celebration of student research and creativity

Spotlighting the best of student work at

Northern Kentucky University

April 15-19, 2013
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LETTER FROM THE PRESIDENT

To Our Celebration 2013 Participants and Guests:

Welcome to Northern Kentucky University’s annual Celebration of Student Research and Creativity. I offer my congratulations to the students and faculty members participating in this year’s event. To our guests and visitors, thank you for joining us and supporting our students and our university.

This year is the 11th in which NKU has held the Celebration of Student Research and Creativity. This event is designed to recognize the outstanding research and creative work of our students, performed under the guidance of faculty mentors.

Student research and creative work are important because they contribute to our knowledge, and the projects enable our students to apply what they learn in the classroom. This “active learning” is becoming a defining feature of an NKU education as we develop more service-learning courses, internships, co-op experiences, and opportunities for student research.

Direct faculty-student interactions foster deeper learning and better assimilation of knowledge for undergraduates. These working relationships develop students’ critical thinking and analytic skills, as well as oral and written communication skills needed to present their work. These interactions also nurture the deep intellectual bond between faculty member and student – a core value of an NKU education.

These posters and presentations exemplify the high-quality work by undergraduate researchers at NKU. These students are future leaders in the development of the intellectual infrastructure of the Commonwealth. Their talent gives me great faith in the future of our region, our state, and our country.

The outstanding presentations for this year’s celebration set a high standard, serving as inspiration for future student projects and research. Again, congratulations to all whose work is showcased in this year’s event, and my thanks to all who have helped make this celebration very memorable.

Sincerely,

Geoffrey S. Mearns
President
Dear Celebration 2013 Participants:

Congratulations to all students and faculty members participating in the 2013 Celebration of Student Research and Creativity. I join the deans, chairs and faculty members in expressing a deep sense of pride in the outstanding work accomplished by our students.

The presentations given during the Celebration provide evidence of the extraordinary opportunities provided to NKU’s students as they work one-on-one in partnership with faculty members on research projects. This experience is often transformational for our students – their horizons are broadened, their learning and understanding is deepened, their interest is heightened, their possibilities are seemingly unlimited, and the sense of their own potential is strengthened. Students working directly with faculty members in research and creative activity has become a defining characteristic of the student experience at NKU and a perfect example of the education we like to call “up close and personal.”

Many of these projects will be presented and celebrated at local, state, national or even international conferences and will lead to scholarly publications that are co-authored by students and faculty. These results are a source of great pride for all of us at NKU.

We take great pleasure in applauding the success and accomplishments of the students and faculty whose work is showcased in the 2013 Celebration of Student Research and Creativity.

Sincerely,

Gail W. Wells
Vice President for Academic Affairs and Provost
SCHEDULE OF EVENTS

POSTER PRESENTATIONS, INTERACTIVE PRESENTATIONS, AND ARTISTIC PRESENTATIONS

Tuesday, April 16
1-3 p.m.
Student Union Ballroom

MUSIC, DANCE AND THEATRE EVENTS

Tuesday, April 16
Student Union Ballroom at Poster Session
1-1:30 p.m. Small Chamber Brass
1:30-2 p.m. Student Strings
2-2:15 p.m. President and Provost Welcome
2:20-2:30 p.m. Solo Marimba: Morgan Minor
2:30-3 p.m. Guitar Ensemble

Tuesday, April 16
Tent, Plaza in front of Founders Hall
11 a.m. Jazz Ensemble
11:30 a.m. Jazz Ensemble
Noon Musical Theatre Troupe
1-2 p.m. Steel Drum Band
2 p.m. Jazz Combo

Tuesday, April 16
Amphitheater
1 p.m. Dance Troupe

Wednesday, April 17
Tent, Plaza in front of Founders Hall
11 a.m. Jazz Combo 3
11:30 a.m. Latin Jazz Ensemble
12-1 p.m. Student Computer Works
1 p.m. Jazz Combo IV
1:30 p.m. Women’s Choir
2 p.m. Concert Band
2:30 p.m. Vocal Jazz

ORAL PRESENTATIONS

Tuesday, April 16
Political Science, Criminal Justice & Organizational Leadership Presentation
1:40-2 p.m. Founders Hall 211

NEW THIS YEAR!
Photography at NKU
Wednesday, April 17
9-11:30 a.m.
Griffin Hall Lobby
Tuesday-Thursday evenings, April 16-18
dusk to dawn
Griffin Hall

Painting on the Plaza
Thursday, April 18
Noon-3 p.m.
Plaza, near tent in front of Founders Hall

NKU Celebrates National Poetry Month:
OPEN MIC
Thursday, April 18
1-3 p.m.
Tent, Plaza in front of Founders Hall

Wednesday, April 17
World Language & Literature Presentation
3:30-4 p.m. Landrum 107
English Presentations
1:30-4 p.m. Steely Library 102

Thursday, April 18
Counseling, Social Work, Leadership Presentation
Photography Show (10am) & Photovoice Presentation (11 am)
10 a.m.-noon University Center Ballroom
Chemistry; History & Geography; Sociology, Anthropology, and Philosophy Presentations
3-5 p.m. Landrum 404

ARTISTIC EVENTS

Friday, April 19
Senior Art Exhibit
9 a.m.-9 p.m.
Fine Arts – Main Gallery
“CELEBRATE NKU: ALL AROUND CAMPUS” EVENTS

Griffin Hall
Tuesday, April 16, 3:30–5:00 p.m.
Digitorium, GH 201
Matt Kish “Moby Dick: In Pictures: one drawing for every page
Artistic Demonstration and Public Talk

Fine Arts Center
Wednesday, April 17, 11:00 a.m.–12:30 p.m.
Prop Shop, FA 115
Behind the Scenes: NKU Theatre

Dorothy Westerman Herrmann Natural Science Center
Wednesday, April 17, 1:00–4:00 p.m.
NKU Haile Planetarium, SC 409
1:00 p.m. Secret Lives of Stars
2:00 p.m. Aurora
3:00 p.m. Earth, Moon, Sun

Albright Health Center
Thursday, April 18, 11:00 a.m.–1:00 p.m.
Human Performance Lab, HC 112
OPEN HOUSE AND DEMONSTRATION

Founders Hall
Thursday, April 18, 1:00–3:00 p.m.
Tent on Plaza (near Founders Hall)
Celebrate National Poetry Month:
OPEN MIC

Fine Arts Center
Friday, April 19, 10:00 a.m.–Noon
NKU Main Art Gallery, 3rd Floor
Senior Art Exhibition

Landrum Academic Center
Friday, April 19, 11:30 a.m.–1:00 p.m.
NKU Museum of Anthropology, LA 200
OPEN HOUSE
A-1: REBECCA WREN, JAMIE AUSTIN, KATHLEEN BELL, ELISA BOETTGER, JESSICA BORCHERS, TERESA COORS, MARYANA FEDIUK, MEG LOMBARDO, KELSEA MISKELL, CHRISTINA MITTS, BREANNA MOUNCE, KATHERINE ROWE, ANNA RUNYAN, KRISTYN SINGLETON, CHELSEA SWINFORD, REX TROGDON, ANGELA TURNER, AMBER VARGO, STANLEY WARREN HUFFMAN, COURTNEY WOODARD

A Gallery of Art by Participants in the Seminar on Edgar A. Poe

FACULTY SPONSOR(S): ROBERT RHODE, ENGLISH

STUDENT UNION, APRIL 16, 1-3 PM

Abstract: After a semester of thorough reading, discussion, and research, students of the seminar on Edgar A. Poe came to better understand a man whose work is not all that it appears to be. Students were asked to create final projects that highlighted an aspect of Poe’s work or life that they found interesting. Students were free to express their idea using whatever medium they preferred, and the results range from simple pencil drawings to baked goods.

A-2: CASSIE GRAVES

Bedford, Kentucky

FACULTY SPONSOR(S): BARBARA HOUGHTON, VISUAL ARTS; MATTHEW ALBRITTIN, VISUAL ARTS

GRIFFIN HALL LOBBY, APRIL 17, 9-11:30 AM AND GRIFFIN HALL, APRIL 16-18, LATE EVENING

Abstract: This display is a digital slide show of photographic work done for an ongoing series. This series has been in the works since the beginning of 2012 and may never be fully complete personally. Over this course of time I have been photographing and obtaining information about abandoned homes in the town where I was raised – Bedford, KY. My intention is to enable the viewer to look into the life of the families that once resided there, to look past the crumbling walls and to imagine the lives that were lived within the space exhibited in each photograph.

A-3: ANNA KLAENE

Riding with the Windows Down

FACULTY SPONSOR(S): BARBARA HOUGHTON, VISUAL ARTS; CHRIS SMITH, VISUAL ARTS

GRIFFIN HALL LOBBY, APRIL 17, 9-11:30 AM AND GRIFFIN HALL APRIL 16-18, LATE EVENING

Abstract: I will display a Digital Soundslide of my photographic work made for a Digital Daily Diary project over a 4 week period in the Summer of 2012. As a photographer, I spend a great amount of my time stepping outside of situations and becoming more than a casual observer. I strive to capture that “Decisive Moment” which many unconsciously dismiss as nonessential. Your eye must see a composition or an expression that life itself offers you, and you must know with intuition when to click the camera. Once you miss it, it is gone forever.

A-4: MIKE BALE

Portraiture

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; MARCLEONE, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: My drawings deal with the creative processes within portraiture. Through exploring the marks and layers of the drawing, along with my interaction with the model, I was able to create unique abstracted forms giving dialog to their external and internal emotional states. Creating images that allow the viewers to perceive the drawing differently from both a distance and up close, do to a relatively crowded composition, was intended to force the audience to spend more time with the individual works.

A-5: KENDRA DOUGLAS

Excruating Vulnerability

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; STEVEN FINKE, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: Through a series of large-scale figurative autobiographic sculptures I am exploring how we, in our human experience, learn to embrace our struggles, imperfections, and vulnerabilities so that we can engage in our lives from a place of authenticity and cultivate courage, compassion, and connection.

A-6: ANDREJS KRUZA

Control

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; KEVIN MUENTE, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: The work is a reflection of self-control through the medium of paint. Large panels radiating intensity through mark making and vibrant colors construct a surface to meditate on human nature. As forms emerge from dark backgrounds, they speak in a tempest of textures, allowing the fluidity of paint to be a metaphor for desire as we can sink or swim above our own addictions. To be in control, is to be able to breathe and float above the calamity of own lives.

A-7: ANDREYA MELNYK

Space LIFE

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; ANDREA KNARR, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: “The Baby Boom Boogie” explores the curiously revolutionary era of culture in the 60’s; focusing on its innocence and optimism of human potential and groundbreaking space explorations. My observations of this time through music, art, film and literature have allowed me to express this cultural history through a contemporary point of view. I project myself into a world of adventurous hope for the future, and great advancements of mankind through the pages of LIFE magazine. The photographs and articles give me inspiration to create intaglio prints collaged with magazine images; developing compositional environments, and unique content with each print.

A-8: AMANDA ROSS

Senior gallery exhibition

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; KEVIN MUENTE, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: For my exhibition, I’m exploring themes of science through a series of small scale paintings inspired by medieval illuminated manuscripts. I find it incredible that such extraordinary and beautiful works of art came from a period commonly referred to as the dark ages. Similarly, science illuminates the unknown in our current age. By combining the two themes, I hope to emphasize how far we have come since medieval times, and also how much more we have yet to discover.

A-9: JOHN TIBBS

Reflections

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; KEVIN MUENTE, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: This series of paintings serves as a reflection of observed scenes through my eyes, which is being thrown back onto canvas. My intentions are of an observational painter, which aims to portray the world as I see it even if it doesn’t fit inside the realm of realism. This group of work is my attempt to reflect on my childhood through a means of toys that accompanied me through my early years. The scenes vary from chaotic to somber and confident to uncertain, that elude to past experiences and feelings that question the innocence of the past.

A-10: MARY WESTWOOD

Intervals

FACULTY SPONSOR(S): DAVID KNIGHT, VISUAL ARTS; ANDREA KNARR, VISUAL ARTS

SENIOR EXHIBITION, FINE ARTS CENTER-MAIN GALLERY, APRIL 18-26, 2013

Abstract: These works stem from a fascination with deserted space. Humans make corners in the void, pathways through darkness, and steps from one habitation to the next. These uninhabited places have a presence of their own. Their stillness is imbued with magazine images; developing compositional environments, and unique content with each print.

A-11: BRIAN WOLF

Comics for Everyone: An In-Depth Look at the Sequential Arts

FACULTY SPONSOR(S): MARCLEONE, VISUAL ARTS

STUDENT UNION, APRIL 16, 1-3PM

Abstract: I started my senior capstone with a single goal in mind: make more comics. But that seemingly simple project exploded into something much bigger. Come for an animated discussion about making comics for print and the web, the changing nature of comics communities online and offline, and the potential future of the medium as a whole.
The Moonstone, by Wilkie Collins; and Tess of the d’Urbervilles, by Thomas Hardy; and Dickens’s Bleak House.

Abstract: Each team, functioning as a Human Resources task force, is designated to deal with the issues associated with the changes to the organization resulting from the implementation of the Affordable Patient Care Act, Federal legislation designed to reduce the increase in cost of providing health care to all citizens of the United States. The issues are: 1. state insurance exchanges for Kentucky, Ohio, and Indiana; 2. Medicare options for Kentucky, Ohio, and Indiana; 3. the continuation, change, or elimination of health care benefits currently provided by employers; 4. repeal, and, if repealed, what would be the coverage offerings.

I-4: KRISTAHUNGLER
The Contradictions of Women in Society

Abstract: As a society we place certain sexual standards on individuals based on their gender. We tend to give males praise or encouragement (or even leniency) when it comes to sexual acts or partners, while females are criticized and subjected to harsh judgements. Why is this? Society has sculpted us into seeing males as the Alphas and females as the Betas. We tend to give males praise or encouragement (or even leniency) when it comes to sexual acts or partners, while females are criticized and subjected to harsh judgements.

I-5: EMMA THOMPSON
Gender Roles and Sexuality

Faculty Sponsor(s): Kimberly Weir, Political Science, Criminal Justice & Organizational Leadership
Student Union, April 16, 1:00 PM
Abstract: Throughout Western history, society has stereotyped how individuals should live their lives, based on gender. Traditionally, women are considered feminine, nurturing creatures; and men are considered masculine, dominating creatures. Also, heterosexuality has been the only commonly accepted sexuality, and the traditional couple consists of a man and a woman. But through media in the past century, those who know the truth to be much more broad than the narrow minds of those who previously called the shots on acceptability, have spoken out and let everyone know that the norm itself is purely arbitrary, and it is okay to be different.

ORAL PRESENTATIONS
Abstracts are listed by department of the first faculty sponsor.

O-1: EMMA JONES
Shortening the Fullerene Bridge with Phenanthrolines
Faculty Sponsor(s): Keith Walters, Chemistry
Thursday, April 18, 3:30 PM, Landrum Room 104
Abstract: While our research group is interested in uniting fullerene and transition metal subunits in supramolecular systems, spectroscopic investigations of our first systems have suggested that their interaction is not as strong as desired. An alternative route is to redesign the linkage between these subunits to bring them closer together. This presentation displays our work synthesizing substituted phenanthrolines that can be joined both to a transition metal and a fullerene using chemical reactions developed in our group. To date we have prepared this ligand and its complexes with rhenium and ruthenium centers. Preliminary spectroscopic results have also been performed.

O-2: HANNAH HARTIG, KATIE HENDERSON, JULIA TAYLOR, JEREMY BILBY, LEAH SCHUMACHER, PATRICK BRANDES
Utilization of Mentoring and Participatory Action Research Methodology in Exploring Non-Academic Barriers to Graduation Among High School Students
Faculty Sponsor(s): Dana Harley, Counseling, Social Work, Leadership; Karen Tapp, Counseling, Social Work, Leadership; James Canfield, Counseling, Social Work, Leadership; Willie Elliott, Counseling, Social Work, Leadership
Thursday, April 18, University Center Ballroom
Abstract: MSW “Family Policy” students present findings from a research study that utilized mentoring and photovoice to examine barriers to high school graduation among “at risk” students (n=46) from three local high schools. Photovoice is an innovative, non-invasive methodology that gives high school students a “voice” to express their concerns and experiences through photography. This project allowed students to be the experts on their own lives and have a voice that otherwise may not have been heard. Implications are provided for high school administrators, staff, and other policy makers in regards to addressing non-academic barriers to graduation reported by the students.

O-3: THOMAS CLARK
Counting the Costs of Colonialism: The Unintended Legacies of British Imperialism in Collins’s The Moonstone, Hardy’s Tess of the D’Urbervilles and Dickens’s Bleak House
Faculty Sponsor(s): Andrea Gazzaniga, English
Wednesday, April 17, 3:30-5:30 PM, 102 Steely Library
Abstract: On their faces, the novels The Moonstone, by Wilkie Collins; Tess of the D’Urbervilles, by Thomas Hardy; and Bleak House, by Charles Dickens, are domestic novels. Read through a domestic lens, they can be studied as parochial stories of morality. But a more expansive inquiry reveals individual stories that can be read as...
metaphors that dive into foreign waters—cautionary tales that reveal the intrusion of the foreign into the domestic. Written at the height of the British Empire’s powers, these novels collectively presaged the decline of the Empire and the national anguish that was to accompany the Empire’s decline.

O-4: CODY HEDGES
The Birth of Tragedy: Nietzsche’s Duality in Hamlet
FACULTY SPONSOR(S): TONYA KROUSE, ENGLISH
WEDNESDAY, APRIL 17, 1:45-2:00 PM 102 STEELY LIBRARY
Abstract: Friedrich Nietzsche’s The Birth of Tragedy from the Spirit of Music is the words of Walter Kaufmann, “one of the most suggestive and influential studies in tragedy ever written.” For Nietzsche, high tragedy is produced by the continuous strife and occasional reconciliation of two great forces; the internal "plastic" Apollonian, and the outer “chaotic” Dionysian. This dynamical exchange is best illustrated using Shakespeare’s Hamlet, for in it, we see violent discordance turn to seamless harmony. This harmony or reconciliation is represented by the concurrence of Hamlet’s death and sense of justice and recititude.

O-5: PATRICK MCgee, REX TROGDON
Loch Norse Magazine and Licking River Review present a Reading and Open Mic in Celebration of National Poetry Month
FACULTY SPONSOR(S): STEVE LEIGH, ENGLISH; ANDY MILLER, ENGLISH; KELLY MOFFETT, ENGLISH
THURSDAY, APRIL 18, 1:30 PM, TENT ON PLAZA NEAR FOUNDERS’ HALL
Abstract: In celebration of National Poetry Month, the editors of NKU’s literary journals, Loch Norse Review and Licking River Review, will host a reading and open mic for the celebration of Student Research and Creativity. The featured readers will include students selected for publication in this year’s issues, and the open mic will encourage other writers of the NKU community to share their poetry and prose. The editors of each magazine, Patrick McGee and Rex Trogden, will encce the event. Both journals are sponsored by student life and have faculty advisors from the English Department.

O-6: MINADORA MACHERET
The Holocaust and Survival: An Exploration through Poetry
FACULTY SPONSOR(S): KELLY MOFFETT, ENGLISH
WEDNESDAY, APRIL 17, 1:30-1:45 PM 102 STEELY LIBRARY
Abstract: I have taken my grandmother’s account of surviving the Holocaust and represented it through poetry. In this collection I have incorporated her stories, recipes, and herbs to survive through the use of vivid imagery and free verse poetry. This has given me the opportunity to connect and give her story to future generations to remember. I learned how to use my grandmother’s stories as a poetic medium to bridge connections between our generation and hers.

O-7: CAITLIN NEELY
Selections from Exposure: Poetry Reading and Discussion of Lyricism
FACULTY SPONSOR(S): KELLY MOFFETT, ENGLISH
WEDNESDAY, APRIL 17, 3:15-3:30 PM 102 STEELY LIBRARY
Abstract: I will read selections from my poetry chapbook Exposure. The poems were written to study lyricism, landscape, and voice. I will also explore what I have learned during my Honors capstone such as the poetic line, and my understanding of nature and how it affects my poetry.

O-8: STACEY BARNES
Emily’s Window
FACULTY SPONSOR(S): ROBERT WALLACE, ENGLISH
WEDNESDAY, APRIL 17, 2:20-2:35 PM 102 STEELY LIBRARY
Abstract: The quilt, Emily’s Window, is an interpretation of what Emily Dickinson may have seen as she looked out of her window while caring for her ailing mother. Flowers and birds are the primary subject of one half of Emily Dickinson’s poems and give the reader a glimpse of the things Dickinson cherished during her lifetime. I chose to make a quilt because it is lasting, expressive and easily displayed for anyone’s enjoyment. I used colors for each flower that I believe project a sense of joy and happiness. The yellow background in the quilt represents sunshine and gaiety and gives a clear view of the life Dickinson longed for as she closed herself off from interaction with her community.

O-9: RACHEL HARPE
My Cocoon Tights—Colors Tease: An Artistic Representation of Emily Dickinson’s Poem 1099
FACULTY SPONSOR(S): ROBERT WALLACE, ENGLISH
WEDNESDAY, APRIL 17, 2:35-2:50 PM 102 STEELY LIBRARY
Abstract: My paper-cut piece is a representation of Emily Dickinson’s poem 1099, “My cocoon tights—colors tease.” I felt I could express this beautiful poem with the use of an empty drawer, lined with aged letters and felt flowers. I learned how to emulate 1800’s style of writing, as well as how those closest to Dickinson may have felt through their limited correspondence.

O-10: MINADORA MACHERET
An Emily Dickinson Letter Box
FACULTY SPONSOR(S): ROBERT WALLACE, ENGLISH
WEDNESDAY, APRIL 17, 2:30-2:45 PM 102 STEELY LIBRARY
Abstract: I created a series of responses to Emily Dickinson’s famous “Master” Letters from male and female voices using 1800’s style speech. I did this to reply to Dickinson’s interpreted “Master” Letters, which would provide insight into the types of relationships Dickinson may have had. They are represented visually through the use of an empty drawer, lined with aged letters and felt flowers. I learned how to emulate 1800’s style of writing, as well as how those closest to Dickinson may have felt through their limited correspondence.

O-11: KEIANNA TROXELL
Gib Dickinson
FACULTY SPONSOR(S): ROBERT WALLACE, ENGLISH
WEDNESDAY, APRIL 17, 2:45-3:00 PM 102 STEELY LIBRARY
Abstract: For my final project in a course in Emily Dickinson and the Arts, I created an art piece about Dickinson’s nephew. I drew a picture of his face and hands using black marker on white paper. To make the boy’s dress, I used pictures that he had pasted to his closet door as a child and made a collage of them. I then cut out the shape of his dress and mounted the body to the dress. To create the background, I wrote out Dickinson’s poem 341. I gained a better sense of her poetry through creating this art piece.

O-12: CHRISTINA MCgee
At Any Price: BP, Oil and the Gulf of Mexico
FACULTY SPONSOR(S): JOHN METZ, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 3-3:30 PM LANDRUM ROOM 404
Abstract: On April 22, 2010, the drilling rig Deepwater Horizon, crippled by an explosion, collapsed and sank into the Gulf of Mexico. It touched off one of the worst oil spills in United States history. This project discusses the factors that contributed to the disaster, and highlights the impact the spill had on the fragile—and invaluable—ecosystems of the Gulf. It also poses some difficult questions. Can we really “clean up” such a spill? Who is to be held liable, and how? And, perhaps the most important of all, can we prevent this from happening in the future?

O-13: ARIN ARNOLD
Women of Southeast Asia
FACULTY SPONSOR(S): JONATHAN REYNOLDS, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 3-3:50 PM LANDRUM ROOM 404
Abstract: This paper seeks to identify patterns in the lives of women throughout countries in Southeast Asia. It will examine women of varying religious, cultural, economic, and geographic backgrounds. By providing different examples of cultural paradigms, this paper will argue that there is a culture unique to Southeast Asia, from its early regional religions and Chinese and Indian influences in culture, to the development of cities after Western colonization. By providing a historical perspective on Southeast Asian culture, this paper will highlight women’s lives from yesterday and seek to explain how they came to live the lives they do today.

O-14: ABIGAIL QUIROA
Persuasion, Purity, and Politics: Votes for Bluegrass Women!
FACULTY SPONSOR(S): JONATHAN REYNOLDS, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 3:50-4:10 PM LANDRUM ROOM 404
Abstract: This paper examines the women’s suffrage movement, in particular the unique struggle for suffrage in Kentucky. The research spans over 80 years of Kentucky history from the first mention of women’s suffrage to the passing of the 19th Amendment. The paper explores the debate between the anti-suffragists and suffragists. Kentuckians wanted equal rights. This paper shows that through objections, obstacles in popular science, religious subordination, and educational difficulties, Kentuckysuffragists were able to gain some equality and pass the Amendment. Family histories, public records, and writings on suffrage were used to capture the nature of the movement in Kentucky.

O-15: SHANE WINSLow, ANDREW BOEHRLINGER
The Process of the Ascent: A Cultural History of Stairways in Cincinnati
FACULTY SPONSOR(S): JONATHAN REYNOLDS, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 3-4 PM LANDRUM ROOM 404
Abstract: This will be an oral presentation on The Process of the Ascent: A Cultural History of Stairways in Cincinnati project. It will examine the step-by-step details on how the project developed, from the beginning idea, cross-cultural research in Quito, Ecuador, international conferences at the University of Amsterdam, and the research prepared for publication by publishing houses such as Ohio University Press. This project remains in process and will serve as an introspective examination of its development by the creators.

O-16: ROSIE SANTOS
El Campo
FACULTY SPONSOR(S): MEREDITH SMITH, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 4-4:20 PM LANDRUM ROOM 404
Abstract: “El Campo” is a service-learning project utilizing the theory of action
research. The purpose of research is to assess the needs of mothers in the Price Hill, Latino community in regards to the access to natural space and nature education for their children. The subjects of the case study are the student participants in Church of Our Saviour’s Learning Club. The ultimate goal of the research is to create relevant environmental education programming at Imago Earth Center for the Learning Club students.

O-17: KAYLA ELLISON
Healthy Life, Healthy Mind, Healthy Students: The Well-Being of African American Students
FACULTY SPONSOR(S): MICHAEL WASHINGTON, HISTORY & GEOGRAPHY
THURSDAY, APRIL 18, 3-5 PM, LANDRUM ROOM 404
Abstract: A person’s well-being is defined as being healthy and healthy. In the growing days of technology, money, and status, well-being can be a hard thing to come by. A person’s measured well-being can be different due to race, environment, and stress intake. This oral presentation is on the well-being of African American students. My plan is to do a literature review and present on the research that has been reported. Future research may include a research project on northern Kentucky University. I want to compare findings with all ethnic groups on campus. By presenting a literature review and presentation, it sets an outline for future research on this campus. I find this topic to be meaningful, because it displays the well-being of African American students on other campuses. A project like mine will explain why it is important to study the well-being of students and how to promote programs that can advocate healthy living.

O-18: LAUREN GABBARD
The Gold Standard: Stability and Political Feasibility
FACULTY SPONSOR(S): MICHAEL BARANOWSKI, POLITICAL SCIENCE, CRIMINAL JUSTICE & ORGANIZATIONAL LEADERSHIP
TUESDAY, APRIL 16, 1-40 PM, FOUNDERS HALL, ROOM 211
Abstract: This paper addresses the question: Would a return to a gold standard provide a more stable economy and is this action politically feasible? It first reviews literature from those that support and oppose a gold standard. It next analyzes data during and after the gold standard and compares it to the Federal Reserve’s practice of manipulating the money supply to conclude that the gold standard would not provide a more stable economy. It then reviews the support the gold standard has among politicians, and concludes that a transition to a gold standard is unlikely.

O-19: CHRISTOPHER BURDETT
The Media and Male Androgyny in Japan
FACULTY SPONSOR(S): JUDIE VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
THURSDAY, APRIL 18, 3-5 PM, LANDRUM ROOM 404
Abstract: This paper examines the ethnohistorical tendency of the Japanese culture to allow cross-gender expression in entertainment and argues that the current fashion trends toward androgynous Japanese males warrants directed anthropological consideration. Japanese media is gaining popularity in world markets in the form of anime, manga, costume play, visual kei, and other fashion trends, and it influences not only the young people of Japan but also countries importing Japanese cultural media. This paper explains the popularity of cross-gender dress and the social mechanisms supporting its spread, while raising questions for future field studies.

O-20: JORDAN HENSLEY
Monologue, selected reading from Pedro Calderón de la Barca’s ‘La Vida Es Sueño’
FACULTY SPONSOR(S): LANDWEHR HILARY, WORLD LANGUAGE & LITERATURE
WEDNESDAY, APRIL 17, 3:30-5 PM, LANDRUM ROOM 107
Abstract: Pedro Calderón de la Barca is one of the most influential 17th century playwrights of the Spanish Golden Age and La Vida Es Sueño is arguably one of his most critical works. Protagonist Segismundo falls victim to Plato’s Allegory of the Cave. Begin imprisoned by his father at birth and developing a false sense of reality triggers Segismundo into believing that life is merely a dream. This twisted sense of right and wrong is the key conflict in the play. This monologue depicts Segismundo’s internal struggles with deciphering what life truly is.

O-21: SHAWN REHKAMP
Blossoms of the Brain
FACULTY SPONSOR: ROBERT WALLACE
WEDNESDAY, APRIL 17, 3-3:15 PM, 102 STEELY LIBRARY
Abstract: “Blossoms of the Brain” is meant to showcase each of the final projects presented in a class on Emily Dickinson and the Arts. It categorizes each creative work by its type (visual art, performed art, or creative writing) and presents the piece alongside information submitted by each creator and comments from classmates. The design of the site is meant above all to be simple and intuitive but also to have a degree of entertainment.

P-1: AMBER HENNING, SHERILYN HOYDAL, ANNA LEICHTER
Case #7 Lung Cancer and its Complications
FACULTY SPONSOR(S): TOM BAXTER, ALLIED HEALTH
Abstract: This was a group collaborative project for Radiologic Technology and Respiratory Care students. Patient Case #7 was researched for pathophysiology, radiographic images, respiratory care interventions and suggested diagnosis of secondary spontaneous pneumothorax. Ms. P had left sided chest pain, dyspnea, chills, fatigue and respiratory distress. She had long history of asthma; non-smoker. Percussion revealed hyperresonance on the left; auscultation was diminished on the left. On chest x-ray trachea was deviated left. Suspected diagnosis of spontaneous pneumothorax. Recommendations are to continue chest x-rays to determine if pneumothorax resolves; if not chest tube insertion, oxygen, consider needle decompression.

P-2: TARA NORDMAN, EMILY RIESENBECK, ELIZABETH SLOCUM
Case #10 Secondary Spontaneous Pneumothorax
FACULTY SPONSOR(S): ANDREA CORNELLE, ALLIED HEALTH
Abstract: This was a group collaborative project for Radiologic Technology and Respiratory Care students. Patient Case #10 was researched for pathophysiology, radiographic images, respiratory care interventions and suggested diagnosis of bronchiectasis: 20 year old Mr. M presented to a pulmonary clinic with complaints of dyspnea, a productive cough, occasional hemoptysis and difficulty maintaining weight. On physical exam: digital clubbing, wheezes, crackles, and hyper respiration on percussion. He is a non-smoker with frequent respiratory infections. At age 11 he was diagnosed with bronchiectasis; he had a Sweat Chloride Concentration of 67 mEq/L. He was then started on regular bronchodilator therapy.

P-3: ERICA HERALD, EILEEN ERION, ASHLEY GROVE
Case #5 Bronchiectasis
FACULTY SPONSOR(S): DEBORAH PATTEN, ALLIED HEALTH
Abstract: This was a group collaborative project for Radiologic Technology and Respiratory Care students. Patient Case #5 was researched for pathophysiology, radiographic images, respiratory care interventions and suggested diagnosis of bronchiectasis: 20 year old Mr. M presented to a pulmonary clinic with complaints of dyspnea, a productive cough, occasional hemoptysis and difficulty maintaining weight. On physical exam: digital clubbing, wheezes, crackles, and hyper respiration on percussion. He is a non-smoker with frequent respiratory infections. At age 11 he was diagnosed with bronchiectasis; he had a Sweat Chloride Concentration of 67 mEq/L. He was then started on regular bronchodilator therapy.

P-4: ANTHONY BANKEMPER, MOLLIE BECK, RYAN DURBIN, ELIZABETH HALL
Project FORCE (Focus on Occupations, Recruiting, Community, and Engagement) in STEM
FACULTY SPONSOR(S): BETHANY BOWLING, BIOLOGICAL SCIENCES; MAUREEN DOYLE, COMPUTER SCIENCE
Abstract: Project FORCE (Focus on Occupations, Recruiting, Community, and Engagement) sponsors academic departments and seeks to increase the recruitment, graduation, and retention rate of students in STEM (Science, Technology, Engineering, and Mathematics) disciplines. This multidimensional project includes STEM living and learning communities, STEM Ambassadors, and undergraduate research opportunities for students in STEM disciplines (UR-STEM). The project is funded by the National Science Foundation (DUE STEP grant #0969280).

P-5: JOSEPHINE BROWN
Spontaneous Alternation Behavior in Offspring of Heterozygous Cyp1a1_1a2(+/-) mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES; SMITHA INFANTE, BIOLOGICAL SCIENCES
Abstract: Previous work in our lab uncovered motor deficits in Cyp1a2(-/-) mice lacking the metabolic enzyme CYP1A2 and in a related strain of double knockout Cyp1a1_1a2(-/-) mice. We generated heterozygous Cyp1a1_1a2(+/-) mice to determine if there is a gene-dose effect. We are conducting a behavioral battery of tests on the offspring of heterozygous parents which include wild type (+/+), mice, heterozygous (+/-) mice and knockout (-/-) mice. Here, we present data on spatial working memory.

P-6: PANTHEREE DEHON, MARINA ROY, HUAN LI
Offspring of Heterozygous Cyp1a1_1a2(+/-) mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES
Abstract: We generated heterozygous Cyp1a1_1a2(+/-) mice to determine if there is a gene-dose effect. The offspring of heterozygous parents which include wild type (+/+), mice, heterozygous (+/-) mice and knockout (-/-) mice. Here, we present data on spatial working memory.
P-6: BREANN HAYS
Assessing Anxiety in Wild Type, Heterozygous and Double knockout Cyp1a1_Cyp1a2(-/-) mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES; SMITHA INANTE, BIOLOGICAL SCIENCES
Abstract: After prior work in our lab uncovered motor deficits in Cyp1a2(-/-) mice and in a related strain of double knockout Cyp1a1_Cyp1a2(-/-) mice, we generated heterozygous Cyp1a1_1a2(+/-) mice to determine if there is a gene-dose effect. We also expanded our battery of tests to determine if other behaviors were affected by the loss of the CYP1A1 and CYP1A2 enzymes. Here we report results from open field locomotor activity and acoustic startle with pre-pulse inhibition. These tests can identify animals with hyperactivity and abnormal sensory gating. Abnormal results would indicate that brain regions beyond those required for normal motor function are affected.

P-7: MOLLY KROMME, HELEN GARBER, BREANN HAYS, JOSEPHINE PEARLMAN
Behavioral Characterization of Wild Type, Heterozygous and Double knockout Cyp1a1_1a2(-/-) mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES; SMITHA INANTE, BIOLOGICAL SCIENCES
Abstract: Alter prior work in our lab uncovered motor deficits in Cyp1a2(-/-) mice and in a related strain of double knockout Cyp1a1_Cyp1a2(-/-) mice, we generated heterozygous Cyp1a1_1a2(+/-) mice to determine if there is a gene-dose effect. We also expanded our battery of tests to determine if other behaviors were affected by the loss of the CYP1A1 and CYP1A2 enzymes. Here we report results from open field locomotor activity and acoustic startle with pre-pulse inhibition. These tests can identify animals with hyperactivity and abnormal sensory gating. Abnormal results would indicate that brain regions beyond those required for normal motor function are affected.

P-8: MINDY STEGMAN, ANNA LANG, KELSEY TAYLOR, HELEN GARBER
Analysis of Gene Dose Effects on Motor Function in Cyp1a1_Cyp1a2(-/-) double knockout and in Cyp1a1_1a2(+/-) mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES; SMITHA INANTE, BIOLOGICAL SCIENCES
Abstract: CYP1A1 and CYP1A2, members of the cytochrome P450 family, are key detoxifying enzymes normally expressed in the liver. Though they are reportedly expressed in the cortex and cerebellum of the brain, their physiological function in the brain remains unknown. Previous work in our lab uncovered motor deficits in Cyp1a2(-/-) knockout mice which lack CYP1A2 and in a related double knockout Cyp1a1_Cyp1a2(-/-) line of mice. We are comparing wild type and double knockout mice with Cyp1a1_1a2(+/-) heterozygous mice to see if there is a gene-dose effect. We will present results from the balance beam test. Mice were trained to walk across a 100cm beam that narrows from 25cm to 5cm in width. Mice were scored for foot slips and dips and the time required to cross the beam.

P-9: GREGORY BARTH, COURTNEY GRAVES
A Decade of Ichthyologic Demography: Meta-analysis of Ten Years of Biotic Integrity Analysis
FACULTY SPONSOR(S): RICHARD DURTSCHIE, BIOLOGICAL SCIENCES
Abstract: Adedace of NKU/vertebrate zoology ichthological (fish) data were evaluated from Grassy Creek (Pendleton County, KY) and Gunpowder Creek (Boone County, KY). Gunpowder Creek is historically polluted from airport runoff (anti-freeze) and housing development, while Grassy Creek is a natural stream free of any major industrial pollution (a control system). We performed a Kentucky Index of Biotic Integrity (KIBI) analysis on each set of data for both locations and graphed the results over time to monitor fluctuations in environmentally sensitive fish species. Three bioassessment techniques (backpack electrofishing, kick seining, and large seining) were used and evaluated for this study.

P-10: WESLEY PARSONS, MITCH MERCER
Diurnal Activities and Metabolism of the Lazarus Lizard (Podareis muralis) as an Introduced Species
FACULTY SPONSOR(S): RICHARD DURTSCHIE, BIOLOGICAL SCIENCES
Abstract: As a founding population (10 individuals) of Lazarus lizard (Podareis muralis), introduced from Italy in 1952, has since grown exponentially throughout the Greater Cincinnati area where they thrive in urbanized saxicolous micorrhabids. Our research evaluates the niche of these introduced lizards to determine if they 1) occupy a vacant urban niche, and 2) pose a threat to the local ecosystem. We study the foraging ecology of these lizards, as well as their time-activity budgets. An ontogenic range of individuals within the species is currently being tested for differences in metabolic rates with a respirometry gas analysis system.

P-11: JAMES BROWN, ZACH POYNTER
Effectiveness of a Wetland to Improve Water Quality of Stormwater Runoff
FACULTY SPONSOR(S): KRISTINE HOFFSPERGER, BIOLOGICAL SCIENCES
Abstract: Wetland construction can improve runoff water quality prior to continuing down the watershed. The purpose of this research project is to analyze stormwater runoff into and out of a wetland at Burlington Elementary in Boone County. Water quality analyses including total dissolved solids (TDS), total suspended solids, phosphorus, ammonium, and nitrate concentrations were performed. The results of this water quality project determined improved runoff water quality from the wetland. Nitrate, ammonium, and phosphorus levels all showed a decrease in concentration at the outlet compared to the inlet during storm events.

P-12: MILLCENT FRIMPONG-MANSO
Adventures into the Microbial World that Nurtures Brittle Stars in a Bahamas Cave
FACULTY SPONSOR(S): MIRIAM KANNAN, BIOLOGICAL SCIENCES
Abstract: We report here on the microbial community at the open entrance of Bernier Cave, San Salvador Island, Bahamas. The purpose of our study was to identify and culture the organisms that would provide food for the brittle stars. We cultured diatoms (Suriella and Achannthes), cyanobacteria, several protozoans, and bacteria. This poster will present a photographic tour of the wonderful microbial life in our study site.

P-13: STEFANIA GUGLIELMI, ALEXUS RICE
Collection and Identification of Potentially Toxic and Allergenic Cyanobacteria from the Greater Cincinnati Area
FACULTY SPONSOR(S): MIRIAM KANNAN, BIOLOGICAL SCIENCES
Abstract: We report the recent occurrence of cyanobacterial blooms from several ponds in Ohio and Northern Kentucky from 2012 to present. Many cyanobacteria produce liver and/or neurotoxins, and exposure to cyanotoxins can also produce dermatological and allergenic effects; therefore, monitoring their presence in ponds is important to public health. The most prevalent cyanobacteria in all our samples were several morphospecies of Microcystis, (potentially a liver toxin producer). We also found cyanobacteria in the genera Anabaena, Oscillatoria, Planktothrix, Woronichinia, Pseudanabaena, Aphanizomenon, Merismopedia, Anacystis, Synechococcus, and Lyngbya. The samples are being cultured and analyzed for toxin production at the U.S. EPA.

P-14: TAYLOR TEVIS
Isolation of Bacteria from the Mouth and Feces of Venomous Snakes
FACULTY SPONSOR(S): MIRIAM KANNAN, BIOLOGICAL SCIENCES
Abstract: In the gut of a typical human, there exists more bacterial cells than human cells in the entire body. Although it is unknown, there is likely a similar trend among other higher vertebrates. Because of the potential hazards associated with handling venomous snakes, even less is known about their bacteria flora. Bacteria were isolated from the mouth and gut of the following venomous snakes: the eastern diamondback (Crotalus adamanteus), the St. Lucian viper (Bothrops carinatus), the Asian cobra (Naja kaouthia) and the forest cobra (Naja melanoleuca). The bacteria were then isolated for purity and identified. Knowing the bacterial flora that inhabit the bodies of venomous snakes is important because of the possibility of zoonotic bacterial infection. This is of particular importance when bacteria are inoculated into humans via snake-bite.

P-15: DIANNEA WILSON
Analysis of Microcystis aeruginosa and Microcystis wesenbergii with Dark Field and Scanning Electron Microscopy
FACULTY SPONSOR(S): MIRIAM KANNAN, BIOLOGICAL SCIENCES
Abstract: The examination of morphological characteristics for various Microcystis morpho-species exposes information needed to determine why certain morpho-species are surviving predominantly in cold water. These cyanobacteria can form harmful algal blooms (HABs) in eutrophic freshwater. They can contaminate drinking water supplies and aquatic habitats. The Scanning Electron Microscope (SEM) and the Dark Field Microscope were utilized to evaluate key species characteristics. The focus is on Microcystis aeruginosa and Microcystis wesenbergii. Measurement of the gelatinous amorphous mucilage made with both microscopes reveals considerable differences between these two morpho-species.

P-16: BERIS DIZDAR
Immunoreactive Regions of the Human Metapneumovirus G Protein
FACULTY SPONSOR(S): JOSEPH MESTER, BIOLOGICAL SCIENCES
Abstract: Human metapneumovirus (HMPV) is a highly prevalent virus that can cause severe respiratory infection. The G protein of HMPV is a potential vaccine target, but immune responses to the G protein have not been well-defined. The purpose of this study was to determine the immune cytokines elicited by HMPV G peptides when added to human macrophages. Cytokine expression was monitored by real-time polymerase chain reaction. Exposure to HMPV G peptides elicited both protective and pathogenic cytokines. These results demonstrate that regions of the HMPV G protein are recognized by human macrophages and may influence the outcome of HMPV infection.

P-17: BRANDY ASHCRAFT, JAMES CREAGER, TATUM DAVIS
Investigating the Mechanism of Genomic Instability Due to Haploinsufficiency in Aromatic Amino Acid Metabolism
FACULTY SPONSOR(S): ERIN STROME, BIOLOGICAL SCIENCES
Abstract: To identify novel cancer susceptibility loci, our group previously undertook a screen in the yeast S. cerevisiae to assess the genome for heterozygous mutations that modify genomic instability. Gene ontology analysis of the resulting gene list showed a significant population of genes involved in amino acid and derivative metabolism. Accordingly, we have begun a more detailed examination focusing on genes involved in the biosynthesis and transport of aromatic amino acids. We have found significant
increases in instability due to gene mutations functioning at the endpoints of the phenylalanine, tryptophan, and tyrosine biosynthesis pathways. These heterozygous mutations impact both chromosome fragment loss rates and whole chromosome loss rates as measured by two instability assays. Instability is compounded on a gene-specific basis in strains further starved for these amino acids through media depletion. We hypothesize that changes in available amino acids pools impact genomic instability by altering the activity of the TOR regulatory pathway. Work is underway to test impacts of TOR depletion on genomic instability and to characterize the TOR activity in these heterozygous strains.

P.18: JOHN CRUIN, ARIANNA CABRALES
Dosage Sensitivity of msh5 in Regards to Genomic Instability in Yeast
FACULTY SPONSOR(S): ERIN STROME, BIOLOGICAL SCIENCES
Abstract: Previously collected data suggests that heterozygous mutations in certain <i>Saccharomyces cerevisiae</i> genes cause an increase in genomic instability that is greater in yeast strains that are deficient in the <i>rad9</i> checkpoint gene, a homolog of the human gene <i>BRCAn</i>. Preliminary data on strains with a heterozygous mutation in msh5 showed an increase in genomic instability, both in wild type and in msh5 deficient strains. We are now in the process of creating strains in which the <i>S. cerevisiae</i> gene is missing both copies of msh5. One of the two newly created strains will contain a wild type <i>RAD9</i> gene, while the other is homozygously mutated for <i>rad9</i>. Data from sectoring and fluctuation analyses performed on these newly created strains will be compared to each other and to the previously collected data on heterozygous mutants.

This comparison will determine if there is a statistical difference in genomic stability between the strains. Also of future interest for the project is the task of examining any possible links between msh5 mutations and mutations in checkpoint genes other than <i>RAD9</i> in order to determine if the previously suggested link to genomic instability is specific to mutations in msh5 and not <i>rad9</i>.

P.19: GEORGE GARDNER, BALINT ZSIGAI
Searching for Haploinsufficiency Effects of Dicarboxylic Amino Acid Biosynthesis Genes on Genome Stability in <i>Saccharomyces cerevisiae</i>
FACULTY SPONSOR(S): ERIN STROME, BIOLOGICAL SCIENCES
Abstract: Previous research has shown mutations in cellular metabolism genes can lead to genome instability, a hallmark of cancer. Our studies use the yeast <i>Saccharomyces cerevisiae</i> to investigate chromosome loss, caused by heterozygous mutations in genes involved in the metabolism of amino acids. Genome instability has been shown to be significantly higher in yeast strains deficient in the checkpoint gene <i>rad9</i>. Since this gene is homologous to the human <i>BRCAn</i> gene, the results of this research are applicable to the human model. Our project has centered on the investigation of the impact of haploinsufficiency of dicarboxylic amino acid biosynthesis and transporter genes. Genes involved in dicarboxylic amino acid biosynthesis were mutated in two yeast strains, one wild type for <i>RAD9</i> and one deficient in <i>rad9</i>. Utilizing two genome stability assays, sectoring analysis and fluctuation analysis, we are able to measure chromosome fragment and whole chromosome loss. Statistical analysis of the collected data is then used to determine how specific mutations, on their own and in combination with deficiency in <i>rad9</i>, affect genome stability.

P.20: JUSTIN GIBSON, ERIN STROME
Investigation of Genome Instability Due to Mutations in the SAM1 Gene and Checkpoint-Deficiencies
FACULTY SPONSOR(S): ERIN STROME, BIOLOGICAL SCIENCES
Abstract: The goal of this project is to explore the role of particular gene mutations in the formation of cells that are genomically unstable, a phenotype often seen in cancer. To study these gene mutations we utilize the budding yeast <i>Saccharomyces cerevisiae</i>, which has conservation of many proteins involved in genome maintenance, thereby making our findings applicable to human cells. Previous research by our group identified a set of genes shown to have genome instability effects when combined with a checkpoint deficiency. My research has focused on one of these genes called <i>SAM1</i>. <i>SAM1</i> encodes for an enzyme that catalyzes the formation of 8-adenosyl methionine (<i>AdoMet</i>), a critical intermediate in many cellular reactions. <i>AdoMet</i> and <i>AdoHcy</i> are critical for disease diagnosis because these enzymes are involved in most cellular activities. The most commonly used method, spectroscopy with fluorogenic or chromogenic substrates, is sensitive but cannot be used reliably in colored samples like blood. Here, a reversible electrochemical method called pulsed chronopotentiometry is used for the detection of thiol activity using synthetic peptides as substrates. The response to synthetic peptides is a function of concentration, first measured. Then thiorphan is added to the peptide solution and the response is monitored as the enzymatic reaction takes place.

P.21: GABRIELLE SEVILLA, FATIMA MOHMOUD
Impact of Branched-Chain Amino Acid Availability on the Genome Stability of Yeast Cells
FACULTY SPONSOR(S): ERIN STROME, BIOLOGICAL SCIENCES
Abstract: Prior research has shown that mutations in genes involved in cellular metabolism can increase genome instability. However, the range of genes that have this effect as well as how this occurs has not been investigated. In this research project, we are focusing on genes in the branched-chain amino acid biosynthesis pathway. To begin research, heterozygous mutations were made replacing ten separate genes with a selectable marker deletion cassette. These strains were all

then tested for genomic instability via a colorimetric assay that measures loss of a chromosome fragment from the cell. The results from this assay have caused us to focus on four of these genes <i>LEU1</i>, <i>LEU9</i>, <i>ILV1</i>, and <i>ILV2</i>. Multiple trials for each of these strains have been performed in order to get consistent results and allow us to test for significance in this assay. Trials are underway for a second genome instability assay that measures whole chromosome loss rate due to mutations in these genes. Preliminary data suggests that the presence or absence of <i>ILV3</i>, <i>ILV5</i>, <i>ILV6</i>, <i>BAT1</i>, and <i>BAT2</i>. Future directions for the project are to investigate the dosage sensitivity and mechanism of action in the strains that show increased instability of their genomes.

P.22: KELSEY SHOTZBARGER
Vascular Flora of the St. Anne Wetlands
FACULTY SPONSOR(S): MAGGIE WHITSON, BIOLOGICAL SCIENCES
Abstract: St. Anne’s Wetlands are one of the best remaining wetlands on the Ohio River. It functions as an education and research environment for students and scientists. Our research focuses on collecting and databasing the vascular plants found at St. Anne’s. Plants will be pressed, dried, identified, and their label data entered into the NKU Herbarium’s database. Pressed specimens will be kept for reference and future study. This will allow people interested in the flora at St. Anne’s to have a list of the species located there. Species lists are a useful tool for education, research, and management of rare species.

P.23: KAITLIN CAHILL, REBECCA SUTTMILLER
Simple and Inexpensive Electrochemical Detection of Thrombin and its Inhibitors
FACULTY SPONSOR(S): KEBEBE GEMENE, CHEMISTRY
Abstract: The detection of proteolytic enzymes, like thrombin, and their inhibitors are critical for disease diagnosis because these enzymes are involved in most cellular activities. The most commonly used method, spectroscopy with fluorogenic or chromogenic substrates, is sensitive but cannot be used reliably in colored samples like blood. Here, a reversible electrochemical method called pulsed chronopotentiometry is used for the detection of thrombin activity using synthetic peptides as substrates. The response to synthetic peptides is a function of concentration, first measured. Then thiorphan is added to the peptide solution and the response is monitored as the enzymatic reaction takes place.

P.24: VICHETH KONG, ABIGAIL MCBREE, AARON MURPHY
Photochemistry and Photophysics of Common Pharmaceuticals
FACULTY SPONSOR(S): PATRICK HARE, CHEMISTRY
Abstract: A wide variety of pharmaceuticals are found in surface waters where they can affect the development of wildlife. Many can be broken down by sunlight. The photochemistry and photochemistry of some of the more commonly found pharmaceuticals, such as estrone, 17-beta estradiol, progesterone, and acetaminophen, will be discussed, and their photochemical products identified.

P.25: THUY DO, QUINTIN HAUSER, TAYLOR KIDD
Synthesis and Biological Evaluation of Chalcone Derivatives as Xanthine Oxidase Inhibitors
FACULTY SPONSOR(S): LILI MA, CHEMISTRY; STEFAN PAULA, CHEMISTRY
Abstract: Xanthine Oxidase is an attractive target in the treatment of gout. Current medicines have some problems such as side effects and high dose. We present here the design and development of xanthine oxidase inhibitors originating from bioactive natural products. A small library of twenty chalcone compounds was developed by utilizing the aldol reactions. Their inhibitory effects against xanthine oxidase were determined by a spectrophotometric assay that followed the oxidation of xanthine to uric acid. From this experiment, DDA7 was found to be the most active. These chalcone derivatives may provide useful information in the development of pharmaceutical candidates for gout.

P.26: QUINTIN HAUSER
Xanthine Oxidase Inhibition Explored by Alternating Functional Groups in Synthesized Chalcone Derivatives
FACULTY SPONSOR(S): LILI MA, CHEMISTRY; STEFAN PAULA, CHEMISTRY
Abstract: Xanthine oxidase inhibitors and their potential medicinal properties have been attracting research in recent years. We present here the design and development of novel xanthine oxidase inhibitors originating from bioactive natural products. Several libraries of twenty chalcone compounds were developed by utilizing the aldol reactions. Their inhibitory effects against xanthine oxidase were determined by a spectrophotometric assay that followed the oxidation of xanthine to uric acid. From this experiment, DDA7 was found to be the most active. These chalcone derivatives may provide useful information in the development of pharmaceutical candidates for gout.

P.27: REBECCA RYDER
New Selective Nonsteroidal Aromatase Inhibitors: Synthesis and Characterization of 3-Phenyl-1H-Isochromene-1-one
FACULTY SPONSOR(S): LILI MA, CHEMISTRY
Abstract: In the course of this past summer, reactions conditions were tested to start

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Abstract: The purpose of this research is to synthesize a supramolecular system with metal chromophores. Synthetic and characterization results will be presented. Of particular interest is the use of GPC characterization to give us a good idea of the size of our synthesized polymers.

P-28: EMILY HOFMANN
Inhibition of the Sacro-/Endoplasmic Reticulum Calcium AT-Pase Enzyme Observed in Two Cell Lines with Fluorescence Calcium Imaging
FACULTY SPONSOR(S): STEFAN PAULA, CHEMISTRY
Abstract: The goal was to observe the effect of inhibitors of the sacro-/endoplasmic reticulum calcium ATPase (SERCA) on calcium homeostasis in both healthy and cancerous human cell lines by fluorescence imaging. Human fibroblasts and prostate cancer cells were grown in culture and loaded with Fura2-AM dye, allowing the continuous monitoring of intracellular calcium concentrations as a controlled dosage of inhibitor was introduced. The experimental data showed that all inhibitors tested disrupted calcium homeostasis, which manifested by a sharp increase in intracellular calcium levels. Future directions seek to investigate selected SERCA inhibitors as novel options for prostate cancer chemotherapy.

P-29: TAYLOR RIDD
Antioxidant Properties of Coumarins as a Result of Xanthine Oxidase Inhibition and Radical Scavenging
FACULTY SPONSOR(S): STEFAN PAULA, CHEMISTRY; LILI MA, CHEMISTRY
Abstract: Coumarins are organic plant-derived substances in the benzopyrone category. They have an innate medical value due to their ability to absorb/scavenge harmful reactive oxygen species (ROS). Moreover, they suppress the production of additional ROS by inhibiting ROS production by the enzyme xanthine oxidase (XO). Here, we investigated several coumarins as XO inhibitors and as radical scavengers using DPPH radical scavenging, XO activity inhibition, and cell toxicity assays. We also performed computational docking to quantitatively assess how coumarins interact with XO at the molecular level.

P-30: JONATHAN WEBSTER, TONY BANKEPER, DR. MANORI JAYASINGHE
Measurement of SERCA Activity by Isothermal Titration Calorimetry
FACULTY SPONSOR(S): STEFAN PAULA, CHEMISTRY
Abstract: The goal of this project was to establish a protocol for measuring the activity of SERCA – an ATPase – using isothermal titration calorimetry (ITC). ITC detects enzyme activity directly by measuring the enthalpy of the reaction and is therefore not dependent on coupled reactions and auxiliary enzymes. Here, ITC experiments were carried out by titrating adenine triphosphate (ATP) into a solution of SERCA and measuring the heat signals caused by the hydrolysis of ATP. Kinetic analysis provided the classic parameters Vmax and Km. We validated this method by comparing its results to those obtained by an established spectroscopic ATPase activity assay.

P-31: EMMA VANDER ENDE, CAMERON JOHNSON, HILLARY ANDERSON, LE DAO
Synthesis of Asymmetric Pyridoannulenes
FACULTY SPONSOR(S): K.C. RUSSELL, CHEMISTRY
Abstract: The objective of this research is to synthesize one of a series of asymmetric dehydroheteroannulenes (DHA) to continue studies that have already been done on previously synthesized symmetric DHA molecules. These studies include investigating the effects of the orientation of specific atoms within the molecules on the molecule’s physical properties and spectra. Additionally, once the synthesis of the asymmetric DHAs are complete, their interaction with metal ions will be studied to determine how their spectra is changed by the presence of the ions, and whether they could be used to detect the presence of the ions.

P-32: CORINNE BASINGER
NKU Molecular Wire Research: The Combination of Molecular Wire and Fullerene Synthesis to Create a Polymer with Both Fullerene and Transition Metals
FACULTY SPONSOR(S): KEITH WALTERS, CHEMISTRY
Abstract: The ultimate focus of our research group is to design new devices that utilize the movement of electrons following excitation by light. To achieve this goal, our small molecule studies must be expanded into polymeric systems. This poster presents our continuing efforts in polymerizing supramolecular monomers that involve our substituted fullerene compounds and basic p-conjugated organic systems. The inclusion of bipyridine systems allows us to also incorporate well-known transition metal chromophores. Synthetic and characterization results will be presented. Of particular interest is the use of GPC characterization to give us a good idea of the size of our synthesized polymers.

P-33: ZACHARY EWING
Synthesis of Novel Ligands to Connect Fullerene and Transition Metal Subunits for Supramolecular Applications
FACULTY SPONSOR(S): KEITH WALTERS, CHEMISTRY
Abstract: The purpose of this research is to synthesize a supramolecular system with both fullerenes and a transition metal present enabling the system to harness energy from light and transfer this energy both efficiently and properly. A bipyridine bridge is used to connect two fullerenes together and serve as a place for a metal to attach utilizing the nitrogen of each pyridine as attachment points. This system will then be duplicated into polymers that can be applied to paint for solar cell applications. Other alternative ligands potentially uniting multiple transition metals and fullerenes in a single small molecule will also be presented.

P-34: JESSICA HORN
Synthesis of Fullerene Complexes via One Pot Method for Solar Cell Applications
FACULTY SPONSOR(S): KEITH WALTERS, CHEMISTRY
Abstract: The goal of our research group is to create a solar cell using an organic compound known as a fullerene or C60. Because these are macromolecules, they have excess electrons, and therefore are good electron acceptors which make them potential molecules for use in our solar cells synthesis. The goal is to be able to attach a metal, possibly ruthenium or rhenium, as the electron donor which when excited by a photon of light will create the energy for the solar cell. A functionalized fullerene is necessary for this system, and this poster presents a one pot Sonogashira coupling reaction, which is different than our “traditional” three-step reaction method. The purpose of the research is to find out if this new pathway is faster and more efficient that the traditional method of preparing both functionalized fullerenes and other compounds in the future.

P-35: CHAD MASCHINOT
Functionalization of Fullerene, Coronene, and Corannulene for Organic Nanomaterials Utilizing Microwave Synthetic Methods
FACULTY SPONSOR(S): KEITH WALTERS, CHEMISTRY
Abstract: One of our group’s main objectives has been to produce substituted fullerenes (and other polyaromatic systems with extended conjugation) that facilitate metal-catalyzed coupling to other chemical subunits to create supramolecular systems. Besides fullerene, both corannulene and coronene have been attempted as potential alternates to the fullerene handle with varying results under the current thermal reaction conditions. While our current synthetic strategies using fullerenes are successful, we have recently explored a new strategy that utilizes microwaves instead of a traditional thermal reaction. This methodology appears to increase the reaction yield while decreasing the reaction time, and also has appeared to be more successful at obtaining reactions with coronene and corannulene substitution.

P-36: KENDRA BAUMAN, REBEKAH THOMAS
Fútbol de Mexico
FACULTY SPONSOR(S): MATT BAKER, COMMUNICATION
Abstract: My project takes a look at how the two countries, the United States of America and Mexico, approach the issue of poverty. Specifically, I researched what each government does to assist with housing, as well as what nonprofit organizations in each country do to assist with the problem. I found my information by reading different articles about each country. I also gained firsthand experience outside of what I had in the United States because I visited Mexico City in March. The poster is an overall comparison of the two different approaches.

P-37: RACHEL MULLINS
Housing for the Impoverished: A Comparison Between the United States and Mexico
FACULTY SPONSOR(S): MATT BAKER, COMMUNICATION
Abstract: The purpose of the research is to find out if this new pathway is faster and more efficient that the traditional method of preparing both functionalized fullerenes and other compounds in the future.

P-38: TAYLOR ROMER
Seoul Meets Mexico
FACULTY SPONSOR(S): MATT BAKER, COMMUNICATION
Abstract: The purpose of the research is to find out if this new pathway is faster and more efficient that the traditional method of preparing both functionalized fullerenes and other compounds in the future.

P-39: MINSUK KIM
Omotenashi: Japanese Hospitality
FACULTY SPONSOR(S): YASUE KINOSHITA, COMMUNICATION
Abstract: Many foreigners who visit Japan talk about distinguished experience of Japanese hospitality. The way they are served in Japan is completely different from that of other countries. Meanwhile, this service spirit of Japan is not limited to hotels and restaurants but also every store. This service mindset is called “Omotenashi”.

P-40: MISUN KIM
Seoul Meets Mexico
FACULTY SPONSOR(S): MATT BAKER, COMMUNICATION
Abstract: The purpose of the research is to find out if this new pathway is faster and more efficient that the traditional method of preparing both functionalized fullerenes and other compounds in the future.
set up Omotenashi marketing strategies. This study will examine the concept and the use of Omotenashi in contemporary Japan.

P-40: AMBER ADAMS
Leadership in the Throes of Groupthink: Does it Matter?
FACULTY SPONSOR(S): STEPHEN YUNGBLUTH, COMMUNICATION
Abstract: The purpose of this study is to determine if having a leader promotes or deters the phenomenon of groupthink. Subjects were placed into one of two groups to complete a ranking activity. Group A was leaderless and Group B had a leader with a pre-written instruction script. In both groups, subjects were asked to rank a list of twelve items from most important to least important. To test the groupthink phenomenon, subjects in both groups were given pre- and post-questionnaires. It is predicted that the leaderless groups may have more groupthink than groups with leaders.

P-41: SEAN PRÔNY
Bona Fide Virtual Team Communication Research
FACULTY SPONSOR(S): STEPHEN YUNGBLUTH, COMMUNICATION
Abstract: More and more, working with others online is a fact of life. This qualitative study seeks to identify best practices in communication for geographically distributed teamwork. Through audio and video teleconference interviews, participants discuss the dynamics of working in small groups and across distances too vast for face-to-face meetings. Their stories take us inside real world professional teamwork scenarios in which participants’ livelihoods depend at least partly on successful outcomes.

P-42: YASEMEE ALUFAISAN
Social Media Mining and Privacy
FACULTY SPONSOR(S): ALINA CAMPAN, COMPUTER SCIENCE
Abstract: Social media sites contain public and confidential information about their users. In order to protect the users’ privacy, social network graphs have to go through an anonymization process before being publicly published or released to a third party for data mining or statistical analysis. The goal of all the anonymization models is to preserve the privacy of the social network’s users and, in the same time, preserve enough information to enable a good analysis of the social network. We study how well we can preserve the important features in a social graph while ensuring privacy with different anonymization models.

P-43: TAMAM ALAYED
The Usability of File and Email Encryption
FACULTY SPONSOR(S): CHARLES FRANK, COMPUTER SCIENCE
Abstract: Our research seeks to understand the current usability situation of files and email encryption software. Particularly we focus in GnuPG encryption software and Thunderbird email application and the integration of them. We did a user testing to find out whether people can easily use those software applications to encrypt files and emails. The study was to find current problems in the following areas: downloading the softwares and set them up, create a key pair, get public keys published, encrypt/decrypt files, encrypt/decrypt emails.

P-44: SEAN BUTTS
Designing Green Mobile Applications with Cloud Computing
FACULTY SPONSOR(S): WEI HAO, COMPUTER SCIENCE
Abstract: As smart phones are becoming more prevalent among cell phone users, there is a trend towards an all-encompassing platform. Smart phones are required to be able to process and execute the same or similar applications to those of a laptop or desktop. These demands cause more stress on the processing power of the phone, which can lead to a decrease in performance and a strain on the battery. Amazon’s Elastic Computing Cloud (EC2) makes it possible to launch instances of the cloud and do some of the processing in these instances. Using Amazon’s EC2 Mobile SDK it is possible to launch instances from the mobile phones and have the off site cloud instance perform the operations required. With the technologies Amazon provides it is possible to create green mobile applications because of the power saved on the phone from executing processes off site.

P-45: JOSH NEWKIRK
Cloud-based P2P Web Caching for Mobile Devices
FACULTY SPONSOR(S): WEI HAO, COMPUTER SCIENCE
Abstract: More and more web traffic is generated from mobile devices. User-perceived response time is an important performance metric for mobile user experience. Web caching is a widely used approach to reducing the response time. However, mobile devices often have limited storage space. The traditional web caching approaches cannot achieve very high cache hit rate. In this research, we use cloud computing and Peer-to-Peer (P2P) techniques to design a cloud-based P2P web caching approach for mobile devices. Our approach is not replacement of the existing web caching approaches. It complements the existing approaches to increase cache hit rate so that it will further reduce the response time for mobile users. We will perform experimental studies to validate our approach.

P-46: BENJAMIN BAXTER
Best Practices of Client-Side Web Application Development
FACULTY SPONSOR(S): YI HU, COMPUTER SCIENCE
Abstract: Server side development and the Model View Controller (MVC) pattern are very mature. Until recently, there was nothing remotely close to those strategies for client side web application development. Client side development is supposed to be able to enrich user experiences and increase the performance of a web application. However, currently there are no easy patterns for directing client side dynamic application development. We examined leading client side frameworks and compared their attributes to those of the traditional server side models to seek out the best practice for client side web application development.

P-47: JOHN DWYER
Finding Anomalies in Windows Event Logs
FACULTY SPONSOR(S): TRAIAN TRUȚA, COMPUTER SCIENCE
Abstract: Windows event logs are a very useful source of data for security information, but sometimes can be nearly impossible to use due to the complexity of log data or the number of events generated per minute. For this reason, event log data must be processed so that an administrator is given a list of events that actually need the administrator’s attention. This has been standard in intrusion detection systems for many years to find anomalies in network traffic, but has not been common in event log processing. This paper will implement these intrusion detection techniques on a Windows event log data set to find anomalies in the log data.

P-48: JOSHDON BELLIS
GIS Mapping for Census Tract 505 - Part of the 505 Initiative at NKU
FACULTY SPONSOR(S): HONGMEI WANG, COMPUTER SCIENCE
Abstract: The 505 Initiative’s goal is to concentrate a portion of NKU’s public engagement in one Northern Kentucky neighborhood over time. This project sought to generate maps for the census tract 505, in Newport, Kentucky. GIS data describing spatial boundaries of the 58 census blocks within tract 505 and other spatial features were obtained from Northern Kentucky Area Planning Commission (NKAPC) or online GIS clearingshires. Tabular data at block level of census properties were collected from the U.S. Census Bureau’s website. The data was combined, analyzed, and mapped in the software ArcGIS.

P-49: TOBIAS DEATON
North Africa and the Arab Spring: A Geospatial Analysis of Political Violence
FACULTY SPONSOR(S): HONGMEI WANG, COMPUTER SCIENCE
Abstract: Political violence associated with the Arab Spring has received much attention since December 2010. Though media coverage abounds, there is a paucity of empirical research investigating this recent phenomenon. This study employs point pattern analysis methods in a Geographic Information System (GIS) to examine the geospatial dimensions of political violence before and after initiation of the Arab Spring in North Africa. The results show that political violence during the Arab Spring increased significantly and concentrated in densely populated areas, and the predominant type of violence shifted in each country. Furthermore, the results also indicate that battles were more likely to occur further from capital cities than riots and protests.

P-50: BRITTANY CARLISLE
Post-Discharge Evaluation of the Young Child Institute
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP
Abstract: The effects of early intervention were researched within a mental health treatment program for young children called the Young Child Institute (YCI). The purpose of this study was to examine the lasting effects of early intervention on children’s functioning in the areas of attachment, self-control, and attention problems. Information pertaining to these areas were recorded before treatment, at the end of treatment, and at least six months after treatment. Findings from this study indicate that early intervention services at YCI have a sustained influence on a child’s level of attachment, self-control, and attention span.

P-51: HANNAH CARTMILL
Girls on the Run and Ethnicity
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP
Abstract: Childhood obesity is a significant issue in the United States, often resulting in low self-esteem and other psychological/social issues. Consequently, it is important to identify effective programs to assist children in developing healthier life habits. One such innovative program is Girls on the Run (GOTR). Evaluation studies of GOTR have revealed positive results; however, research has failed to compare the effectiveness for different ethnic groups. This is particularly disconcerting since self-esteem issues are often culturally based. This study compares the effectiveness of GOTR for different ethnicities.

P-52: SHIRLEY CONRAD
Supportive Employment’s Effect on Daily Living Activities
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP
Abstract: Approximately 26% of Americans are diagnosed with a mental illness each year. Persons with psychiatric disabilities have difficulty obtaining and maintaining employment. While employment programs target vocational outcomes, researchers...
have examined whether these programs also have an impact on non-vocational activities of daily living. Supportive employment has been proven effective in attaining vocational outcomes; however, the literature remains divided concerning non-vocational implications. This study further examined the effectiveness of supportive employment in improving the activities of daily living for the severely mentally ill. This study thus adds to the literature on the benefits of supportive employment programs.  

P-53: KELLY CURRY  
“Using Treatment as a Punishment: Day Programming for Severely Mentally Ill Clients in a Mental Health Court Program”  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP; DAVE WILKERSON, SOCIAL WORK  
Abstract: The Northern Kentucky Regional Mental Health Court provides services to severely mentally ill individuals who have become involved with the judiciary system. The Mental Health Court recently designed and implemented a Day Treatment Program to address the need for frequent in-person monitoring, severe illness-management education, and mandatory client participation in meaningful daily activities for clients. This four day/week program was initiated in August of 2012 and consisted of group therapy and exposure to the Illness Management Recovery SAMSHA curriculums. The need for design and implementation of this program will be discussed.  

P-54: BRITTANIE DUDLEY  
Effectiveness of The Darkness to Light Program in the Northern Kentucky Area.  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP  
Abstract: Childhood Sexual Abuse (CSA) has become a great concern throughout the country. CSA can range from sexually offensive touching to intercourse. One out of every four girls and six boys will be sexually abused before the age of 18. Ninety percent of children are abused by someone that they know. The Darkness to Light Program is a CSA prevention program designed for adults and caregivers. This study examined the effectiveness of the Darkness to Light Program in the NKY area. This study seeks to find whether after completion, adults/caregivers have a better understanding of the signs/symptoms of CSA.  

P-55: SCOTT HALE  
Gender Differences as Related to Eating Disorders  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP  
Abstract: This study examined gender differences related to eating disorders in 20 adolescent male and 30 adolescent female patients seen at Cincinnati Children’s Hospital Medical Center between 2010 and 2012. Variables measured include age, ethnicity, mental health diagnoses, sexual orientation and Body Mass Index at intake. It was hypothesized that there would be significant differences between male and female eating disordered clients in terms of sexual orientation and BMI, while no significant differences were expected in terms of age, ethnicity, and comorbid diagnoses. Implications for research and practice are discussed.  

P-56: REBECCA IRWIN  
How Does Implementation of Dialectical Behavioral Therapy Impact Appointment Utilization in an Outpatient Mental Health Treatment Facility  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP  
Abstract: Dialectical Behavior Therapy (DBT) was developed to treat a mental health population of self-harming individuals who have difficulties with emotional regulation. One of the main tenants in stage four of the DBT program includes decreasing and/or eliminating behaviors that interfere with treatment such as missed appointments and not completing therapeutic assignments. This study sought to examine differences in appointment utilization between DBT clients and non-DBT clients. It is beneficial to examine the impact of the DBT treatment program on appointment utilization for maximization of limited therapeutic resources and treatment effectiveness.  

P-57: DAVE MERRISS  
Needs and Perceptions of Older Homeless at Emergency Shelter of Northern Kentucky  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP  
Abstract: Homelessness remains a persistent economic, social and health problem. Relatively little is known about the growing and largely invisible “older” homeless population over the age of 50. This survey study of 20-30 older homeless individuals examined participants’ general health needs and perceptions across the spectrum of demographic and background variables. The results of this study illustrate the vulnerability of the “older” homeless and their heightened risk of mortality. Additionally, findings demonstrate “older” homeless’ inability to achieve stable housing and access to regular healthcare.  

P-58: STACY SCHERDER  
Impact of Spiritual Support Groups on Anxiety  
FACULTY SPONSOR(S): CAROLINE MACKE, COUNSELING, SOCIAL WORK, LEADERSHIP  
Abstract: Cancer directly impacts not only the patient, but also their caregivers.
P-64: NATHAN ROGERS, EIKE LOHRBACH, TYLER SPAETH, DANIEL WALTERS, NICK BERTKE, RYAN HILLENBRAND, JEREMY TRESTER
Norse Baja SAE Buggy
FACULTY SPONSOR(S): MORTEZA SADAT-HOSSENY, ENGINEERING TECHNOLOGY
Abstract: The Society of Automotive Engineers (SAE) is a professional organization for students interested in the automotive field. Skills learned in the classroom meet real-world expectations through SAE regional and international competitions, where students gain valuable hands-on experience by working on projects, automotive, aerospace manufacturers and suppliers. Designed and built by Norse Baja, NKU’s vehicle will compete in the 2013 SAE international competition in June.

P-65: CODY SCHUMACHER, JAMES BROWN
Impact of Amur Honeysuckle on Wetland Gas Fluxes
FACULTY SPONSOR(S): KRISTINE HOPFENSPEGER, ENVIRONMENTAL STUDIES
Abstract: Lonicera maackii is an invasive shrub that is not fully understood in regards to its impact on ecosystem and environmental processes. Potentially altering greenhouse gas flux cycles and available nutrients in soil. Amur honeysuckle is of wide interest in the Eastern region of the US, especially in bottomland forests where stands are most dense. Early data suggests that honeysuckle lessens the available oxygen and water in surrounding soils for native species and microbes. Continuing to do so, honeysuckle may cause high levels of greenhouse gas release from wetlands. This study focused on the seasonal change in greenhouse gas emissions via microbial metabolic processes as honeysuckle density increased.

P-66: JAMES MCMANUS
Tracking the Modern Family: A Critique of Newspaper Comics from 1980 to 2005
FACULTY SPONSOR(S): JONATHAN REYNOLDS, HISTORY & GEOGRAPHY
Abstract: This research project will examine how family structures, gender roles, and the “nuclear family” have been portrayed from 1980 to 2005. Using popular culture mediums, we can see and evaluate the eras by how they saw themselves in their daily lives. This examination will use a survey of four newspaper comics that were in publications in newspapers across North America in this time period as primary sources. By examining the themes and recurring motifs regarding how families were structured and the gender roles family members take on within the literature, it becomes possible to see the evolution of the concept of family from the late 20th to early 21st century. This critique of recurring ideas, themes, and motifs will also allow for comparison with secondary sources regarding how families in North America were developing, compared to their idealized, pop culture counterparts. Through this contextual analysis of themes within popular newspaper comics, it becomes possible to see the historical importance of them as markers of not only popular thought but social trends within the eras they are syndicated.

P-67: JAMIE AUSTIN, SHERRY LABATE
Voter Disenfranchisement: How Close Elections are Won
FACULTY SPONSOR(S): MICHAEL WASHINGTON, HISTORY & GEOGRAPHY
Abstract: Of all the rights endowed upon the U.S. Citizen, the right to vote is the most coveted. The vote is the very essence of democracy and should be protected by Government and its Citizens with the same fervor usually reserved for the protection of the First and Second Amendments. Since 1877, disenfranchisement techniques have been used in high-stakes, close elections to limit the number of economically disadvantaged and minority persons who are able to participate in the democratic process. Only through voter education and political activism can the vote be secured for future generations of American Citizens.

P-68: DONALD ALBERT HALL
African American Struggles For Equality 1950s to the Present
FACULTY SPONSOR(S): MICHAEL WASHINGTON, HISTORY & GEOGRAPHY
Abstract: The project is an effort to depict various methods used by African Americans to achieve justice and racial equality from the 1950s to the present. The exhibit portrays five action-oriented methods including economic boycotts, picketing, mass demonstrations, effective use of the legal system and the mass voter turn-out that contributed to the successful elections of President Barack Obama in 2008 and 2012.

P-69: ANGELICA SMITH
Slave Narratives and Their Historical Significance
FACULTY SPONSOR(S): MICHAEL WASHINGTON, HISTORY & GEOGRAPHY
Abstract: During the times of slavery, the treatment of Africans were unimaginable. A major problem was that no one in the North knew how bad blacks were being treated in the South until slaves began to write Slave narratives. These narratives described their daily experiences. The purpose of the project is to describe the historical significance of the slave narrative.

P-70: MELISSA THOMPSON
The Disfranchisement of African Americans
FACULTY SPONSOR(S): MICHAEL WASHINGTON, HISTORY & GEOGRAPHY
Abstract: The Compromise of 1877 ended Reconstruction and resulted in the withdrawal of federal troops from the South. The “redeemers” restored white “home rule” and resorted to every legal and extra-legal maneuver to deny black people political equality. By 1910 blacks were denied the right to vote in every state throughout the South. The purpose of the project is to describe the various techniques employed to disfranchise African Americans during Reconstruction and the post-Reconstruction eras.

P-71: KYLIE ANNUNZIATA, JESSE TOMLIN
Range, Abundance, Body Size, and Conservation Status of Rare Freshwater Fishes of the Southeastern United States
FACULTY SPONSOR(S): KENNETH OSWALD, HONORS PROGRAM
Abstract: Multiple life history, zoogeographic, and demographic parameters have been shown to influence conservation status in rare species. We examine the effects of geographic range, abundance, and body length on conservation status of freshwater fish endemic to the Atlantic slope of the southeastern United States (Roanoke River to Altamaha River). We test for correlations among these parameters and also utilize statistical models to assess their influence on conservation status. Results are useful to conservation biologists tasked with determining patterns of imperilment among rare species.

P-72: ZACHARY HOLT KAMP, REBECCA KIDNEY
Evolution, Creationism, and Intelligent Design at Northern Kentucky University
FACULTY SPONSOR(S): KENNETH OSWALD, HONORS PROGRAM
Abstract: We surveyed the Northern Kentucky University (NKU) population at three locations, Student Union, Baptist Student Center, and Science Center. We gauged the knowledge of the NKU community about evolution, creationism, and intelligent design and compared respondents’ knowledge base to their personal religious backgrounds. We found a wide variety of knowledge levels and opinions at each on-campus location. Personal religious beliefs influenced respondents’ views, and generally, the population appeared relatively uneducated on evolution and intelligent design compared to creationism. The majority of respondents indicated that creationism should be taught alongside one another in public school science classes.

P-73: KATHERINE BACHMAN
Glaciated and Nonglaciated Coalescent Modeling of Genetic Diversity in Rare Species
FACULTY SPONSOR(S): KENNETH OSWALD, HONORS PROGRAM
Abstract: Genetic diversity data in rare species are typically subject to high levels of peer reviewed scrutiny due to inferences based on small sample sizes. The purpose of this research is to run computer simulations of small populations to determine sample sizes that accurately represent population diversity in both glacial and interglacial periods. Using a coalescent model, we investigate evolutionary genetic measures of diversity for both periods. Specifically, we simulate nucleotide diversity (π), haplotype diversity (h), total number of segregating sites (S), and population differentiation (FST). We recommend minimum sample sizes for evolutionary genetic studies of rare species.

P-74: MATTHEW WOESTE
Analysis of the Greater Cincinnati Wildlife Trade
FACULTY SPONSOR(S): KENNETH OSWALD, HONORS PROGRAM
Abstract: Estimates for the value of the global wildlife trade range from $8 - $159 billion annually. Among other threats, such high volume trade places species at risk of extinction and threatens the spread of disease. This study characterized the local wildlife trade. Inventories taken from five local pet retailers mirrored national and global trends. The total value of wildlife trade within Greater Cincinnati was estimated at $1.3 million, with the majority of species coming from Africa, Asia, and South America. Imperiled species were worth considerably more than common ones.

P-75: EMILY COOPER
Evolution, Creationism, and Intelligent Design at Northern Kentucky University
FACULTY SPONSOR(S): KENNETH OSWALD, HONORS PROGRAM
Abstract: Estimates for the value of the global wildlife trade range from $8 - $159 billion annually. Among other threats, such high volume trade places species at risk of extinction and threatens the spread of disease. This study characterized the local wildlife trade. Inventories taken from five local pet retailers mirrored national and global trends. The total value of wildlife trade within Greater Cincinnati was estimated at $1.3 million, with the majority of species coming from Africa, Asia, and South America. Imperiled species were worth considerably more than common ones.

P-76: SCOTT BROCK, JOSH VOLPENHEIN, BRIAN GISH
The Effect of Active Video Games on Heart Rate: Exercise or Not?
FACULTY SPONSOR(S): GABRIEL SANDERS, KINESIOLOGY & HEALTH
Abstract: Background. Nintendo Wii Sports Boxing and Xbox Kinect Sports Boxing are considered active video games. However, the Wii requires upper body movements while the Kinect requires full body movements for successful game play. Purpose. To assess average and maximal heart rate during four conditions. Methods. Twenty students wore a polar heart rate monitor and participated in four, 10-minute conditions; rest, treadmill walking at 3.0 miles/hour, Wii Boxing, and Kinect Boxing. Results. A single, four condition repeated measures ANOVA was utilized to examine any differences in heart rate.
Abstract: A rotator cuff strain may lead to significant limitations in function and an increase in pain and instability in overhead athletes. The extent of recovery from surgical intervention and rehabilitation can vary depending on the complexities of the tear, repair procedure, and post-operative patient management. Evidence states that although non-operative options should be exhausted, surgical treatment is frequently necessary for any rotator cuff tear if conservative treatment fails. Tear thickness has been used often to determine the surgical approach. Evidence suggests that preoperative and functional characteristics will influence patient presentation in terms of strength and function, and thus need to be considered when healthcare professionals design rehabilitation programs.

P-85: SHANE SULLIVAN, CHRIS BAYNE
Tommy John Surgery: Can Repairing the Ulnar Collateral Ligament Make a Baseball Player’s Arm Stronger?
FACULTY SPONSOR(S): FRANK SHIPLEY, KINESIOLOGY & HEALTH
Abstract: The ulnar collateral ligament (UCL) is the primary stabilizer for valgus support in the elbow. Injury to the UCL is common among baseball players and requires surgery to return to play. Research shows that athletes who have undergone Tommy John surgery have returned to their previous play or higher. The purpose of this study was to compare and contrast the success rate of baseball players returning to play that have had Tommy John surgery.

P-86: PETER ALBREcht
Retrospective Isokinetic Analysis of Glenohumeral Rotator Stresses in Division I Baseball Pitchers
FACULTY SPONSOR(S): RACHELE YOVELPIOH, KINESIOLOGY & HEALTH
Abstract: The glenohumeral joint is subjected to high forces during pitching. As shown in previous research, the combination of high forces and an abnormal range of motion can leave the shoulder susceptible to injury. Pitchers on Northern Kentucky University’s men’s baseball team were monitored for shoulder injury and rehabilitation. Measurements of shoulder stress were collected using a dynamometer. The purpose of this study was to determine if there was a significant difference in the strength of pitchers who reported shoulder injury compared to those who did not in the hope of determining a plan to decrease the chance for injury.

P-87: THOMAS GOODING, CAITLIN COORS, RACHEL FABRE
Lig Domination, Hamstring Flexibility, and ACL Injuries Among Collegiate Soccer Players: Is there a Relationship?
FACULTY SPONSOR(S): RACHELE YOVELPIOH, KINESIOLOGY & HEALTH
Abstract: Sustaining a knee injury in soccer can often be season ending, if not career ending. One of the most serious and commonly sustained injuries in athletes is the Anterior Cruciate Ligament (ACL) tear. Many factors have been attributed to a non-contact ACL tear, but no specific set of causes have been linked. The purpose of this study was to examine ligament dominance and hamstring flexibility in college soccer players to determine if there was a correlation to non-contact Anterior Cruciate Ligament injuries in the knee.

P-88: ZACHARY HASEKOESTER, ROBBIE LOTZ, DONTA JOHNSON
Elastic Therapeutic Tape
FACULTY SPONSOR(S): RACHELE YOVELPIOH, KINESIOLOGY & HEALTH
Abstract: Elastic therapeutic tape (ETT) has recently gained popularity amongst athletes and the general public. The ETT can be applied in different ways to facilitate the neuromuscular system, reduce pain and inflammation, enhance performance, prevent injury and promote good circulation and healing, and assist in returning the body homeostasis. Much of the research on elastic therapeutic tape was done on strength and range of motion, and the results are not conclusive. Therefore, the purpose of this study was to examine the effects of elastic therapeutic tape on throwing accuracy of the throwing arm in healthy Division 3 baseball players.

P-89: TYLER HOPPER, TYLER WATSON, KAIE REISELMAN, ELEANOR STEUR
The Effect of Ankle Bracing vs. Ankle Taping on Athletic Performance
FACULTY SPONSOR(S): RACHELE YOVELPIOH, KINESIOLOGY & HEALTH
Abstract: Taping ankles and wearing ankle braces are common in today’s athletics. Both methods are meant to increase the overall stability of the ankle joint. Research has shown that ankle taping is less effective the longer you wear it, while braces can be adjusted at any point. However, research has not shown its effect on performance. One method could possibly have a greater impact on athletic performance. The purpose of this study was to determine if there is a significant difference in athletic performance between ankle taping and ankle bracing.

P-90: JEFFREY POORE, LUKE GREENE
Comparing Eccentric and Concentric Loading Effects in Relation to Doms
FACULTY SPONSOR(S): RACHELE YOVELPIOH, KINESIOLOGY & HEALTH
Abstract: In many rehabilitation programs, muscle soreness following exercise can hinder progression and lead to setbacks. It is accepted in literature that the cause of this soreness is due from the eccentric phase of movement. Previous studies have compared eccentric and concentric effects, but not on the same subject. The purpose of this study was to replicate published findings while eliminating inter subject variables in order to better design rehabilitation programs.
The World Health Organization and United Nations Children’s Fund (UNICEF) have focused on the effectiveness of involuntary treatment and Casey’s Law, an educational offering, in addressing addiction. To increase understanding of addiction as a disease, they addressed stigma by professionals, which was further ignited by the gang rape of a 23-year-old Delhi woman. This event highlighted the conditions of women in India. The students were enlightened by gender activists who discussed the importance of women’s health in the societal context.

Abstract: On December 27, 2012, fifteen female students and two female professors from Northern Kentucky University departed for a two-week study abroad class to explore women’s health and well-being in India. The class, “Women’s Health in the Societal Context,” focused on the health and well-being of women. The project was part of a collaborative effort between Northern Kentucky University, NKU’s Social Work program, and the Burkehardt Consulting Center.

P-93: MICHELLE LAUER, AMY LAUER
Providing Puberty Education to Girls in Private Schools
FACULTY SPONSOR(S): KATHY BERGMAN, NURSING
Abstract: Puberty education was a key need among female students at St. Joseph School. The purpose of a Mother Daughter Moment was to develop an after-school educational meeting where mothers and daughters can learn and share knowledge about female puberty, health, and hygiene. The objectives of this meeting were to enhance lines of communication on the topic of puberty, create a secure environment where the students feel comfortable, and encourage participants to take control of their health and well-being. Puberty information, appropriate for the audience, was developed including topics on the female reproductive system, pad usage, self-esteem, and more.

P-94: KRISTEN ROBB
Increasing Breastfeeding: A Baby-Friendly Hospital Initiative
FACULTY SPONSOR(S): KATHY BERGMAN, NURSING
Abstract: The World Health Organization and United Nations Children’s Fund have developed Baby-Friendly Hospital Initiative to promote breastfeeding. University Hospital has begun the certification process of becoming a Baby-Friendly Hospital. This certification requires compliance with evidence-based practices of the Ten Steps to Successful Breastfeeding. The purpose of this project was to develop a staff-training program and evaluation tool that meet the requirements of the Baby-Friendly Hospital Initiative. This program consisted of prepared questions to answer mothers’ concerns about breastfeeding, and educational material on breastfeeding topics. A questionnaire evaluated the improvement of knowledge and skill confidence of the nursing staff on breastfeeding.

P-95: RACHEL WILKES-MITCHELL
The Gentle Cesarean Section: Initiating Immediate Skin-to-Skin Contact and Breastfeeding at Birth
FACULTY SPONSOR(S): KATHY BERGMAN, NURSING
Abstract: The Christ Hospital Labor and Delivery Unit was seeking ways to increase their skin-to-skin contact and breast feeding initiation rates during the first hour of life for mothers who deliver via cesarean section. The unit manager decided to implement a Gentle Cesarean Section procedure to help increase low skin-to-skin contact and breast feeding rates. This Gentle Cesarean Section would be for mothers undergoing a scheduled, term, low risk cesarean section only. It would not be available for preterm, breech, or multiple birth deliveries. The process of implementing this policy is in the early phases.

P-96: LORI MANGAN, DEBBY FULLER, STEPHANIE THEOBALD, TARYN FLEDDERMAN
300 Hours in India
FACULTY SPONSOR(S): ADELE DEAN, NURSING; KAREN TAPP, SOCIAL WORK; FRANCOIS LEROY, STUDY ABROAD
Abstract: On December 27, 2012, fifteen female students and two female professors from Northern Kentucky University departed for a two-week study abroad class to India. The class, “Women’s Health in the Societal Context,” focused on the health conditions of women in India. The students were enlightened by gender activists who, already on fire about the injustices Indian women face from widowhood and other factors, were further ignited by the gang rape of a 23-year-old Delhi woman. This presentation will take you on the students’ journey more than 6,000 miles away... and so their story begins.

P-97: SHEILA PELLE, NOLA RESTESAN
Lighting the Way to Recovery from Addiction Disease
FACULTY SPONSOR(S): KIM DINSEY-READ, NURSING
Abstract: Casey’s Law is legal court ordered treatment of individuals with substance addiction. To increase understanding of addiction as a disease, stigma by professionals, and effectiveness of involuntary treatment and Casey’s Law, an educational offering, was given to 27 healthcare and allied students, faculty and staff. A pre and post survey indicated a decrease in the belief an individual must want treatment and an increase in responses that participants had adequate knowledge of Casey’s Law to utilize it in practice. Future recommendations include the incorporation of involuntary treatment and Casey’s Law in healthcare and allied health studies curriculums and continuing education.

P-98: SARAH HAINES
Increasing Parental Knowledge about Shaken Baby Syndrome (SBS) and Methods of Prevention
FACULTY SPONSOR(S): TERESA HUBER, NURSING; KRIS PFENDT, NURSING
Abstract: Shaken baby syndrome (SBS) is one of the most severe forms of child abuse with very high mortality rates for children under one year of age. The purpose of this study was to improve the SBS discharge handout for the University Hospital of Cincinnati making it easier to read with a focus on education and prevention. In the development of this handout a series of questions were asked among staff members of the neonatal intensive care unit (NICU). The handout will have a positive impact by making it easier for staff to educate caregivers on SBS.

P-99: MAHMOOD ALHAKEEM
Fabrication and Characterization of Carbon-Fiber-based Composites
FACULTY SPONSOR(S): SEYED ALLAMEH, PHYSICS & GEOLOGY
Abstract: Structurally tough materials are needed to increase the resistance of structures against dynamic shear forces typical of earthquakes. Naturally tough biomaterials such as nacre use a layered pattern combining hardness of ceramics with the ductility of polymers in alternate layers. Mimicking such structures, it is possible to make composites that can be used in the fabrication of durable houses. Reinforcing these composites will give the tensile strength required for structural materials. Preliminary results of a study on the effect of reinforcement on the toughness of structural composites will be presented.

P-100: AMR NAJJAR, ADNAN ALMUWALLAD, HANIALHARI
Algae-Based Biofuel Instrumentation for Household Application
FACULTY SPONSOR(S): SEYED ALLAMEH, PHYSICS & GEOLOGY; MIRIAM KANNAN, BIOLOGICAL SCIENCES
Abstract: The high levels of nutrient in household sewage effluent may be used for growth of algae to produce biofuel. A compact biofuel reactor is designed and built to grow algae and harvest biofuel in an automated self-sustaining continuous process. The process requires light and flow of effluent both of which can be supplied automatically. Algae are then mechanically crushed and oil is separated and converted into biodiesel. The crushed algae may be used for diatomaceous earth or nanotechnological applications, and the resulting water is suitable for irrigation. The mechanics and engineering aspects of the growth biofuel reactor are discussed here.

P-101: SAMANTHA CALDWELL
Paleoenvironmental Interpretation Through Oxygen Isotopes in Phosphat From Barosaurus Indicate Increasing Aridity at The Aaron Scott Quarry (Morrison Formation, Jurassic Period)
FACULTY SPONSOR(S): JANET BERTOG, PHYSICS & GEOLOGY
Abstract: Taphonomic research, stratigraphy, and oxygen isotopes from a Barosaurus bone were used to determine climate patterns and their effects on the animal’s environment in the Late Jurassic of Utah. Data suggests there was an increase in aridity over the animal’s lifetime. Oxygen isotopes of phosphorus from the femur of the Barosaurus range from 13-16 per mil dO18 from the inner part of the bone to the edge. Millimeter-scale fluctuations in the dO18 of 1-2 per mil may be evidence of yearly fluctuations. The trend is increasing in dO18, showing a climate change at the end of the animal’s life.

P-102: JUAN MALDONADO
Optisthias (Sphenodontia) From The Aaron Scott Quarry (Morrison Formation, Jurassic Period) of Central Utah
FACULTY SPONSOR(S): JANET BERTOG, PHYSICS & GEOLOGY
Abstract: The Aaron Scott Quarry in central Utah (Jurassic Period) is unusual in that microfossils and macrofossils are found together. In the quarry several specimens of Optisthias sp. have been recovered. These specimens represent at least four individuals. Specimens include two maxilla, one pterygoid, and four dentaries. The four dentaries exhibit variations that suggest they are from different individuals and possibly different species. The dentary differences vary from the shape and length of the teeth, to the structure of the jaws. The variability in these specimens suggest at least two different species of Optisthias from this site.

P-103: EVAN CLARK
Comparison of Seismic Methods on Local Landslides
FACULTY SPONSOR(S): THOMAS BRACKMAN, PHYSICS & GEOLOGY
Abstract: Northern Kentucky and Cincinnati are prone to landslides. Previous work using surface wave seismic techniques were used to image the potential failure plane (Brackman). We have conducted a seismic refraction survey along the previous seismic line in order to correlate the two methods and determine if they can be used in concert to locate the failure plane more accurately. The results will be presented on this poster.
Abstract: The Cosmic Ray Electron Synchrotron Telescope, CREST, is a balloon-borne experiment that detects high energy cosmic rays. This is a comparison between previous and proposed atmospheric models for use in the data analysis of CREST. The models relate atmospheric density, pressure, and temperature to altitude. The goal of this comparison is to subsequently create an atmospheric model that resembles reality as closely as possible.

P-112: KIRK WALLACE
CREAM and ISS-CREAM Simulations
FACULTY SPONSOR(S): SCOTT NUTTER, PHYSICS & GEOLOGY
Abstract: The Cosmic Ray Energy and Mass instrument, CREAM, is a multi-university collaborative balloon experiment that aims to measure both the energy and mass of high (I TeV) energy cosmic ray nuclei. There are currently two versions of the CREAM detector; one version will fly on a traditional balloon flight (CREAM), while the other will be docked on the International Space Station (ISS-CREAM). Currently both instruments are modeled with Monte-Carlo simulations to aid with the detector's design. This work updates the simulations with geometry modifications for both the CREAM and ISS-CREAM experiments.

P-113: CHRISTOPHER WALES
The United Nations Security Council Expansion and Legitimacy
FACULTY SPONSOR(S): MICHAEL BARANOWSKI, POLITICAL SCIENCE, CRIMINAL JUSTICE & ORGANIZATIONAL LEADERSHIP
Abstract: The UN Security Council has been responsible for the oversight of international peace and security since 1945 and has remained largely unchanged since its founding. In recent years, however, many have questioned the legitimacy of the Council and several scholars have called for Security Council reform. The greatest advocates for reform have been the G4, a coalition of states who have advocated for each other’s permanent membership on the Council. This study attempts to understand how expanding the number of permanent seats on the UNSC would affect its legitimacy as a security and peace keeping organization.

P-114: PAIGE TSUISMIS
Virtual Bullies: Prevalence and Predictors
FACULTY SPONSOR(S): CHERYL JONSON, POLITICAL SCIENCE, CRIMINAL JUSTICE & ORGANIZATIONAL LEADERSHIP
Abstract: Despite its significance, the rate at which youth vote is consistently measured, and there is a lack of unification among Afro Latinos and denying the existence of racism within Latin America. A hurdle in gaining protection and recognition under the Law is the lack of unification among Afro Latinos and denying the existence of racism within Latin America. A hurdle in gaining protection and recognition under the Law is the lack of unification among Afro Latinos and denying the existence of racism within Latin America. A hurdle in gaining protection and recognition under the Law is the lack of unification among Afro Latinos and denying the existence of racism within Latin America. A hurdle in gaining protection and recognition under the Law is the lack of unification among Afro Latinos and denying the existence of racism within Latin America. 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increased greatly over the last two decades. It is unknown what influence APDs have on brain maturation and social interaction. This study examined the effects of early-life antipsychotic drug treatment on social interaction behaviors in young rats. Sixty rat pups (33 females/27 males) were randomly assigned to receive injections of a control solution, or 1.0 or 3.0 mg/kg of the APD risperidone from postnatal day 14–42. Rats administered risperidone were dramatically sedated one hour post-injection, and interacted with cage mates less at 25 hours post-injection.

P-119: RACHEL STEVENS, MATT GANNON
The NMDA Antagonist, MK-801, Impairs Recall in an Operant, Delayed Non-matching to Sample Task
FACULTY SPONSOR(S): MARK BARDIGETT, PSYCHOLOGICAL SCIENCE
Abstract: Dysfunction at NMDA-type glutamate receptors has been implicated in the pathophysiology of several psychiatric and neurological disorders and has been associated with deficits in learning and memory. Rats were used to determine the effects of the NMDA receptor antagonist, MK-801, on spatial working memory in an operant version of a delayed non-matching to sample task. MK-801 diminished the number of correct responses in a dose-dependent manner, and rats treated with high doses of MK-801 completed fewer trials. The spatial working memory deficits observed in rats after MK-801 treatment can be used as a model of NMDA dysfunction in psychiatric disorders.

P-120: CLAUDIO TORO SEREY, MATT GANNON
The Effects of Zolpidem on Regional Neuronal Activity and Behavior
FACULTY SPONSOR(S): MARK BARDIGETT, PSYCHOLOGICAL SCIENCE
Abstract: Ambien (Zolpidem) is a relatively common sedative used to effectively induce sleep in humans. However, in late years it has been reported that for some patients in minimally conscious states, Ambien produces a paradoxical effect, waking them up for limited amounts of time. Because of this, the current experiment aimed to better understand the way in which Zolpidem affects brain networks commonly associated with consciousness, as well as determining its effects on memory through an animal model of impaired cognition. These results provide support for a mechanism that works as a base to further study this phenomenon.

P-121: KAREY COOPER, EMILY ENGELS, KAYLA VIRES, KATELEEN BELL, YOUNGUE N LEE
The Joint Effect of Exercise and Environment on Emotion and Cognition
FACULTY SPONSOR(S): KIMBERLY BREITENBECHER, PSYCHOLOGICAL SCIENCE; KATHLEEN FUEGEN, PSYCHOLOGICAL SCIENCE
Abstract: This experiment examined the joint impact of exercise and environment on mood and attention. Researchers have documented that exercise improves mood and attention, and that being in nature restores vitality and improves working memory, though no one has yet examined the combined effect of exercise in nature. Undergraduate participants were mentally fatigued and then randomly assigned to exercise or rest, either indoors or outdoors. We report changes in mood and attention as a function of physical activity and environment.

P-122: GLADYS FRIMPONG-MANSOH, ADAM ELSAMAH
Does Participation in As You Are Physical Activity Classes Affect Wellbeing?
FACULTY SPONSOR(S): KIMBERLY BREITENBECHER, PSYCHOLOGICAL SCIENCE
Abstract: The purpose of the present investigation is to evaluate the effect of participation in the As You Are Physical Activity Classes. These classes include two, 30-minute classes taught by Kim Baker, Employee Wellness Manager and Exercise Physiologist. These classes meet twice per week throughout the spring semester. Individuals who report for class will be invited to participate in an associated research project. Interested class members will complete anonymous, online surveys assessing psychological and physical wellbeing before and after participating in the As You Are classes each day of class. Results will be presented.

P-123: CASEY BIGGS
The Importance of Fun at Work: Predicting Retention with Supervisor Feedback, Goal Clarity, and Perceived Control Survey Items as Mediated by Job Satisfaction.
FACULTY SPONSOR(S): KATHLEEN FUEGEN, PSYCHOLOGICAL SCIENCE
Abstract: Research on work motivation and satisfaction has become more popular in recent years in order to help people feel happier and more engaged at work. The importance of fun at work has also been explored recently in order to help people feel happier and more engaged at work. The purpose of this study was to investigate the prevalence of alcohol-induced blackouts in college students who consume alcohol alone compared to AmED.

P-124: KAREY COOPER
Is Someone Watching You? The Impact of Audience Effects and Exercise in Nature on Attention Restoration
FACULTY SPONSOR(S): KATHLEEN FUEGEN, PSYCHOLOGICAL SCIENCE
Abstract: The objective of this study is to examine how audience effects impact mood, attention, and restoration while exercising in a natural environment, as these combined factors are not supported in any study to date. Participants were randomly assigned to either walk or sit outdoors near Loch Norse. The sitting participant either observed or faced away from the walking participant. Both participants completed mood and attention measures prior to and after the manipulation. This study may reveal that the potential for evaluation introduces a distraction that interferes with attention restoration and thus may detract from the cognitive benefits of exercising in nature.

P-125: YOUNGUE N LEE, KATELEEN BELL, KAYLA VIRES, EMILY ENGELS, KAREY COOPER
The Joint Effect of Exercise and Environment on Perceived Restoration, Health-related Attitudes, and Health-related Behaviors
FACULTY SPONSOR(S): KATHLEEN FUEGEN, PSYCHOLOGICAL SCIENCE; KIMBERLY BREITENBECHER, PSYCHOLOGICAL SCIENCE
Abstract: This experiment examined the joint impact of exercise and environment on perceived restoration, attitudes, and food choice. Researchers have documented that exercise reduces anxiety, and that being in nature promotes feelings of restoration, though no one has yet examined the combined effect of exercise in nature. Undergraduate participants were mentally fatigued and then randomly assigned to exercise or rest, either indoors or outdoors. We report the effects of the intervention on perceptions of restoration, attitudes toward the activity, and snack and beverage choices.

P-126: BRANDON WOOD
The Impact of Attitudes About Work and Family on Students’ Aspirations
FACULTY SPONSOR(S): KATHLEEN FUEGEN, PSYCHOLOGICAL SCIENCE
Abstract: Researchers have investigated how work and family roles are negotiated by working adults. Studies show that stress at work affects one’s satisfaction with family life, and stress at home affects job satisfaction. However, less is known about how young adults who do not yet have families think about work and family roles. The purpose of this study is to investigate the expectations young adults have regarding work-family conflict, family-work conflict, family-work facilitation and family-work facilitation. Undergraduate participants completed an online questionnaire designed to assess their attitudes concerning career planning and future family expectations. The results of this study will benefit future psychology majors who enroll in a career-planning course.

P-127: CHRISTINA SHRADER
Belief in Mental Continuity Between Animals and Humans Predicts Support for Animal Rights
FACULTY SPONSOR(S): DAVID HOGAN, PSYCHOLOGICAL SCIENCE
Abstract: In 1871, Darwin proposed that humans and the great apes possess similar psychical processes, such as learning, memory, and self-awareness. His proposition, which is known as the mental continuity hypothesis, became a valuable scientific concept for organizing data and stimulating research in comparative psychology. The present research investigates whether students’ beliefs in mental continuity influence their attitudes toward animal rights, and the quality of emotional attachment with their pets. Our results indicate that students who believe strongly in animal-human continuity are not only stronger advocates for animal rights, but they also form stronger emotional attachments with their pets.

P-128: EMILY TEEGARDEN
The Impact of Diversity Courses, Interpersonal Contact, and Disgust Sensitivity on Homophobia in College Students
FACULTY SPONSOR(S): DAVID HOGAN, PSYCHOLOGICAL SCIENCE
Abstract: The present study examined the influence of diversity courses, disgust sensitivity, and quality of interpersonal contact with homosexuals on homophobia in heterosexual male and female undergraduate students. Results indicated that relatively favorable attitudes toward homosexuals were associated with completion of one or more courses in human sexuality or race and gender; relatively low levels of disgust sensitivity; and relatively favorable experiences with a homosexual person. Disgust sensitivity partially mediated the association between course completion and homophobia in females, and disgust sensitivity partially mediated the link between interpersonal contact and homophobia in both genders.

P-129: ASHLEY WORMLEY
A Comparison of Happiness Ratings of Political Conservatives and Liberals Before and After the 2012 Presidential Election
FACULTY SPONSOR(S): DAVID HOGAN, PSYCHOLOGICAL SCIENCE
Abstract: Prior research has shown that people who identify as politically conservative are generally happier than liberals. The present study compared self-reports of happiness and life satisfaction in conservative and liberal college students before and after the 2012 presidential election. The results suggested that conservatives were significantly happier and more satisfied with life than liberals before and after the election. Contrary to our expectations, the election outcome did little to reduce or reverse the difference between the groups.

P-130: HEATHER ELSTUN, AMY STATMATES
Survey of Consequences Associated with Drinking Alcohol
FACULTY SPONSOR(S): CECILE MARCZINSKI, PSYCHOLOGICAL SCIENCE
Abstract: Research has indicated that the risks associated with the consumption of alcohol mixed with energy drinks (AmED) may be greater than a similar dose of alcohol alone. The purpose of this study was to investigate the prevalence of alcohol-induced blackouts in college students who consume alcohol alone compared to AmED.
Participants completed questionnaires about their demographics, current alcohol consumption rates with and/or without energy drinks, the rate of blackouts and other behavioral consequences associated with alcohol consumption. Results indicated that AmED drinkers had a higher rate of blackouts, as well as other negative behavioral consequences, when compared to non-AmED drinkers.

P-131: HEATHER HERTZENBERG
The Relationship between Alcohol Consumption and Facebook Postings of Intoxication
FACULTY SPONSOR(S): CECILE MARCZINSKI, PSYCHOLOGICAL SCIENCE
Abstract: Underage and binge drinking is widespread among college students. This demographic group also widely uses Facebook, a social networking website. Individuals often add pictures and/or comments about recent drinking episodes to their personal Facebook pages. Therefore, the purpose of this study was to investigate the relationship between alcohol consumption patterns and postings of alcohol use on Facebook. Participants completed a web-based survey to assess drinking problems (the AUDIT questionnaire) and recent activity on Facebook. Results indicated there was a significant positive correlation between participants’ self-reported scores on the AUDIT and Facebook postings of intoxication.

P-132: SARAH MALONEY, AMY STAMATES
The Effects of Energy Drink Expectancies on Memory and Critical Thinking Tasks
FACULTY SPONSOR(S): CECILE MARCZINSKI, PSYCHOLOGICAL SCIENCE
Abstract: The purpose of this study was to investigate positive and negative expectancies of energy drink consumption on cognitive and subjective measures. Participants were randomly assigned to one of four dose/expectancy message conditions. The results indicated that participants felt more sedated after drinking the energy drink at 20 minutes than the group that received placebo. The participants in the enhance condition desired more energy drink than the impair expectancy groups. There were no significant results for dose or expectancy on the memory or the math task. Given recently reported health concerns associated with these beverages, limiting consumption of these products appears warranted.

P-133: RENEE MEISTER, CECILE MARCZINSKI
Effects of Age of First Use of Alcohol and Age of First Intoxication on Impulsivity and Behavioral Control in Young College Students
FACULTY SPONSOR(S): CECILE MARCZINSKI, PSYCHOLOGICAL SCIENCE
Abstract: Alcohol use at an early age is a risk factor for future heavy drinking and alcohol dependence. This study examined the age of first drink and first intoxication can be used to determine developmental and cognitive risks associated with binge drinking. Participants between the ages of 18 and 20 completed questionnaires that assess past and present drinking habits and impulsivity and behavioral control is measured by a cued go/no-go task. It is hypothesized that participants who self-report an earlier age of first drink and first intoxication may exhibit greater cognitive impairments on the behavioral control task.

P-134: AMY STAMATES, SARAH MALONEY, CECILE MARCZINSKI
Effects of Artificial Sweeteners on Breath Alcohol Concentrations
FACULTY SPONSOR(S): CECILE MARCZINSKI, PSYCHOLOGICAL SCIENCE
Abstract: This study examined differences in breath alcohol concentrations (BrACs) in varying doses of alcohol and diet or regular mixer consumed with an artificially versus a sugar sweetened mixer. Subjects attended five sessions where they received one of five doses in random order (0.30 g/kg dose of alcohol mixed with a diet or a sucrose sweetened beverage, 0.60 g/kg dose of alcohol mixed with a diet or a sucrose sweetened beverage, or placebo beverage). BrACs were significantly greater when subjects consumed alcohol + diet mixer compared to when they consumed the same amount of alcohol + regular mixer in both low and high alcohol conditions.

P-135: MELISSA AARRINGTON
The Effects of Organizational Supports and Explanations on Employee Perceptions of Fairness with Work-Family Programs
FACULTY SPONSOR(S): PHILIP MOREB, PSYCHOLOGICAL SCIENCE
Abstract: The increasing diversity of workers in the labor force (i.e., single parents) has led organizations to provide workers with family-friendly programs to help balance work and family responsibilities. This study examines employee perceptions of fairness in work-family benefit program decisions made by a direct supervisor versus the organization’s human resources office. Also, this research investigates different types of explanations for denying these benefits programs (i.e., flextime, telecommuting, paid parental leave, child care assistance) and the decision’s impact on perceptions of distributive, procedural, and interpersonal justice.

P-136: CASEY BIGGS, WHITNEY KESSINGER, REBECCA SHEARER
Formulation of a Scale to Assess Goal Types in Workplace Training
FACULTY SPONSOR(S): PHILIP MOREB, PSYCHOLOGICAL SCIENCE
Abstract: Research on motivation and goals has long been conducted in the field of Industrial/Organizational psychology to maximize employees’ ability to achieve high performance. Much of the previous literature and scale development in the area, though, is focused on goals for performance in general while the present study seeks to examine goal types as they apply to training programs at work. We evaluate the formation of performance goals, normative goals, and learning goals. Through a principal axis factoring analysis with oblique rotation and reliability and validity analyses, we developed a four factor measure of goal types in workplace training programs.

P-137: JESSICA PETOR
Psychological Work Detachment: Construct Definition, Scale Development, and Preliminary Validity Evidence
FACULTY SPONSOR(S): PHILIP MOREB, PSYCHOLOGICAL SCIENCE
Abstract: Emerging research in psychological work detachment has identified the potentially harmful effects of insufficient detachment on individual productivity and worker health. The present study explicitly conceptualizes the domain of detachment and reports preliminary validity, reliability, and factor analytic evidence to support the hypothesis of detachment as a multidimensional construct.

P-138: LAURASOS, CAROLINE WAGNER, STEVE STAGGS
Identifying Sources of Work Anxiety: Scale Development and Validation
FACULTY SPONSOR(S): PHILIP MOREB, PSYCHOLOGICAL SCIENCE
Abstract: This study describes the development and preliminary validation of a measure designed to assess individual and organizational sources of work-related anxiety. Exploratory factor analysis of a 38-item scale revealed three dimensions of work anxiety. Validity evidence from relations with measures of job stress, satisfaction, anxiety, and emotional stability is reported.

P-139: CHRYSALIS PAYNE
An Analysis of African American Women and Anglo Women in Full-Page Magazine Ads
FACULTY SPONSOR(S): BARBARA ARRIGHI, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: The study analyses the treatment of African American women and Anglo women in full-page magazine advertisements. It examines a sample of three issues each of Elle, Essence and Vogue that target Anglo and African American readers to determine whether the way models are posed in magazines targeting Anglo readers differs from the way models are posed in magazines targeting African American readers. The study finds that Anglo models displayed in submissive positions or wearing little to no clothing. The results indicate that how models are posed in ads depends on the magazine and the readers targeted.

P-140: LAURA VEETY
Leisure, Tourism and Aging Population in American Society
FACULTY SPONSOR(S): BONNIE, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: The aging population is growing rapidly in American society and will reach 20% by 2030. Currently with baby-boomers gradually entering retirement, now is the prime time to change the traditional retirement norms and encourage the elderly to experience a new outlook of life transitioning into their “golden years.” Tourism could be a solution for this age group to improve their quality of living including enjoyment of life, physical and mental health as well as social interactions. This research will evaluate the options of tourism for this aging group and also the benefits for both the retirees and social economic development.

P-141: ALEXANDRIA HARGRAVE
Reparatac the Past: Flintknapping in Fort Ancient Culture
FACULTY SPONSOR(S): BARBARA THIEL, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: During much of prehistory, different human cultures have been able to create amazingly effective and varied tools out of nothing more than simple stone. Through the process of flintknapping, using the natural fracturing qualities of stones like flint, chert, or obsidian, one can create almost any tool necessary to survive and thrive in the natural world. This project focuses on the replication (through flintknapping) of tools and parts associated with the Fort Ancient culture—a prehistoric Native American group who inhabited local Northern Kentucky/Southern Ohio—using self-made, primitive anvil and stone tools.

P-142: CORA ARNEY, JOHN WILDER
West Coast Artisans: Portrayals of Culture
FACULTY SPONSOR(S): JULIE VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: Northwest Coast cultures are known for their red and black, stylized geometric, wood carved totem poles and other ceremonial items which were often used in potlatches. In 1992, the Canadian government began arresting individuals and confiscating items of the potlatch. These items were dispersed to many museums across Canada and the United States. By 1978, some museums returned the potlatch items to individual tribes and required these tribal groups to create their own museums to preserve the objects. Our study examines exhibits and objects from both tribal museums and other collections to better understand Northwest Coast craft production and indigenous cultures, and the multiple ways museums’ portray local culture.

P-143: CAITLIN HAZELIP
The Life of an Artifact and a Museum's Role in Preserving the Past
FACULTY SPONSOR(S): ROBERT GENHEIMER, CINCINNATI MUSEUM CENTER
Abstract: This project focuses on a single artifact, from its manufacture to its (re)
discovery and eventual curation. This artifact, which is a small, portable object created for use by the people of the Fort Ancient culture, is tracked through time, from its creation, deposition, and eventual (re)discovery by Cincinnati Museum Center staff and volunteers. Following excavation at the Hahn site in Newtown, Ohio by archaeologists, the artifact was next processed and archived at the Geier Collections and Research Center. This artifact, and others from the Hahn site are being studied to better understand Native American lifeways in prehistory in our region. Following analysis the artifact may be used for educational purposes at the Cincinnati Museum Center.

P-144: LISA HOFFMANN, KENDRA HEIN, KAITLYN GERRETY, STEVEN SHELBY
Mortuary Practices of Mesoamerica
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: Prehistoric people throughout Mesoamerica buried their dead in many ways, often dependent on the social status and gender of the deceased. Understanding mortuary practices in different cultures help define the society and their views. Examining mortuary practices may inform on issues such as social organization, divisions of labor, and ceremonial/ritual behaviors of cultures and societies. This poster focuses on two distinct groups in prehistoric Mesoamerica: the Maya and the inhabitants of Teotihuacan; we examine differences in mortuary behavior of these two cultures.

P-145: ALEXANDRA IVERS
Prehistoric Production of Copper in Central Thailand: Slag as an Indicator for Differences in Metallurgical Practices and Health Concerns
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY, GRANT EDWARDS, CHEMISTRY
Abstract: The major copper production sites of Non Pa Wai and Nil Kham Haeng, located in the Khoao Wong Prachan Valley of central Thailand, contain large concentrations of slag, a waste material. Monsoonal weather in Thailand may have resulted in the leaching of copper from the slag into the soil and rain water. High concentrations of ingested copper result in gastrointestinal distress, liver and kidney failure. This research determined the amount of copper present in slag using Atomic Absorption Spectroscopy and the amount of copper that could leach out of slag according to the Environmental Protection Agency’s Toxicity Characteristic Leaching Procedure.

P-146: LAUREN SMITHER, ALEXANDER IVERS, MALIA STROBEL, DOROTHY ATWELL, ALEX GRIMES
Mental Illness and Health Concerns In Modern Day China and Japan
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: This poster provides perspectives on how mental illness and other health concerns are treated in non-western cultures, namely China and Japan. Mental illness, suicide, and certain diseases are still delicate topics in these cultures and this affects how afflicted people obtain treatment. In China, HIV/AIDS patients are often discriminated against. Suicides in rural Chinese women are higher than women living in urban populations; while suicide rates in Japan are among the highest in the world. In Japanese society, people with mental illness often go untreated and are shunned by society. To remedy these situations, increased government recognition, programs, and public education are required.

P-147: BOB VALLANDINGHAM, LINSEY BATES, JESSICA PERKINS, DAVID BARBER
Examining the Use of Influence and Power by Mesoamerican Elites
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: Many civilizations in ancient Mesoamerica were led by a small number of individuals who exerted power by manipulating and often having control over the larger population. In the last forty years, scholars have redefined these early societies through examination of archaeological evidence and the decipherment of Mayan glyphs. This project focuses on the use of writing, rituals, and the construction of large temples and other central structures by elites as a mechanism to promote and strengthen their status within these cultures.

P-148: MORGAN WALKER, MARCUS HARSHAW JR., LINDSEY NEVILLE, CANDACE GLAHN
Cornerstones of Complex Societies: Exploring Craft Specialization in Mesoamerica
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: Craft specialization is an important component in complex societies. This poster presents archaeological evidence of craft specialization focusing on crafts produced in the ancient societies of the Olmec, Maya, and at Teotihuacan. Early inhabitants of Mesoamerica utilized resources such as obsidian, stone, and other materials to create intricate objects for daily use, ritual purposes, as well as for trade and exchange. Another aspect of this research is an examination of the interdependence between Mesoamerican societies. This interdependency is shown by their ability to work in concert through trade to gain the materials necessary to manufacture goods.

P-149: STEPHANIE ZACH, SCOTT JUMP, HELEN SIZEMORE
Faces in Stone: Elite Immortality in Ancient Mesoamerica
FACULTY SPONSOR(S): JUDY VOELKER, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY
Abstract: This poster discusses the significance of stone as a political medium in early Mesoamerican cultures by examining depictions on lintels, alters, stone monuments, and stelae. We discuss the relationship of stonework with the elite class and how elites used this resource to promote and maintain their power. Rulers often utilized impressive stonework to display their accomplishments in an effort to be immortalized. Alterns in these early societies were sacred structures where rulers performed rituals to affirm their divine right to govern. In a society where the majority was illiterate, stone artwork was a mechanism to maintain elite power through the use of their image.

P-150: JIBRIL MCCASTER
Sportsmanship CHAMP (Creating good character, Healthy relationships, Addressing Social Issues. Making meaningful & Positive changes.)
FACULTY SPONSOR(S): KARI JENNINGS, PHYSICAL INSTRUCTION
Abstract: Sportmanship CHAMP is a free athletic camp that helps youth with and without disabilities learn sportmanship/good character, teambuilding, healthy decision-making, and basketball fundamentals. Mayors and NUK’s basketball teams have supported CHAMP camp since 2007. The camp concludes with a Teen Summit and an Awards ceremony where campers demonstrate what they learned and receive awards. The long-term effect is the demonstration of Sportmanship/Good Character, fostering of Healthy Habits, and Sportsmanship among athletes/coaches/officials/parents/fans throughout the school year. At CHAMP Camp everyone’s a winner. Sportmanship CHAMP camp’s free, but the benefit to all involved is priceless!

P-151: ROSEMARIE SANTOS
Use of a Green School Learning Laboratory as an Instructional Tool
FACULTY SPONSOR(S): STEVE KERLIN, TEACHER EDUCATION
Abstract: The research will ultimately show how teachers use the sustainable features of a new green school in instruction as well as changes in students’ attitudes and academic performance. The research completed during summer of 2012 concentrated on the analysis of audio-recorded teacher focus groups.

P-152: JESSICA FRAZER
Using Applied Behavior Analysis to Increase Desired Behavior
FACULTY SPONSOR(S): STEPHEN WALKER, TEACHER EDUCATION
Abstract: The purpose of this behavior change program was to increase the number of positive slogans a 5th grade student would say during assigned academic tasks. This student displayed escape and avoidance behavior and had acquired “learned helplessness”. The target behavior and goal was to increase positive self statements he would say when handed a task. The teacher used event recording and the student kept a record of his performance using a sticker chart. Reinforcers were selected based on the student’s interests. There were many confounding variables that affected the results of this behavior change program, however, in the end the student’s positive slogans increased and the intervention was successful.

P-153: APRIL RIDER
Discovering a Student’s True Potential Through Positive Reinforcement
FACULTY SPONSOR(S): STEPHEN WALKER, TEACHER EDUCATION
Abstract: This presentation describes a positive and proactive behavior intervention plan that was created and implemented for a seventh grade student with a learning disability who also struggled with complying with teacher requests and instructions. Over the course of a couple weeks the student’s behavior was observed and monitored. Baseline data revealed that the student exhibited a high stable rate of noncompliance. Prior to receiving a behavior contract he was only following four out of ten directions in a one-hour period. By the end of the project he had reached his goal of following seven out of ten directions.

P-154: BROOKE WHITACRE
Homework Completion Through Contingency Management
FACULTY SPONSOR(S): STEPHEN WALKER, TEACHER EDUCATION
Abstract: This behavior change project analyzed the effects of contingency management on homework completion. The study was conducted with a 14-year old male in a high school math class. The student was struggling to succeed and a great deal of his difficulty came from his failure to complete his homework. Because he was exhibiting a performance rather than a skill deficit, he was offered a tangible reinforcer for completing his homework. The recorded data indicated the contingency management plan was an effective means of encouraging this student’s success.

P-155: JENNIFER WILLIAMSON
Using Applied Behavior Analysis to Successfully Change a Behavior
FACULTY SPONSOR(S): STEPHEN WALKER, TEACHER EDUCATION
Abstract: The purpose of this behavior intervention project was to decrease non-compliant behavior in a 3-year-old during bathroom time. Her behavior consisted of ignoring simple instructions and not participating in bathroom activities. After defining the target behavior and determining the function of the behavior, I used a simple AB single subject design. I took baseline data (A phase) to monitor her
behavior at the operant level and then implemented the intervention in the B phase.
A contingency was developed which included stickers for compliant behavior. As
those stickers added up she earned puzzle pieces. Once the puzzle was completed
she earned her prize from the classroom treasure box. This project was successful in
helping a little girl develop age appropriate skills!

P-156: ALEXANDRA HEDGES, CHRISTOPHER FISHER
Service Learning in the Spanish Classroom: Two Approaches
FACULTY SPONSOR(S): KAJSA LARSON, WORLD LANGUAGE & LITERATURE
Abstract: This study measured the impact that two service-learning and philanthropy
projects had on student success in the Spanish classroom. First, students enrolled
in Spanish Composition & Conversation completed volunteer work with Santa
Maria Community Services, wrote reflection papers and presented in Spanish.
Second, students in Hispanic Women Writers received grant money from NKU’s
Mayerson Student Philanthropy Project and decided how to award local nonprofits
that serve women, including Hispanics. An anonymous student survey from both
classes confirmed our hypothesis that this work enhanced students’ professional
growth, social awareness, problem-solving skills, and interest in career and volunteer
opportunities that require Spanish.

P-157: JORDAN HENSLEY, KATHERINE FRANZEN,
MICHELLE TENSING, ILIYANA KRIVCHEVA, CLAIRE BARTELS,
REBECCA COLLINS, AMY FIGHTMASTER, GEORGINA ALAMILLA,
VERONICA ALAMILLA, GARRETT KINDER, KAITLYN LUTES,
MARC RISKIU, BETH SCHMIDT, ANNA SYSUN, TAYLOR VICK
Calligrammes: Visual Poetry on the footsteps of Guillaume Apollinaire
FACULTY SPONSOR(S): GISÈLE LORIOT-RAYMER, WORLD LANGUAGE & LITERATURE
Abstract: A calligram is a poetic text in which the spatial arrangement of the words
on the page forms a visual image that captures the theme of the poem. Students in French
Composition and Conversation (FRE 304) created their own Calligramme, in the style of
the French poet Guillaume Apollinaire (Calligrammes 1918). Authors carefully
researched the shape, the vocabulary, the images, the syntax, and the punctuation that
would best convey the theme(s) and meaning of their poem. The result is a collection of
visual poetry ranging from familiar topics to myths, ideas, passions, and life struggles.
*** Additional co-authors: Georgina Alamilla, Veronica Alamilla, Garrett Kinder, Kaitlyn Lutes, Marc Riskiu, Beth Schmidt, Anna Sysun, Taylor Vick ***

P-158: SCOTT MEADOWS
Orbits of Massive Particles Around a Charged Black Hole Surrounded by
Dark Energy
FACULTY SPONSOR(S): SHARMANTHANE FERNANDO, PHYSICS & GEOLOGY
Abstract: In this project, we study an electrically charged black hole surrounded by
quintessence dark energy. Quintessence dark energy is a candidate for dark energy that exists
in our universe. The project is focused on the orbits of the massive particles.

HONORS PRESENTATIONS
WEDNESDAY, APRIL 24 AND THURSDAY, APRIL 25
OTTO BUDIG AUDITORIUM
KEYNOTE SPEAKER: JULIA ALVAREZ
APRIL 24, 7 PM

HONORS ORAL PRESENTATIONS

H O-1: JENA BRADLEY
Fostering Community: Civic Engagement, Homelessness, and the City of
Cincinnati
FACULTY SPONSOR(S): SHANNA REILLY, POLITICAL SCIENCE, CRIMINAL JUSTICE & ORGANIZATIONAL LEADERSHIP
Abstract: How do the perceptions of homelessness held by the general public compare
to the realities experienced by individuals that work with the population? How do
these perceptions impact the ability of organizations to carry out their missions?
What is meant by community , and how do we foster its growth? This research devles
into these questions, exploring how agencies in the City of Cincinnati and Northern
Kentucky attempt to curb the instances of homelessness, what successes are had, and
what challenges are faced.

H O-2: AUSTIN BROWN
Effects of Prenatal Polychlorinated Biphenyl Exposure on Energy
Metabolism in Three Genotypes of Mice
FACULTY SPONSOR(S): CHRISTINE CURRAN, BIOLOGICAL SCIENCES
Abstract: Polychlorinated biphenyls (PCBs) cause learning, memory, and behavioral
deficits in the developing human brain. Our previous work showed that allelic
differences at the Ah and Cypl2 loci alter susceptibility to developmental PCB
neurotoxicity. Using a mouse model, we discovered significant divergence in body
weights that were dependent on sex, genotype, and treatment. Follow-up experiments
were designed to see if gestational and lactational PCB exposure alter energy
metabolism. We compared blood glucose, triglycerides and cholesterol in PCB-treated
and corn oil-treated control mice with the following genotypes: AhrbCyp1a2(+/+)
AhrbCyp1a2(-/-) and AhrbCyp1a2(-/-) at multiple time points from young adults to
aged mice (5-13 months of age).

H O-3: HANNA DASENBROCK, ANDREW HALL, ROB SPAULDING, JEO CIRCUO
Evaluation of Apoptosis-related Gene Expression to Measure
Poly(butylcyanoacrylate) Nanoparticle Toxicity in a Cell Culture Model of the
Blood Brain Barrier
FACULTY SPONSOR(S): KRISTI HAIR, BIOLOGICAL SCIENCES; RUTH HEMMER,
BIOLOGICAL SCIENCES
Abstract: Using nanoparticles (NPs) to treat diseases shows potential. Coating
NPs with surfactants can facilitate crossing the blood brain barrier (BBB). Poly(butylcyanoacrylate (PBCA) can be loaded with anti-tumor drugs and coated with surfactants. There is evidence these can cross the BBB. A comparison of
surfactant toxicity is important for the use of NPs. Here, a cell co-culture model of the
BBB was used to investigate the difference in gene expression of the co-cultures
following surfactant-coated PBCA-NPs exposure at three concentrations. 
RNA was collected 8/24th post-treatment and analyzed for expression of apoptosis-related genes using rt-PCR. The results indicate exposure to PBCA-NPs causes change in
apoptosis-related genes.

H O-4: ANNA EGAN
A Sheep In Wolf’s Clothing: A Survey of Pants Roles in Opera
FACULTY SPONSOR(S): GAYLE GROUOT, MUSIC
Abstract: A pants role is when a female acts the part of a young male character. Often
in opera these rolls are written for mezzos as their vocal range is closer to that of young
male. The goal of this project is to give the audience a better understanding of the
complete pants role performer. To accomplish this, my mentor and I selected and studied
four arias featuring pants roles from a range of time periods in the history of western music, which I will then perform in the musical and acting style true to
their time period.

H O-5: KAIRREE FRANZEN
Beauty, Body Image, and Breaking Barriers
FACULTY SPONSOR(S): BELLE ZEMBRUDT, HONORS PROGRAM
Abstract: The development of beauty standards has interested me for some time. For
my project, focused on the formation of such standards and their effect on girls’ body
image. Through my studies, I created a body image wellness program aimed toward
fourth and fifth grade girls, a critical, pre-adolescent stage of life, in conjunction with
the Boys and Girls Club. The program’s base is prevention of a negative body image by
means of media literacy, knowledge of self, relationships with others, nutrition, and physical
education. By educating them, they educate me, and I hope to make a lifelong impact.

H O-6: DEREK GIBBS
Synthesis of Metal-Conjugated Bipyridine Derivatives for Solar Cell
Applications
FACULTY SPONSOR(S): KEITH WALTERS, CHEMISTRY
Abstract: There has been an increased push recently to move to a “greener” society.
At the forefront of this issue is the demand for an economic and efficient source
of renewable energy. This talk will discuss current research in our research group
concerning new approaches for solar cells. This project entailed the synthesis of systems
uniting fullerenes and transition metals. These new molecules offer a largely organic-
based approach to solar cells, which are likely more economic than current silicon-based
cells. This presentation will highlight methodology studies used to optimize reaction conditions of these molecules in order to increase synthetic efficiency.

H O-7: JULIE GILBERT
The Effects of Drug Type and Use Pattern on Attitudes toward Substance
Dependent Individuals and Harm Reduction
FACULTY SPONSOR(S): PERILOU GODDARD, PSYCHOLOGICAL SCIENCE
Abstract: Heroin addicts are among the most stigmatized Americans, and this stigma
may contribute to the scarcity of drug treatment options available to them. However,
recent research shows that, compared to those who remain addicted, stigma decreases
when heroin addicts quit using drugs. My study will examine whether this stigma
reduction following abstinence from heroin also applies to heavy cigarette smokers
who quit, and whether stigma is reduced if individuals protect others from the harms
associated with their continued addiction. Finally, I will investigate whether reduced
stigma toward individual drug users translates into increased support for a wider
array of treatment options.
H O-8: RACHEL HARPE  
Georges-Eugene Haussmann's Paris Urban Plan and It's Use in Modern Times  
FACULTY SPONSOR(S): NICK BONNER, VISUAL ARTS  
Abstract: In 1853, Georges-Eugene Haussmann, a French civic planner, was appointed to renovate the city of Paris. To accomplish Napoleon III's goal of better traffic flow, encouragement of economic growth, and making the city 'revolution-proof,' Haussmann tore up many of the ancient cramped streets, run-down apartment buildings, and replaced them with wide tree-lined avenues. Through personal observations of Paris, interviews, and scholarly research of Haussmann's urban plan, I can discover its benefits and disadvantages for today’s Paris.

H O-9: HANNAH LINSER, CODY LINDGREN, KAILEE POSTON  
Bad Film Fan  
FACULTY SPONSOR(S): BAVAND KARIM, COMMUNICATION  
Abstract: Bad Film Fan is a podcast series created with the intent of reviewing each of the American Film Institute's top one-hundred films of all time. The project originated while I was having a conversation with my two collaborators, Kailee Poston and Cody Lidgren, about how many of these listed films we had each seen. Having each claimed to be avid cinephiles, our statistics were pathetically low. In order to remedy this situation we created Bad Film Fan. Every week we post a podcast episode in which we review that week's film, as well as additional companion videos that feature our reactions to the movie.

H O-10: MINADORA MACHERET  
The Holocaust and Survival: An Exploration through Poetry  
FACULTY SPONSOR(S): KELLY MOFFETT, ENGLISH  
Abstract: I have taken my grandmother’s account of surviving the Holocaust and represented it through poetry. In this collection, I have incorporated her stories, recipes, and her will to survive to gain a more personal and fluid sense of the Holocaust. This has given me the opportunity to connect and give her story to future generations to remember. I learned how to use my grandmother’s stories as a poetic medium to bridge connections between our generation and hers.

H O-11: CAITLIN NEELY  
Selections from Explosure: Poetry Reading and Discussion of Lyricism  
FACULTY SPONSOR(S): KELLY MOFFETT, ENGLISH  
Abstract: I will share selections from my poetry chapbook Explosure and define my current understanding of the American free verse lyric poem. I will also discuss the lyric experience, and how landscape and nature shaped the progression of my chapbook.

H O-12: ROSEMARIE SANTOS  
Use of a Green School Learning Laboratory as an Instructional Tool  
FACULTY SPONSOR(S): STEVE KERLIN, TEACHER EDUCATION  
Abstract: A growing trend for school systems is building environmentally conscious, high performance school buildings. The main reason for the phenomenon is economic. However, what has not been proven is the supposed positive influence on teachers and their students. The purpose of this research is to explore the impact of green high performance learning laboratories on the teaching practices of middle school teachers. Specifically, the research will examine whether the move from a conventional school building to a building that is designed and built to “green” building standards has affected the ways in which teachers teach.

H O-13: CLAUDIO TORO SEREY  
The Effects of Zolpidem on Regional Neuronal Activity and Behavior  
FACULTY SPONSOR(S): MARK BARDGETT, PSYCHOLOGICAL SCIENCE  
Abstract: Ambien (Zolpidem) is a relatively common sedative used to effectively induce sleep in humans. However, in late years it has been reported that for some patients in minimally conscious states, Ambien produces a paradoxical effect, waking them up for limited amounts of time. Because of this, the current experiment aimed to better understand the way in which Zolpidem affects brain networks commonly associated with consciousness, as well as determining its effects on memory through an animal model of impaired cognition. These results provide support for a mechanism that works as a base to further study this phenomenon.

H O-14: AMANDA WELCH  
Combinatorial Game Theory  
FACULTY SPONSOR(S): DON KRUG, MATHEMATICS & STATISTICS  
Abstract: Combinatorial games are two-player games lacking chance. Players alternate turns until there is no move left to be made. The player unable to move wins. Mathematicans study these games in order to develop winning strategies. A winning strategy will tell which move a player should make given a specific set up so that they can move toward a winning position. From a winning position the player will be able to win the game by playing perfectly (i.e. following the winning strategy). I will be giving a brief introduction to combinatorial games and Greedy Cannibals, the game I studied.

H O-15: BRIAN WOLF  
Comics for Everyone: An In-Depth Look at the Sequential Arts  
FACULTY SPONSOR(S): MARICLEONE, VISUAL ARTS  
Abstract: Brian Wolf started his senior capstone with a single goal in mind: Make more comics. But that seemingly simple project exploded into something much bigger. Come for an animated discussion about making comics for print and the web, the changing nature of comic communities online and offline, and the potential future of the medium as a whole.

H O-16: ALEXANDER YARAWSKY  
Evaluating the Implication of Siderophores in Biofilm Formation on Bone  
FACULTY SPONSOR(S): KRISTI HAIR, BIOLOGICAL SCIENCES  
Abstract: Biofilm formation is problematic in a variety of environmental and medical settings, resulting in scenarios such as clogging of stainless steel pipes and human infection. Attenuated total reflectance Fourier Transform infrared spectroscopy (ATR-FTIR) was used in conjunction with dissolution and fluorescence analyses to examine the interaction between siderophores and metal(oxide) surfaces. A hydrogel was prepared as a model biomaterial characterized by Atomic Force Microscopy (AFM). The implications of siderophores in the initial stages of biofilm formation on hydroxyapatite will be discussed.

HONORS POSTER PRESENTATIONS

H P-1: JILLIAN ALIG  
The Effects of Primed Familiarity with Drug Users on Attitudes toward Medication-Assisted Treatment  
FACULTY SPONSOR(S): PERILOU GODDARD, PSYCHOLOGICAL SCIENCE  
Abstract: Recently, the abuse of opioid drugs has skyrocketed and impacts an increasingly young demographic. To determine how this shift affects individual attitudes towards drug use, I will conduct a research study. Half the participants will be randomly assigned to complete a questionnaire prompting them to consider the extent of smoking, binge drinking, and use of other drugs within their own peer groups. All participants will then indicate their attitudes toward specific drug treatment approaches. I hypothesize that those who are sensitized to drug use in their own social networks will have more favorable attitudes toward a variety of treatment approaches.

H P-2: LANCE BARRETT, EDWARD HICKMAN, JAMISON MILLS  
Consulting Project for Touritzy  
FACULTY SPONSOR(S): DENISE LUETTGE, MANAGEMENT  
Abstract: This project involves a team of three consulting Touritzy, a local start-up business, on entering the competitive market. Touritzy will be a crowd-sourcing website/smart phone application that allows the user to take independent tours of historical areas. The research looks at the overview of the company, the internal analysis, and the external analysis. Our team is looking at the European market as a potential location to start internationally. The biggest part of our project will dive into the competitive analysis. This project will assist the founder of Touritzy in starting his company from an international point of view.

H P-3: KELLY BRYAN  
ABC’s of an IEP  
FACULTY SPONSOR(S): STEPHEN WALKER, TEACHER EDUCATION  
Abstract: This study will focus on the ins and outs of an IEP (Individualized Education Plan). Part of my responsibility as a potential future school psychologist will be to construct and/or follow throughout their schooling. An IEP is a goal-specific plan to help individual learners achieve their potential throughout the education process. My main goal is to create my own IEP for one of the students (who will remain anonymous) that I work with through my co-op.

H P-4: ALEXANDRIA HARGRAVE  
Replicating the Past: Flintknapping in Fort Ancient Culture  
FACULTY SPONSOR(S): BARBARA THIEL, SOCIOLOGY, ANTHROPOLOGY & PHILOSOPHY  
Abstract: During much of prehistory, different human cultures have been able to create amazingly effective and varied tools out of nothing more than simple stone. Through the process of flintknapping, using the natural fracturing qualities of stones like flint, chert, or obsidian, one can create almost any tool necessary to survive and thrive in the natural world. This project focuses on the replication (through flintknapping)
of tools and points associated with the Fort Ancient culture—a prehistoric Native American group who inhabited local Northern Kentucky/Southern Ohio—using self-made, primitive antler and stone tools.

H P-5: EDWARD HICKMAN
Consulting Project for Touritz
FACULTY SPONSOR(S): DENISE LUETHGE, MANAGEMENT
Abstract: I will be working with a group in my MGT 490 (Business Policy) class to provide consulting services for Touritz, a new company that provides a new type of tourism. In conjunction with MGT 490, IBHF, and the Honors program our group will work to develop a business strategy to help Touritz flourish. In order to tie this project to class material, we will review external factors that can impact the company, and we will research the risks associated with “born-global” companies. We will also develop a marketing plan for the company, an internal analysis, company strengths and weaknesses, and an assessment of the firm’s business strategies. We will also conduct many analyses on Touritz to determine the most effective way for them to conduct business abroad.

H P-6: NICOLE KALLMEYER
A Sir and A Toad: Journey Through a Comic Book
FACULTY SPONSOR(S): ANDY MILLER, ENGLISH
Abstract: As authors we use a lot of information, facts about the characters, the setting, the plot, the story, etc. We learn a lot of this stuff from reading books, articles and other sources. We want to create a comic book that uses facts to tell its story.

H P-7: DANIELLE KLEYMEYER
Resolving a Culture of Violence
FACULTY SPONSOR(S): ALEXIS MILLER, POLITICAL SCIENCE, CRIMINAL JUSTICE & ORGANIZATIONAL LEADERSHIP
Abstract: From both the perspectives, perpetrator and victim, there are many concerns to be examined in regards to violence. While the primary objective of this project is the evaluation, implementation, and effectiveness of a support network for victims of intimate partner violence on college campuses, this paper will also address the perpetration of violence and the preventive effects of support networks.

H P-8: RACHEL MEDLOCK
Environmental Enrichment and Successful Canine Adoptions
FACULTY SPONSOR(S): LINDSEY WALTERS, BIOLOGICAL SCIENCES
Abstract: The welfare of domestic dogs can be negatively impacted by inappropriate confinement. In animal shelters, dogs may be housed in a kennel environment for long periods of time. Animate and inanimate environmental enrichment can reduce stress among kennel dogs. This project focuses on determining the enrichment programs leading to the successful adoption of shelter dogs. I used investigation of current animal behavior research, observations of local organizations, and analysis of methods employed by shelters to determine which forms of environmental enrichment have the greatest impact on canine well-being and adoptability, with maximum practicality of implementation.

H P-9: JAMISON MILLS, EDWARD HICKMAN, LANCE BARRET
Consulting Project for Touritz
FACULTY SPONSOR(S): DENISE LUETHGE, MANAGEMENT
Abstract: For our Capstone, we will be acting as consulting agents for a startup tour company named Touritz. We will examine a wide array of issues that deal with the company’s opportunities to expand internationally, with a focus on expansion into Europe. Among the topics we will discuss will be an environmental analysis for the firm, an internal analysis, company strengths and weaknesses, and an assessment of the firm’s business strategies. We will also develop a marketing plan for the company, as well as examine the risks associated with “born-global” companies.

H P-10: MATTHEW MOLONY
The Effect of Harry Potter on my Millennial Generation
FACULTY SPONSOR(S): JOHN ALBERTI, ENGLISH
Abstract: The purpose of this research project is to analyze the effect that the Harry Potter series has had on my Millennial Generation. Just why is so much of my generation so obsessed with Harry Potter? This is what I hope to analyze through my research which includes conducting a survey with Dr. Alberti’s Harry Potter class and potentially a focus group from the class as well.
**DANCE, MUSIC, COMPUTER WORKS AND THEATRE EVENTS**

**BRASS CHAMBER ENSEMBLE**
Tuesday, April 16, 2013
1:00-1:30 pm
Student Union Ballroom
Joseph Ball
Kenny Barth
Justin Bullock
Ian Caldwell
Herbie Cuthbertson
Heather Hale
Dorothy Van Huss
Conrad Krieger
Mandy Manning
Trevor Merser
Barbara Phillips
Alex Robinette
Zach Strong
Sean Todd

Raquel Rodriquez, Director

**STUDENT COMPUTER WORKS**
Wednesday, April 17, 2013
12:00-1:00 pm
Tent, Plaza in front of Founder's Hall

William Brian Hogg, Director

**CONCERT BAND**
Wednesday, April 17, 2013
2:00-2:30 pm
Student Union Ballroom
Trevor Caddell
Ian Caldwell
Jay Seegar
Trey Griff
Allison Evans
Montez Jenkins
Cameron Imbrogo
Nicole Gullion
Montez Jenkins

**JAZZ COMBO**
Tuesday, April 16, 2013
1:30-2:30 pm
Tent, Plaza in front of Founder's Hall

**LATIN JAZZ ENSEMBLE**
Wednesday, April 17, 2013
1:30-2:30 pm
Tent, Plaza in front of Founder's Hall

**MARIAM SOLOIST**
Tuesday, April 16, 2013
2:20-2:30 pm
Student Union Ballroom
Morgan Minor

**JAZZ ENSEMBLE**
Tuesday, April 16, 2013
11:00 am-12:00 pm
Tent, Plaza in front of Founder's Hall

**STEEL DRUM BAND**
Wednesday, April 17, 2013
1:00-1:30 pm
Tent, Plaza in front of Founder's Hall

**JAZZ COMBO IV**
Wednesday, April 17, 2013
1:30-2:00 pm
Tent, Plaza in front of Founder's Hall

**JAZZ COMBO 3**
Wednesday, April 17, 2013
11:11:59 am
Tent, Plaza in front of Founder's Hall

**MUSICAL THEATRE SHOWCASE**
Tuesday, April 16, 2013
12:00-12:30 pm
Tent, Plaza in front of Founder's Hall
SPECIAL THANKS TO

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Will Peveler  
Billy Russell  
K.C. Russell*  
Kurt Sander*  
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Dan Spence  
Melinda Spong*  
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*Celebration 2013 Planning Committee  
**Celebration 2013 Planning Committee co-chair

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