2012 INDIANA UNIVERSITY SOUTH BEND
UNDERGRADUATE RESEARCH CONFERENCE

Schedule

Friday, April 13, 2012

8:30 – 9:00 am  Registration  DW east hallway

9:00 – 10:00 am  First Concurrent Sessions  DW 1150 – DW 1180

10:00 – 10:45 am  Poster Presentations and Coffee Break  DW east hallway

10:45 – 11:45 pm  Second Concurrent Sessions  DW 1150 – DW 1180

12:00 – 1:15 pm  Lunch and Keynote Presentation  The Grill

1:30 – 2:30 pm  Third Concurrent Sessions  DW 1150 – DW 1185

2:45 – 3:30 pm  A Conversation with Keynote Speaker Brian T. Edwards  DW 1175
ACKNOWLEDGEMENTS

The organizers of this conference (David Blouin, Jake Mattox, Yosuke Nirei, Jamie Smith, Alison Stankrauff, and David Wilkes) would like to thank all the students who have taken the time and made the effort to present their research or creative activity at this conference. We hope that they continue to be life-long seekers of knowledge. Their faculty mentors (named in parentheses in this program) are also to be commended for their dedication to developing scholars.

We appreciate the support provided to this conference by Vice Chancellor for Academic Affairs Alfred Guillaume. This event is made possible with funding from his office and time donated by committed IU South Bend instructors and staff—including the members of the Undergraduate Research Advisory Council.

Finally, we would like to thank Jonathan Kitchens for contributing his artwork for the conference poster and program cover.

PROFESSIONAL COURTESY

Please be considerate during the student presentations. Participants in a session should remain in the room during their colleagues’ presentations. The research delivered in each session may offer new and relevant information from which they can expand their own ideas. Other audience members should refrain from entering and leaving session rooms during presentations so as to cause the least disruption. Cell phones should be turned off or switched to vibrate during the sessions.
FIRST MORNING SESSION (9:00 – 10:00)

**Perspectives on Social Policy** (DW 1150)
Moderator: Shawn Nichols-Boyle

9:00  A Call for Expansion and Improvement of Early Childhood Education
Lindsey Blackford (Nichols-Boyle)

9:15  A Glut of Medications: An Imbalance of Power
Lillian Hubbard (Bucksbarg)

9:30  Solving the Summer Learning Gap
Tashara Hudson (Nichols-Boyle)

9:45  Teachers Need to be Paid for Teaching, Not for Time
Emily Sprik (Nichols-Boyle)

**Physics and Chemistry** (DW 1160)
Moderator: Andrew Schnabel

9:00  Arsenite Oxidase Genes from Alcaligenes faecalis to E.coli: Gateway Cloning
Ashley Compton (Anderson)

9:15  Ambient Temperature P-V Equation of State for Garnet Sand of Pfeifer Beach
Erica L. Cotter (Scott)

9:30  Modular Black Holes as Probes of Spacetime
William Hammer (Schimmrigk)

**Contemporary Social and Political Issues** (DW 1170)
Moderator: Jamie Smith

9:00  Gender and Roller Derby
Rachel Berryman (Lucal)

9:15  Reconstruction or Preemption: Stephen Skowronek’s “Political Time” Theory and President Obama
Matthew Furnas (Smith)
9:30 The Social Functions of Comic Books: Using the Comic Book as Social Commentary
Joe Perdue (McGuire)

9:45 Separating the Spectre from the Man: Understanding Hip-Hop Music’s Masculinity
Michael Petty (McGuire)

**Literary Characters: Blacksmith, Monster, and Servant (1180)**
Moderator: Lee Kahan

9:00 The Malleable Smith
Joseph Eggleston (Roth)

9:15 The Cunning and Deceptive Nature of Thady Quirk in Maria Edgeworth’s *Castle Rackrent*
Beth Wenzel (Nichols-Boyle)

9:30 Frankenstein’s (Inner) Monster
Christopher Jack Williams (Kahan)

9:45 Identity Theft: The Impact of White Literature in *Frankenstein*
Stephanie C. Merryfield

**POSTER SESSION AND COFFEE BREAK (10:00 – 10:45)**

10:00 View the following posters and talk to presenters while enjoying coffee and doughnuts

Interpreting Text Language
Michelle Anastasio (Schult)

Tattoos in the Workplace
Ashley Hilliker (Schult)

Direct Observations of Magnesite Formation from Mixed Oxides at Mantle Pressures and Temperatures
Vincent M. Doczy (Scott)

Spatial Distribution and Artifact Densities of Upper Mississippian Features at Collier Lodge, 12 Pr 36
Sarah Nixon (Wells)
Electrochemical Analysis of Estrogenic Phenolic Compounds
L. Roxanne Sirhan (Muna)

Restoring Normal Function to Mutated Isocitrate Dehydrogenase
Joshua Strychalski, Ryan Lubelski, and Aaron Gill (Anderson)

SECOND MORNING SESSION (10:45 – 11:45)

Queer Perspectives in Film and Literature (DW 1150)
Moderator: Benjamin Balthaser

10:45  The Meaning of the Word “Queer” and its Applications (An Introduction)
       B. L. Morley (Balthaser)

11:00  Gender Reconstruction in Sonnets
       Rachel Cheeseman (Chaney)

11:15  Straight Down the Line? Walter Neff’s Quest for Sexual Identity in Double Indemnity
       Nathaniel A. Lambright Dale (Balthaser)

International Literature  (DW 1160)
Moderator: Bobby Meyer-Lee

10:45  It’s a Secret: Subversive Infantilism in Interpreter of Maladies
       Stephanie Foreman (Magnan-Park)

11:00  Subversion, Panopticism and Knowledge in Le Horla
       Stephanie C. Merryfield (Magnan-Park)

11:15  “Some Illness Still Unnamed”: Same-Sex Desire and Anxiety in Maupassant’s Le Horla
       Hannah Stowe (Magnan-Park)

Mental Health Dilemmas  (DW 1170)
Moderator: Igor Jurecevic

10:45  The Deadly Triad: Chronic Pain, Mental Illness, and Prescription Drug Abuse in Veterans
       Scott Hancock (McGuire)
11:00  Examining the Effects of Organizational Tasks on Depression, Anxiety and Stress  
       Alycia Lewis (DeBrule)

11:15  Embracing the Inevitable Wrinkles  
       Christina M. Lynn (Costello)

11:30  Rating Nonverbal Behavior as an Indication of Emotional Distress and Suicidal Thinking  
       Justin McCammon (DeBrule)

The Politics of Play (DW 1180)  
Moderator: Jake Mattox

10:45  LEGOS®: Lack of Diversity, Choices, and Feminists on Their Marketing Team  
       Wendy E. Davis (Lidinsky)

11:00  Awkward Questions: How The Hunger Games Unveils Implications of Privilege, Consumption, and Identity  
       Noel Spring Ullery (Lidinsky)

LUNCH AND KEYNOTE PRESENTATION (The Grill)

12:00  How Does American Culture Play Abroad? Lessons from the Middle East and North Africa  
       Dr. Brian T. Edwards, Associate Professor of English, Comparative Literary Studies, and American Studies, Northwestern University

AFTERNOON SESSIONS (1:30 – 2:30)

Historical and Philosophical Phenomena (DW 1150)  
Moderator: Yosuke Nirei

1:30  Filial Piety and Statecraft: How Traditional China Engineered an Empire  
       Rebecca Barnett (Nirei)

1:45  Knowledge in Deception and Perception  
       Stephanie Burkus (Shrader)
2:00 Neither Believer nor Infidel: The Battle Between Christianity and Rational Thought in Herman Melville’s *Moby Dick*  
Nichole Rohrer (Mattox)

2:15 Memes, Logic and Cultural Replicators  
Justin Stauffacher (Ananth)

**The Search for Dark Matter (DW 1160)**  
**Moderator: Ilan Levine**

1:30 Acoustic Transducer Design for Dark Matter Detection and Radiation Acoustics  
Thomas Nania (Levine)

1:45 Construction and Commissioning of a Cryogenic Radon Assay System  
Timothy Moan (Levine)

2:00 Construction and Use of a Pressure Vessel Simulator for the COUPP Matter Search Experiment  
Cale Harnish (Levine)

2:15 Design and Construction of Acoustic Transducers for Dark Matter Detection  
Tonya Benjamin (Levine)

**Social Dynamics: Then and Now (DW 1170)**  
**Moderator: Josh Wells**

1:30 Palimpsests of Ritual Consumption: Negotiating the Multi-Dimensional Role Feasting Events Played in New World Societies  
Bryan Dull (VanderVeen)

1:45 Three-Generation Households: Challenges and Benefits  
Jason Fouts (McGuire)

2:00 Oh the Disparity: How Martin’s Supermarkets Reflect and Reinforce Financial Disparity Through Product Allocation and Appearances  
Daniel Schulte (Nashel)

2:15 How Do the Roles of Sex, Age, and Home Ownership Affect How Often People Interact with their Neighbors?  
Reginald Young (Blouin)
**Film and Literary Studies (DW 1180)**
Moderator: Andrea Rusnock

1:30  *Cabbage Fairy* and the Birth of Narrative Cinema
Scott Albright (Roth)

1:45  Don’t Gawk at My Bananas: Stereotypes and Presentation within *The King of Kong*
Brandi David (Roth)

2:00  Bromance in the 19th Century: Deconstructing Male Interpersonal Relationships in Herman Melville’s *Moby Dick*
Kristen Pritchett (Mattox)

**Study Abroad in Costa Rica (DW 1185)**

1:30  Building Sustainable Communities Abroad: IUSB’s Spring Break, International Study Program in Costa Rica
Paul Clayton and Christina Pierce (Sernau)

**A CONVERSATION WITH KEYNOTE SPEAKER BRIAN T. EDWARDS (DW 1175)**

2:45  American Culture In The Globalizing World

All students and faculty are invited and encouraged to attend this informal conversation with Brian T. Edwards, our Keynote Speaker, about the perceptions of American culture in the Middle East. The conversation will be loosely based on Edward’s article, “Watching Shrek in Tehran: The Seen and Unseen in Iranian Cinema,” from the March/April 2010, issue of *The Believer*:

http://www.believermag.com/issues/201003/?read=article_edwards
Scott Albright

*Cabbage Fairy* and the Birth of Narrative Cinema

Kathryn Bigelow won the Oscar for best director for her film, *The Hurt Locker* (2008). Bigelow is the only woman to win the award in the Academy’s eighty-four years. While there is a tradition of talented women film-makers – Julie Dash, Ida Lupino, Cleo Madison, Sofia Coppola, and many others – in cinematic history, their contribution to film’s early years is often underplayed, if not completely forgotten. French director Alice Guy refused to be underplayed, ignored, or forgotten; between her first film, *La Fée aux Choux (Cabbage Fairy)* (1896), and her last film, *Tarnished Reputations* (1920), she directed 352 features and shorts (IMDb). Considered the first female film director, Guy also headed her own production company, Solax Studios. But it is for her imagination and forward-thinking, filtered through the lens of her gender, for which Alice Guy is most fondly remembered. *Cabbage Fairy* is a cornucopia of visual delights – the unreal garden setting, the flowing costume, the actor’s gesturing and dancing – strikingly different from anything an 1896 movie-goer had ever seen before. *Cabbage Fairy*, in contrast to the early documentary films of the same year, *William McKinley at Canton, Ohio* (1896) in particular, tells a fictional narrative through mise-en-scène, informed by traditional female gender roles.

Michelle Anastasio

Interpreting Text Language

The purpose of this research study utilized traditional and non-traditional aged students as participants to determine the ability of texting as a means to determine how cognition occurs between participants. My hypotheses stated that traditional students would have a faster reaction time than non-traditional students when interpreting text language accurately. However, non-traditional students that engage in routine texting would have a similar reaction time as traditional students. Previous studies have looked at age as a mitigating factor when determining learning strategies. Other studies have reviewed if personal differences exist in learning methods between demographic students to determine cognitive variances. Overall, the results of my study indicate a significant difference in the amount of time it takes for a student to interpret text language was not found. In addition, separating traditional and non-traditional aged students into subcategories of novice or expert regarding text frequency did not result in a significant difference.
Tonya Benjamin
Design and Construction of Acoustic Transducers for Dark Matter Detection
COUPP and PICASSO are two experiments searching for particle dark matter scattering off of ordinary nuclei. The scatters are very rare and the energies imparted to the nuclei are very tiny, so a special technique is used to amplify this tiny energy to an observable level. This is done through the incorporation of nuclei into superheated liquids which explosively transform into a gas from the heat of these tiny nuclear recoils. Acoustic emanations arise from this phase transition, which we detect with custom-built acoustic sensors. My work is on the design of these acoustic sensors in order to improve their accuracy and longevity in the harsh environments in which they are expected to work.

Rachel Berryman
Gender and Roller Derby
This qualitative research study began as an in-class assignment and then turned in to a grant proposal. The relationship between society’s views on what a female should be and how a female should act are contradicted when a female plays sports, and more specifically, when a female plays contact sports. Roller derby has come a long way from the circus sideshow that it had once been. Today roller derby, both banked track and flat track are making every effort to be recognized as a sport. This research questions what is considered a woman’s place in society and how the physicality of roller derby affects that place, if at all. This is how women discover who they are and what strength they have.

Lindsey Blackford
A Call for Expansion and Improvement of Early Childhood Education
The United States federal and state governments should expand and improve free early childhood education because of the achievement gap often seen between low-income children and middle-to-high-income children when beginning kindergarten. The expansion and improvement has three components: provide parental support for the families enrolled; improvement of federal and state guidelines that will govern what children should know and achieve, the qualifications of those that teach early childhood students, and the characteristics for quality early childhood education programs; and participation in an early childhood education program is voluntary and program choice is the parent’s.

Stephanie Burkus
Knowledge in Deception and Perception
In White’s Illusion, our eyes are deceived; we see two different shades that are in reality the same shade. A popular Cartesian condition for
knowledge is that the premise has to be true for it to be considered knowledge. In my research, I argue against the notion that if deception causes us to see falsely, knowledge cannot be present. A different type of knowledge is actually present in deception, and in White’s Illusion we see that this knowledge actually causes the deception. The qualities and nature of this knowledge greatly depends on what we are used to in our environment, and because of this we find that our senses will actually try to change what is really there.

Rachel Cheeseman
Gender Reconstruction in Sonnets
Gender is a performance in most actions including writing. The sonnet as one of the earliest forms of poetry in the English language has created and enforced the gender constructions of time periods; however, when women sonneteers such as Lady Mary Wroth, Edna St. Vincent Millay, and Adrienne Rich take on this particular form, they undermine the gender binary of male and female by taking on both the traditionally feminine and masculine traits to shed light on the gender and sexuality issues of their particular time period and culture.

Ashley Compton
Arsenite Oxidase Genes from Alcaligenes faecalis to E.coli: Gateway Cloning
Groundwater contamination by arsenic has become a well-known environmental catastrophe globally. Countries of every continent and an estimated seventy countries worldwide have been affected. This contamination has raised numerous adverse health and wellness concerns. Arsenic is a naturally occurring toxic element that is found in most water and soil. However, the World Health Organization (WHO) lists safe concentrations of arsenic to be below 10µg/L. Higher concentrations of arsenic have been connected to disease such as cancers, skin lesions, hypertension, and chromosomal abnormalities. Arsenosis is the broad range of diseases caused by arsenic poisoning. Among the 125 million inhabitants within Bangladesh, up to 77 million are at risk of suffering from arsenicosis due to contaminated drinking water. One of the few bacteria to develop a resistance to arsenic is the bacteria Acaligenes faecalis. There are a number of ways the resistance mechanisms may work but one known mechanism is the bacterial arsenite oxidase enzyme. The soil bacteria A. faecalis contains this enzyme and its function converts arsenite into arsenate. Arsenate is less toxic but also carries a negative charge. This is advantageous because the negative charge allows arsenate to be removed from water by passing it through a positively charged matrix. Within A. faecalis, the enzyme that converts arsenic into a removable form will only be expressed in the presence of arsenic. Since this produces more hazardous waste, it is
beneficial to replicate the enzyme outside of its native bacteria to study the mechanism for arsenic resistance.

Erica L. Cotter

Ambient Temperature P-V Equation of State for Garnet Sand of Pfeiffer Beach

Synchrotron powder X-ray diffraction analysis was performed on a natural beach-sand almandine, \((\text{Fe}_0.68\text{Mg}_{0.25})\text{Al}_2\text{(SiO}_4)3\), from Pfeiffer Beach, Big Sur, California. The ambient-pressure lattice parameter, \(a\), was found to be 11.529 Å. The lattice parameter and, accordingly, unit-cell volume were determined through isothermal compression to 19 GPa in a symmetric diamond anvil cell, in which helium served as a nearly-hydrostatic pressure-transmitting medium. The isothermal bulk modulus, \(K_{0T}\), was determined to be 168.8 ± 1.8 GPa using a second-order (i.e. \(dK/dP\) fixed at 4) Birch–Murnaghan equation of state. We compare these findings with previous elasticity measurements of garnets along the pyrope-almandine join, and report our measurements in relation to prior work on bulk modulus–volume–cation valence systematics [e.g. Fan et al., 2009].

Nathaniel A. Lambright Dale

Straight Down the Line? Walter Neff’s Quest for Sexual Identity in *Double Indemnity*

With her sweet and sultry gaze, the classic femme fatale of film noir can convincingly chisel away at the hearts of even the most austere gentlemen. Her intensity, passion, and seductiveness often mask her true intentions and function as misdirection for her sinister plot to unravel, entrapping the male antagonist in a web of misadventure. On the contrary, in the case of the 1944 film *Double Indemnity*, the bombshell femme fatale Phyllis Dietrichson acts as a smokescreen for the viewer. While on the surface she entices and seduces the protagonist, Walter Neff, her larger role as a femme fatale is to misdirect viewers themselves from the real relationship of seduction. This relationship is an intense and passionate love between two men – Walter Neff and his boss, Barton Keyes. The nuances of intimate affection are carefully buried beneath the legalistic jargon of the Hollywood Code, narrating a journey of self-discovery with regard to sexual identity, and ultimately undermining the heteronormativity of American filmmaking (and the film noir genre) in the 1940s.

Brandi David

Don’t Gawk at My Bananas: Stereotypes and Presentation within *The King of Kong*

Audiences want spectacle: drama, violence, and explosions. However, through the new uses of social media, individuals and specific cultures
are becoming a new form of spectacle. This can be seen through the modern gawkumentary genre, which demonstrates a group of people who embrace a subculture, such as Star Trek (Trekkies), My Little Pony (Bro-nies), and gamers. This last is put on display in the 2007 documentary The King of Kong: A Fistful of Quarters. The film follows Steve Wiebe’s campaign to become the Donkey Kong, Jr. World Champion and beat Billy Mitchell’s decades old score. However, the spectacle in the film is present not only through this subculture, but through the presentation of the social actors. By drawing extreme differences in their experiences, personalities, lifestyles, and goals, filmmaker Seth Gordon presents two sides of the same battle in terms of good and evil, Wiebe and Mitchell respectively. However, Gordon can only accomplish this portrayal thanks to cinematic editing, leaving the easily susceptible audience to discern fact and truth from the on-screen presentation. This contrived relationship between Wiebe and Mitchell creates dramatic spectacle and misinforms the audience of their relationship. Although this framing does create familiarity for the audience, it is truly detrimental to the overall subculture experience and only reinforces the norms imposed upon audiences by popular culture.

Wendy E. Davis
LEGOS®: Lack of Diversity, Choices, and Feminists on Their Marketing Team
There is an overall bias in toys for boys and girls. Boys tend to have hands on violent play themes or building toys. Girls tend to have homemaker themes or an emphasis on boys and beauty. My paper takes a look at LEGOS® and how they are lacking in girl theme options. With more research being done on the devaluation of women and girls this is a problem. Research has found that building with LEGO increases math skills overall and gives to be engineers a love of building new and different things. These future engineers are not going to be all male. Therefore I point out how LEGO has one girl theme that is westernized and pushes girls to play in a Western ideology way of life. I urge people to buy the buckets of LEGO and to have their children create their own play than buy themes where one has an ideology to follow.

Vincent M. Doczy
Direct Observations Of Magnesite Formation From Mixed Oxides At Mantle Pressures And Temperatures
We have made in situ observations of magnesite formation from mixed oxides (MgO and CO2) using laser-heated diamond anvil cells (DACs) at mantle pressures and temperatures. Specifically, we used high-pressure gas-loading techniques to fill DAC sample chambers with liquid CO2 and powdered MgO to make experimental observations at pressures ranging from 5 to 40 GPa and temperatures between 1,000 to 3,000 K.
Synchrotron X-ray diffraction patterns were moderately obscured by the wide range of high-pressure CO2 polymorphs and their poorly constrained bulk moduli yet, as expected, the magnesite-forming reaction proceeded at all conditions examined. No other pressure-quenchable crystalline materials were observed to form. A large body of previous work has documented the stability of magnesite at elevated pressures and temperatures but, to our knowledge, this is first study to document the formation of magnesite, rather than just the lack of a breakdown reaction, at mantle pressures. Accordingly, this work further strengthens the notion that carbonate phases are indeed the primary storage vehicle for carbon in the deep Earth.

Bryan Dull
Palimpsests of Ritual Consumption: Negotiating the Multi-Dimensional Role
Feasting Events Played in New World Societies
In New World societies, a surplus of food served as a means to manipulate certain aspects of the socio-political sphere. A feasting event was one such way that this was achieved, the scale of which was a function of its overall goal. In large-scale rituals, status differentials were affirmed, allowing for political leverage. Small-scale feasting rituals, on the other hand, emphasized group inclusiveness along kinship lines. While interpretations of these events have traditionally favored either the political maneuvering or integrative aspects, these two ritual types are not mutually exclusive. This paper will argue that ritual feasts were multi-dimensional in how they were experienced by those in attendance, both host and participant. Moreover, this experience was informed by the conscious choices of the sponsor by determining the event’s size and ceramic vessel perceptibility. In this way, these feasting rituals operated as both integrative and exclusionary on the participant and thus played a significant role in shaping social organization.

Joseph Eggleston
The Malleable Smith
This paper provides an overview of the changing role of metalworkers and especially that of blacksmiths, the workers in iron and steel, over the course of some several hundred years from the early to the late medieval periods. There is special comparison of the blacksmith's place in society in early British Isle cultures, when he was as much magician as craftsman, to his place in late medieval and early modern society and culture, especially in London. This focus assists in concluding that between the fall of Rome and the rise of Great Britain as an economic empire, the popular approach to these workers underwent as drastic and demystifying change as that which the popular engagement with religion would undergo during and after the Enlightenment to follow. The paper
also purports to contend that the act of demystifying such figures as the smith, who had always been surrounded by superstition, may have been a harbinger of the changing approach to religion, or even reflect a general trend throughout this period of uncloaking the mystical and the godlike.

Stephanie Foreman
It’s a Secret: Subversive Infantilism in Interpreter of Maladies
Post-Colonial studies look at how the colonizers and colonized interact and the outcomes of those interactions. A critique of the colonizers is their infantilist portrayal of the colonized. However, with the changing acceptance of non-hetero-normative sexual desires and sexualities, infantilism may not be as negative as previously assumed. In Jhumpa Lahiri’s book of short stories Interpreter of Maladies there is an underlying trend of positive infantilist desires and actions which show that the childlike mindset and view of the world may be the most healthy, well rounded perspective. Infantilism as a sexuality is an important aspect of the short stories which subvert the dominant discourse. Without a dominant discourse to subvert, different sexualities would not exist, as everything would just be without laws or socially constructed, societal rule to control desire. Lahiri’s novel subverts the hetero normative discourse and subtly inserts an underlying theme of infantilism.

Jason Fouts
Three-Generation Households: Challenges and Benefits
This research is exploring the challenges and benefits of living in a three generation household. Three-generation households are becoming more and more popular with the current economic situation forcing some people to make changes in their living arrangements. This research explores the challenges and benefits that are present within this form of household. Although there are positive influences that focus on the strength of family in this type of living situation, there are influential characteristics that provide a complicated developmental situation in a family through three-generation households as well.

Matthew Furnas
Reconstruction or Preemption: Stephen Skowronek’s “Political Time” Theory and President Obama
This study seeks to determine whether or not, according to Stephen Skowronek’s “political time” theory, President Obama presided over the beginning of a progressive Democratic Party regime through his election in 2008. Skowronek categorizes individual presidencies as periods of “reconstruction”, “articulation”, “disjunction” and, in rare cases, “preemption” in relation to “dominant political party regimes”.
Skowronek identifies two modern presidencies, Franklin Roosevelt and Ronald Reagan, as presidencies of reconstruction; they produced dominant party regimes out of a period of disjunction that preceded them. This study analyzes the congressional electoral data from both the Roosevelt and Reagan presidencies to determine what reconstruction looks like empirically, in conjunction with Skowronek’s political time theory, and then compares them to the electoral data from 2006, 2008 and 2010 to determine that President Obama is not a president of reconstruction. These findings do not rule out an Obama reconstruction; the 2012 elections should provide clearer indicators to that possibility, but they do indicate that, at this point, President Obama is a president of preemption.

William Hammer
Modular Black Holes As Probes Of Spacetime
One of the open problems in gravity is a microscopic interpretation of the entropy of black holes. Recently, progress has been made in this direction for black holes in the context of string theory. The work done by Jatkar-Sen et al, establishes a statistical interpretation of N=4 super symmetric black holes in terms of certain types of functions that count states. These counting functions are distinguished by a high degree of symmetry, given by the modular group, affords you the means to construct an entropy. The goal of this talk is to explore the possibility of using the resulting modular entropy as a probe of the extra dimensions predicted by string theory.

Scott Hancock
The Deadly Triad: Chronic Pain, Mental Illness, and Prescription Drug Abuse in Veterans
Every day, veterans are returning home from serving in a multitude of places around the world, supporting the interests of the United States abroad. These veterans are also taking their own lives at an alarming rate: Although only one percent of Americans have served in the military, former service members represent twenty percent of suicides in the United States. The Department of Veterans Affairs estimates that a veteran takes his or her own life every eighty minutes. The conditions of chronic pain, mental illness, and prescription drug abuse are just a few of the things that veterans may “bring back home” with them following their tours of duty. These conditions are all very treatable, but in cases where these three exist together, there is a greater potential for suicide. The three conditions weave themselves together, making diagnoses challenging and treatment difficult for even the most experienced and skilled health professionals today. In this paper I will examine each of these conditions and identify common issues resulting from comorbidity
in veterans, and offer potential solutions that may lessen the impact of these devastating problems upon our service men and women, their families, and our society.

Cale Harnish
Construction and Use of a Pressure Vessel Simulator for the COUPP Matter Search Experiment
Observations of the cosmos have indicated that the majority of the mass in the Universe is in the form of non-luminous matter (dark matter.) Since this matter does not interact via the electromagnetic force, searching for evidence of it requires a new kind of detector. The COUPP experiment uses a superheated fluid to search for dark matter. When a dark matter particle collides with the superheated fluid, enough energy is transferred to the recoiling nucleus to cause a dramatic phase change from liquid to gas. Pressurizing the chamber allows the detector to be returned to a non-superheated fluid state to recover sensitivity for repeated use. Such a high temperature and high pressure environment puts serious restrictions on what materials may be used in the detector. This talk describes the design and use of a pressure vessel simulator as a means for ensuring components created in the lab can withstand the hostile environment present in the COUPP detector.

Ashley Hilliker
Tattoos in the Workplace
The purpose of this study was to determine whether or not individuals with tattoos are looked down upon in their chosen profession based solely on tattoo presence. Specifically, it was hypothesized that there is a stigma attached to individuals with tattoos in the workplace in comparison to non-tattooed employees. Previous research has looked at the attitudes toward tattooed individuals based on style, gender, and size, yet little research has been done to understand the attitudes toward people with tattoos in the workplace. This study sought to determine if stigmas are placed on individuals with tattoos. To do so, the appropriateness of tattoos in various white and blue collar professions was measured. In addition, the size and visibility of the tattoos were factors in determining attitudes. Although tattoos are becoming more socially acceptable, different traits are often still associated with tattoos. Various personality and physical characteristics of individuals with tattoos were addressed to understand if character is judged based on body ink. Overall, the results of this study found no differences in attitudes toward individuals with tattoos in the workplace compared to non-tattooed employees. However, the perceived personal traits of tattooed and non-tattooed individuals varied.
Lillian Hubbard
A Glut of Medications: An Imbalance of Power

“Ask your doctor if you are experiencing any of these symptoms.” A form of this sentence is utilized in most of the direct-to-consumer advertisements produced by pharmaceutical companies. When patients demand medications from doctors that they have seen in an advertisement, they slip into the role of self-diagnosis. Therefore, doctors yield to patients’ demands often recommending non-beneficial or even dangerous prescriptions. And, this problem of self-diagnosis has not been curtailed due to doctors’ failure to assert themselves as the authoritative power. This authoritative power is an extension of what Howard Brody calls a doctor’s “expert role” in the medical world in, “The Social Power of Expert Healers” (1992). In this essay, Brody discusses the imbalances of power in the medical world and consequently how patients suffer because of these imbalances. Furthermore, Brody argues that should doctors share their knowledge, a better balance of power would occur. A factor that Brody does not mention, though, is that pharmaceutical companies abuse their power through advertisements; as a result, doctors not only fight for a healthier relationship with their patients but also for a beneficial affiliation with pharmaceutical companies. Through the research of the triangular relationship of pharmaceutical industries, doctors, and patients, this paper explores the pathway which needs to be opened in order to start unraveling this prescription problem as well as create a shared balance of power.

Tashara Hudson
Solving the Summer Learning Gap

“Solving the Summer Learning Gap” is a proposal argument written with the intention of solving the issue of the growing achievement gap between middle to upper class students and lower class students. The proposal given here states that summer vacation should not be taken away, but instead it should be changed into something new and very different. Specific summer study programs should be implemented rather than lengthen the school year because students need to be able to enrich their learning instead of taking away the entire summer. The summer programs that seek to be implemented are described in heavy detail and include hands on, themed lessons that last short periods of time, field trips to applicable places throughout a specific community, and volunteer opportunities for high school and college students in excellent academic standing. The positive and negative aspects of this program are both address in full and explicit detail. This proposal includes research from the Journal of Educational Research & Policy Studies, as well as Time magazine and Taking Sides: Clashing Views on Educational Issues.
Alycia Lewis
Examining the effects of Organizational Tasks on Depression, Anxiety and Stress
Fifty undergraduate students are expected to participate in this study. They will complete four organizational tasks, which they may complete however they please. The tasks are to organize papers of different colors and subjects, children’s toys (such as hot wheels cars, Legos, etc.), a laundry basket of clean children's clothing, and an intermediate level puzzle. They will also, both before and after, complete the POMS (Profile of Mood States) and DASS (Depression, Anxiety and Stress Scales) questionnaires to provide tools for evaluating differences in mood levels before and after the study. The participants will either do the tasks alone or with a partner. The hypothesis is that students who work alone will show a greater decrease in negative emotions than those working with a partner, and that the tasks will, in both groups, show an overall decrease in negative emotions. The goal of the study is to provide an easy at-home way to decrease mild to moderate negative emotions.

Cristina M. Lynn
Embracing The Inevitable Wrinkles
The phenomenon of aging is undergoing a revolutionary shift in both theory and practice. The increased life expectancy of the Baby-Boomer generation has brought unprecedented scrutiny upon the process of aging, and even more fervent exploration into the consequences of aging for both the individual and society at large. The purpose of my current research is to delve deeper into the psychological and cognitive aspects of aging, and to propose a model for healthy aging. In particular, I will examine how healthy aging can be fostered through aerobic exercise and proper diet. I will review contemporary research on how exercise and diet can optimize cognitive capacity in older adulthood, and how such factors can ultimately be beneficial towards continued brain health. I will argue that this fundamental shift in the perception of aging, as evidenced in contemporary research on cognitive aging, should aid in maintaining a more positive, social, and healthier life. These factors will shed light on our once limited, and largely negative perception of aging, revealing a more positive, healthy outlook on the years ahead.

Stephanie C. Merryfield
Subversion, Panopticism and Knowledge in Le Horla
Guy De Maupassant in his short fiction Le Horla explores the phenomenological and ways of knowing through his protagonist. The inclination to define, characterize and suppose others as mentally unstable is questioned as a French gentleman begins to experience events which are uncommon but never the less taking place in his
otherwise orderly life. Yet the events seem so foreign that he begins to think he is losing his mind. It is quite possible that the ways of knowing must be expanded in order to afford for new knowledge and new ways of attaining knowledge or experience the supernatural. In my interpretative analysis of *Le Horla*, I argue that Authorities undermine individual “knowing” and that this uncertainty that arises can result in giving into or believing oneself insane. The alternative is to resist Authority and thereby acknowledge the capacity to discern, or experience in ways that are not material or intellectual, but are posited in another realm.

This research paper utilizes the theories of Todorov, Foucault, and others to examine the meaning of Maupassant's short fiction.

Stephanie C. Merryfield  
Identity Theft: The Impact of White Literature in *Frankenstein*  
Mary Shelley’s decision to use the extended metaphor of an unnamed creature as the antagonist in her gothic novel, *Frankenstein*, was arguably her attempt to shed light on the greatest debate of her time—the institution of slavery. Undoubtedly this prodigy, the daughter of two of the most influential writers of their day, also took the liberty of demonstrating the power of literature on the mind of the masses. In a scene, she strategically, places a portmanteau that holds books of the literary cannon, inside. The monster, while in the wilderness, finds the books. He, in his infantile state devours the literature. He determines that they are superior. Upon his encounter with the DeLaceys he is beaten by Felix, the man of the house, and fails to defend himself despite his own physical enormity. What precipitates his inaction? Frantz Fanon, psychiatrist, offers through his theories, a means of understanding the impact that literature has upon the marginalized. In this researched paper I examine the creation of identity by majority populations, the intents and purposes of identity making, and the impact that literature has as a specific means of propagating socio-normative roles along the lines of ethnic boundaries.

Timothy Moan  
Construction and Commissioning of a Cryogenic Radon Assay System  
Astronomical measurements have shown that 85% of the universe’s mass is in some exotic form which is inherently invisible ("dark matter.") Two experiments, COUPP and PICASSO, use superheated liquid targets to search for dark matter. When a dark matter particle collides with a nucleus in the superheated liquid, it creates an explosive phase change from liquid to gas. These experiments are insensitive to various backgrounds that plague other detectors; however they are sensitive to alpha particles from radioactive decays. Therefore, one must reduce the
levels of radioactive contaminants in the detectors, and be able to measure the amount of contaminants that get by. This talk describes the construction of a cryogenic radon sampling system and photomultiplier counting system used to measure radon emanation and diffusion of candidate materials for low-background experiments.

B. L. Morley
Meaning of the Word "Queer" and Its Applications (An Introduction)
The word "queer" has longest meant strange, or odd. It was once used widely as a derogatory word for homosexuals. It has since been reclaimed, and has named a movement and an academic theory - the Queer Movement, and Queer Theory. The Queer Movement is concerned with "the personal is political" activism; activism that is decidedly anti-heteronormative, which is seen as the basis for oppression in society, especially of minorities such as homosexuals and women. Similarly, Queer Theory is interested in examining society from a social constructionist and/or deconstructionist point of view. By using a queer theoretical perspective to analyze film and literature, we can examine the underlying ways in which those mediums challenged or reinforced heteronormative scripts and ideas.

Thomas Nania
Acoustic Transducer Design for Dark Matter Detection and Radiation Acoustics
Astronomical measurements reveal that about 85% of the matter in the Universe is non-baryonic (that is, not made from the constituents of atoms.) This exotic matter does not interact with ordinary matter via the electromagnetic or strong forces and is thus intrinsically invisible and hard to detect. The COUPP collaboration is working to observe individual “dark matter" particles using superheated liquid CF3I as a target for these particles. When the dark matter particles scatter one of the atoms in the liquid, the recoiling nucleus deposits enough heat to cause the liquid to explosively transform to a gas.

The COUPP detector is monitored using acoustic sensors which detect the acoustic emanations from the phase transition. The sensors we have designed and built thus far have been able to distinguish phase transitions induced by neutron calibration sources from those caused by alphas from radioactive decay. Our work is to try to improve the sensor backing composition to improve the event-by-event particle identification capabilities of the detector. We are also exploring whether acoustic sensors can be used in other particle physics measurements.
Sarah Nixon
Spatial Distribution and Artifact Densities of Upper Mississippian Features at Collier Lodge, 12 Pr 36

The Collier Lodge site (12 Pr 36) is a multicomponent site in southern Porter County that has been used historically since the early nineteenth century; however, stratified archaeological deposits dating back to 8,000 BCE have been found, indicating that the site was in use much earlier. This research, based on excavation of prehistoric features, has been taken from archaeological investigations conducted cooperatively by the University of Notre Dame, Indiana University South Bend, and the Kankakee Valley Historical Society for a span of nine years (2003-2011). This poster describes the construction design and artifact contents of fifteen features pertaining to the prehistoric Upper Mississippian use of the site after AD 1050. These features are described using artifact densities of lithic tools, pottery, floral and faunal assemblages, and also by feature dimension and use types.

Joe Perdue
The Social Functions of Comic Books: Using the Comic Book as Social Commentary

Besides the sheer entertainment value, comics provide a social commentary providing a sort of snapshot of the feelings of the general public, or where the writers were able to discuss the issues that disturbed them about society.

Michael Petty
Separating the Spectre from the Man: Understanding Hip-Hop Music's Masculinity

Hip-Hop/Rap music presents an avenue to understand and define a subculture of masculinity that has previously been misunderstood and demonized. There is a great amount of research that places Hip-Hop music as a problematic contributor to social unrest and social problems. My contribution to the discourse of healthy masculinity will begin with the identification of what Hip-Hop music has done to empower both men and women of all races and genders. I propose to examine Hip-Hop music to find and expose its contribution to society, both American and international. A theoretical approach to this topic that includes feminist, race, and gender theory is needed to have a better understanding of a subculture of people who have largely been written off as non-contributors to a healthy society and healthy masculinity. This research will be accomplished by examining those who have criticisms of Hip-Hop music's masculinity, message and influence.
Kristen Pritchett
Bromance in the 19th Century: Deconstructing Male Interpersonal Relationships in Herman Melville’s *Moby Dick*

Since the emergence of terms such as “homosexual”, a term that first appeared in 1892, and is defined as “of, relating to, or characterized by a tendency to direct sexual desire toward another of the same sex”, men have been scrutinized for their interactions with one another in every day society and in various mediums through the ages. *Moby Dick*, a popular piece of literary prose written in 1851, appears to have a multitude of homosexual tendencies referenced throughout the text, however, the time period that *Moby Dick* was written in and other texts and images of the time period suggest that the main character of this novel, Ishmael, was acting in a manner consistent with men of the 1800's towards his fellow shipmates and comrades. Additionally, his own actions prior to his adventures at sea indicate a deeper longing for contact with others – not just men or women, but humanity as a whole. This book is a reflection of the time period and the sense of growing loss of male interpersonal relationships. Research indicates that deeper, more intimate relationships that had been previously accepted were becoming less accepted socially. Terms such as “homosexual” and the negative connotations that came with broke down the 1800’s version of the “bromance”, and all but made it extinct. *Moby Dick* is a reflection of male society wishing to embrace and retain their social relationships as they had been for centuries.

Nichole Rohrer
Neither Believer nor Infidel: The Battle Between Christianity and Rational Thought in Herman Melville’s *Moby Dick*

This paper focuses on the religious differences and tensions that manifest in Herman Melville’s *Moby Dick*. Specifically, it analyzes the relationship between the narrator, Ishmael, and his crewmate Queequeg. Through this relationship, the text presents a religious stance that diverges from the circulating discourses of the early to mid- 1850s. For example, in support of Christianity, this paper will explore a speech presented by Dr. Edward Beecher at the Park-Street Meeting house in Boston in 1830. His speech discusses the religious topics of atheism and Catholicism as potential threats to the liberty of America, which embraces the circulating discourse of radical Protestant Christianity. Likewise, in support of rational thought, this paper will use David Swing’s academic article “Will Reason Exterminate Christianity”, published in 1889, as both support of Dr. Beecher’s speech as well as an answer to the problems he raises. Swing’s text ultimately favors Christianity, but by doing so, permits the developing discourse of rational thought to expand. Melville’s *Moby Dick*, then, challenges the circulating practice of Protestant superiority
which is supported by the discourse of radical Protestant Christianity, though it supports specific cases of Christian practices. Furthermore, the text deliberately injects a sense of acceptance and skepticism into the narrative, thereby supporting the discourse of rational thought. Ultimately, Melville’s text makes the claim that the two discourses can coexist.

Daniel Schulte
Oh the Disparity: How Martins Supermarkets Reflect and Reinforce Financial Disparity Through Product Allocation and Appearances
Martins, a regional supermarket chain, has a disparity in the quality and allocation of its products as observed across their supermarkets in South Bend and Mishawaka. Stores that are located in affluent neighborhoods are more prone to sell higher quality products than the Martins supermarkets located in financially struggling neighborhoods. However, not only do the Martins have differences in the quality of their products, there is also a disparity between their appearances as well: citizens of affluent neighborhoods can look forward to seeing murals in their Martins while the citizens of struggling neighborhoods can expect to see gray, large price signs, and officers posing as shoppers. Therefore, this presentation seeks to not only find differences in product quality and how they are portrayed between each Martins, but also to find out what exterior or social factors contribute to the condition to the respective supermarkets.

L. Roxanne Sirhan
Electrochemical Analysis of Estrogenic Phenolic Compounds
Estrogenic phenolic compounds (EPCs) are the most potent endocrine disruptors in the environment even at very low concentrations. EPCs originate from agriculture, industry, humans, household products and other pharmaceuticals, and they can enter surface water through wastewater treatment effluents and runoff from agricultural sources. Due to the potential negative effects associated with these compounds, and their ubiquitous presence in the environment, their monitoring and detection is important. Currents methods that are routinely employed for the determination of EPCs in environmental samples such as ELISA, have the disadvantages of being relatively expensive, and involve significant time for sample preparation and analysis. Therefore, there is still a need for an analytical method that is simple, affordable, and sensitive enough for detection at levels which might pose health risks to humans and aquatic organisms. Among the many methodologies that have been developed to detect these hormones, electrochemical techniques have been the most promising. However, the steroidal hormones detection in particular has been problematic because of their propensity to foul
(poison) the detecting electrode. Preliminary work on the analytical performance of a nickel-modified carbon electrode in detecting EPCs will be presented.

Emily Sprik
Teachers Need to be Paid for Teaching, not for Time
My paper is an argumentative writing assignment arguing that merit-pay needs to be used in schools to pay teachers.

Noel Spring Ullery
Awkward Questions: How The Hunger Games Unveils Implications of Privilege, Consumption, and Identity
During a cultural explosion of girl literature that revolves around sparkly abstinence porn, gossipy rich girls, and the importance of boyfriends, The Hunger Games immediately stands out as something different. In this presentation, I will discuss one aspect of what makes The Hunger Games, and its main female protagonist, Katniss Everdeen, so subversive within the realm of girl culture and literature. I will explain how the story functions as an allegory of current-day problems surrounding inequalities in privilege, power, and class that are a result of an increasingly capitalist country and global marketplace. Within the U.S., girls occupy a special place within this hierarchy. Constantly bombarded with the idea that power comes from shopping, wearing the right labels, and being “hot,” it is necessary that girls engage in conspicuous consumption to perform femininity. Katniss Everdeen, and her story, teaches girls about the implications of class privilege that make conspicuous consumption possible. By unveiling class privilege, The Hunger Games teaches girls about the hidden means of production that make conspicuous consumption possible for the elite, which leads to the realization that identity should be based on who you are (not what you buy), that true power and freedom should not have to be a product of oppression, and that girls possess the agency to make this happen.

Justin Stauffacher
Memes, Logic and Cultural Replicators
Memes have been classified by many as entities such as ideas or mental representations that are capable of moving from mind to mind. They may have physical manifestations such as behaviors, artifacts, skills and language. In this paper, I will first describe a memes ontology in vivid detail while pinpointing logic as a possible example of one. Following this, I will give some reasons as to why one might accept meme theory and why they are posited as having such a powerful influence over human culture and behavior. Next, I will give some objections to meme theory that are currently being discussed, including the one that I find to
be most damaging to the prospect of memes. Afterwards, I will state some possible resolutions to these issues and conclude that meme theory remains a valid and plausible explanation for the beautiful and amazing phenomena of human culture and behavior.

Joshua Strychalski, Ryan Lubelski, and Aaron Gill
Restoring Normal Function to Mutated Isocitrate Dehydrogenase
Isocitrate dehydrogenase (IDH1), an enzyme involved in the conversion of isocitrate into α-ketoglutarate, is an important step in the citric acid cycle which gives the human body energy. Mutated IDH1 causes a disruption in its structure and overall functionality, leading to the high probability of developing aggressive brain tumors. In order to assess and repair this impairment, two synthetic binders, or FABs, were used to determine the effect on activity of mutant IDH1. Comparison of the activities of these two different FABs revealed to what degree the activity of this enzyme was restored. The wild-type activity for IDH1 is greater than the activity of the mutant enzyme without the presence of FABs. With the presence of FAB4, the activity was increased to a considerable degree. FAB5 shows an opposite effect on the activity of the enzyme, lowering the enzyme’s activity considerably. FAB4 had the more significant effect on restoring the natural function of the enzyme; from this result, it’s possible that FAB4 could help lead to the development of a potential therapeutic agent.

Hannah Stowe
Some Illness Still Unnamed: Same-Sex Desire and Anxiety in Maupassant’s Le Horla
Jutta Fortin argues that the diary of the narrator in Guy de Maupassant’s Le Horla (1887) qualifies as a “transitional object,” something external to ourselves that helps to reassure us of our own autonomy and helps us cope with separation from the person(s) who nurtures us. Fortin compares the narrator’s diary-writing to the keeping of diaries by young girls living under patriarchy. Gerald Prince, however, sees the narrator as being on the cusp of filling his role as inheritor of patriarchal wealth and power, describing one of the desires that occupies his diary as being “to assume the father’s role and occupy his place” (183). The tension between these two critical perspectives begs the question: Why is a well-off, grown man, rooted in patriarchal power with his own estate and four servants, engaging in the same activity we observe in girls as they reconcile themselves to and/or resist their gender roles? That is, given that the narrator’s writing compares to the writing of young girls as they attempt to assimilate into patriarchal society, how might we understand the narrator’s own motives for employing this “writing cure” (i.e., what is he trying to “cure”?)? I will suggest that the narrator’s diary is intended
to aid him in assimilating to hetero-normative society as doing so means suppressing his own same-sex desires. The narrator’s diary allows him to grapple with his sexuality, but ultimately it does not solve the anguish he feels due to his internalization of his society's understanding of same-sex desire as illness.

Beth Wenzel
The Cunning and Deceptive Nature of Thady Quirk in Maria Edgeworth’s *Castle Rackrent*
Maria Edgeworth’s book *Castle Rackrent* was published in 1800 just as the Irish parliament was dissolved and absorbed by the English parliament, officially making Ireland part of the United Kingdom. The Act of Union was not entirely favored by both sides and arguments about the timing of the release date suggests that it was published to help the English better understand their new countrymen, but it can also be said that it was published to show how cunning and deceptive they can be. Robert Bell’s “Document B” published in 1804, shows how he interpreted the Irish behavior and personality to be that of people unable to process how to do the morally right thing. Likewise, *Castle Rackrent* follows the story of the likable Thady Quirk, a servant who tells you how “honest” he is, while using his position in the Rackrent home to betray the family and help his son, Jason, gain control while pretending to be loyal and “honest”. By comparing the two texts, one can see how Thady has a cunning and deceptive nature.

Christopher Jack Williams
Frankenstein’s (Inner) Monster
Throughout Mary Shelley’s *Frankenstein* we are shown the actions of the monster that Frankenstein has created in his attempt to become the envy of the world. This winds up becoming his worst nightmare as the monster turns on its creator and alters his life by killing those he loves. Many have said that the story is a good example about being careful with your actions because each has an equal and opposite reaction. But is this really what is going on in this story? The creator and his created are shown to parallel each other pretty closely; why is this? Is this simply created mimicking the creator, or is this something more cerebral in nature? The relationship between the two characters seems to be more than mimicry. What if the created is just the creator’s innermost fears and desires made manifest with his own hands?

I will argue that *Frankenstein* is a deep look at what drives us, and that what most would consider ‘evil’ exists in all of us, it just usually remains untapped and dormant. By viewing the ‘Monster’ in the story as nothing more than Frankenstein’s inner self, and examining both his and the
monster’s reactions to each other, we can see that when unleashed upon the world one’s unconscious desires can be devastating.

Reginald Young
How do the Roles of Sex, Age, and Home Ownership Affect How Often People Interact with Their Neighbors?

Throughout the world, individuals acquire friends, ties with other individuals, and/or neighbors from the early days of childhood all the way to the end of the line in a retirement home. Social interaction is just as important as the human heart due to the fact that they both drive humans as a species. Social interaction is the center of gravity for adolescents, teens, and adults worldwide. As one ages and makes their way out of college into the workforce, your social interactions within the workforce grow but those outside of the workforce often dwindle. After years of work and sacrifices, which are often made for family and homeownership, workforce interactions often dwindle. At that time, interactions with neighbors who are like you or around you begin to foster more than ever. Joong-Hwan (2004) assess that “Homeownership is a major indicator of economic well-being at the household level because a home is an investment and a significant financial asset to most homeowners.” Furthermore, such economic interest in home equity leads to neighborhood attachment among homeowners who share an important economic fate with their neighbors. It has been noted that the elderly tend to live longer and have happier lives when neighborhood interactions take place. I plan on studying and researching if sex, age, and home ownership affect how often people interact with their neighbors which is based on 120 surveys from Elkhart County residents who both reside and represent the Neighbor4Neighbor Association near the Strong Ave area.