Adenovirus Delivered Gene Therapy Sensitizes Ovarian Cancer Cells to the Pro-Drug Ganciclovir

Kiara Vaden, Joseph Hunsaker, John Griffith (Mentor), Jennifer Rawlinson (Mentor)

Ovarian cancer persists as the deadliest of the gynecologic cancers due to difficulty in early detection and lack of treatment options. Despite medical advances, no improvement of mortality rates have been seen for more than 40 years. Our research goal is to develop a gene therapy that effectively causes ovarian cancer cell death with minimal immune response or damage to normal cells. We aim to achieve this by using an adenovirus to infect and transfer our gene therapy to ovarian cancer cells. Our gene therapy involves the use of an ovarian cancer specific promoter used to drive expression of a suicide gene. We have constructed an adenovirus bearing the promoter region of Human Epididymis Protein 4 (HE4) followed by the well-known suicide gene Herpes Simplex Virus 1 Thymidine Kinase (HSV1-TK). The HE4 promoter has been shown to be highly transcriptionally active in ovarian cancer cells with minimal activity in normal cells, and is currently used as a biomarker for early detection of ovarian cancer in the clinic. Cells expressing the HSV1-TK enzyme have the ability to phosphorylate the drug Ganciclovir, which is then incorporated into elongating DNA chains causing premature cell death. We hypothesize that infection with our Ad-HE4-HSV1-TK will result in HSV1-TK expression, thus sensitizing cells to the pro-drug Ganciclovir.

Maintaining the Airway, an Insight to Intubation

Aleisha Circle, Steve Holley (Mentor)

I researched airway management, which is the most crucial step in the prehospital setting. Without a secured airway there is no oxygen exchange, hypoxia and hypercarbia occur leading to cell and tissue death. I discovered from my research that endotracheal intubation has long been the main skill used to secure the airway. Hypoxia, after severe trauma, can lead to unfavorable outcomes. Out-of-Hospital cardiac arrest is the most common cause of death and the most common airway management issue. Both trauma and cardiac arrests lead to the majority of prehospital intubations. The main objective of my research was to determine if endotracheal intubation, use of RSI, or BLS airway management was the most beneficial in the prehospital setting. Throughout my research I discovered that prehospital endotracheal intubation attempts are associated with a return of spontaneous pulse and the indications for intubation after trauma. Training also plays a key role in which skill to use based on each patient and the different type of call. Overall, airway management is the most important step, how it is maintained, ALS or BLS, it doesn’t matter as long as the airway is secured.

Homing Behaviors of Pagurus hirsutiusculus

Tyrel Foster, Patrick Thomas, Alan Holyoak (Mentor)

The homing behavior of the hermit crab Pagurus hirsutiusculus was studied at Cape Arago, OR, U.S.. The two methods used were mark and recapture, then displacement. Statistically significant results were found using the displacement method. Homing behavior is evident. Differences of elevation in the intertidal zone may affect homing behaviors of P. hirsutiusculus.
Quantification of Neovision vison (American mink) uterine Cytochrome P450 concentrations and measured activity of specific P450: CYP1B1.

Craig Cowling, Spencer Waddoups, Spencer Waddoups, Mikal Kidder, Seth Ririe (Mentor), Jason Hunt (Mentor), Todd Kelson (Mentor)

The research that I am currently conducting is focused on the hormonal regulation of glycogen metabolism in the uteri of Neovision vision (american mink) with special emphasis on prolactin. The premise is that greater uterine glycogen concentrations provide a higher level of energy to support embryo survival, development, and implantation and that photoperiodic regulation of prolactin is a major trigger. In addition to the well known effects of ovarian estradiol in stimulating uterine glycogen accumulation, I am part of a team investigating the role of catecholestrogens, such as the 2, and 4-hydroxylated forms of estradiol in regulating uterine glycogen metabolism. The catecholestrogens are produced by the uterus, but have extremely short half-lives and therefore function in an autocrine/paracine manner. Moreover they appear to have actions very different from estradiol. Specifically, my efforts are on Cytochrome P450 protein concentration quantification and activity of the CYP1B1 protein. We know that like many other CYP proteins in the CYP family, CYP1B1 may be responsible for the transport and synthesis of steroids such as estradiol. The presence of this protein is essential to our understanding of its role in the Neovision vision (american mink) blastocyst implantation. I have quantified the presence of Cytochrome P450 proteins in endometrial tissue and cell cultures. Building upon the quantified protein data, I have performed Luciferan/P450Glo Assays to measure the activity of a specific Cytochrome: CYP1B1.

Use of Cementum Annuli and Eye-lens Weight for Aging Coyotes

Camron Sego, Craig Johnson, Jerry Scrivner (Mentor)

Few have assessed the accuracy and precision of aging techniques using animals of known age. We used the known age of 29 coyotes (Canis latrans) to evaluate two different aging techniques: cementum annuli analysis and eye-lens weight. The two lower canine teeth and eye lenses were collected. Canines were sent to Matson’s laboratory for estimation of age by cementum annuli analysis. The lab was unaware that duplicate teeth were submitted for each coyote. We compared the estimated ages from the lab to the known ages to determine accuracy of the annuli technique. Precision was measured by how often canines from individual coyotes yielded the same age estimate. The lab correctly determined age using the annuli technique for 52 of 56 (93%) teeth. There was a strong correlation between the mean estimated age using both canines and the known age (r = 0.994, P < 0.0001). The estimated age, y, is given by the equation y = 0.7179 + 0.9565(x) where x is the mean age based on annuli counts for both lower canines. There also was a strong correlation between estimated age based on right and left tooth (R² =0.9883, P < 0.0001). Coyote age predictions based on the left tooth matched the right tooth 25 of 28 (89%) occasions. Eye lenses were dried and weighed until a consistent weight was obtained. The relationship between eye-lens weight and known age was determined. A curvilinear relationship was found between known ages and eye-lens weight: eye lenses grew more rapidly in animals <1 yr old than in animals >1 yr old. Subadult coyotes had eye-lens weights ≤215.0 mg. The fitted model yielded the equation y = (0.006396)e^0.02426x where x is the mean eye-lens weight in milligrams and y is the estimated age in years. Overall, age based on eye-lens weights was more variable and less accurate than when age was estimated using annuli. We conclude that the annuli technique is both accurate and precise. Eye-lens weight can be used to predict age of coyotes, but predicted age will be more variable than if annuli analysis was used.
Five Concepts that Make or Break a Team

Aubrey Buttars, Brandon Packer, Lizbeth Juarez, Ty Carter, Natasha Barker, Robyn Bergstrom (Mentor)

Every team has the ability to succeed or fail. There are certain principles that teams need to be successful. These same principles can also contribute to the failure of a team. The success or failure of a team depends on how you utilize these principles: leadership, conflict, diversity, motivation, and proximity. A team is only as successful as their leader will lead them. Conflict within a team can lead to success or failure depending on how it is handled and communicated. Diversity brings fresh perspectives to a team, but also can contribute to conflict or the inability of the team to reach their potential. Motivation can enhance enthusiasm of the team, but a lack of motivation can damage confidence or willingness to perform. Proximity allows face-to-face interaction and clear communication but proximity can bring frustration in teams through communicating virtually and indirectly. All five principles are important to consider when participating in a team because they can make it or break it.

Group Culture: It’s What’s For Dinner

Rebecca Hutchinson, Brittney Long, Chathum Nielsen, Christopher Hannan, Ashley Andersen, Robyn Bergstrom (Mentor)

This academic paper and presentation explores the elements of building a constructive culture within groups. The elements discussed are open communication, team building, diversity, team roles, and leadership. Specific styles and tactics are reviewed and analyzed in order to more successfully integrate them into the culture building process; which has been shown to be vital in promoting organizational progression and stability.

Just Dance

Steven Dance, Robert Spencer, Ariel Owens, Brittney Manwaring, Merissa Berry, Robyn Bergstrom (Mentor)

The elements of group dynamics can be found in the art of dance. Dance is a widespread form of expression and recreation, which involves group interaction, and therefore we feel it is valuable to analyze the group dynamics within complex and creative teams. In our paper and presentation, we have decided to specifically focus on five sub-categories of group dynamics exemplified in dance teams. These include: leadership, communication, creativity, emotional intelligence, and the tools necessary to succeed. Through real life examples we have found that dance teams who actively incorporate these skills while rehearsing and performing are more successful as a whole.

Landscape & Nature: What Makes a Photograph Fascinating?

Lauren Walker, Brooke McKenna (Mentor)

I am a photographer and love to photograph nature and landscapes. I will be showing some of my own landscape and nature images. There are countless photographers, both amateur and professional, that shoot nature and landscape, but what exactly makes an image fascinating? I will be presenting research that answers this question.
Photography and Psychology

Jordan Hinckley, Brooke McKenna (Mentor)

Photography is a big part in my life. I wanted to find how photography and psychology work together in helping capture emotion and how photography communicates the emotions to its viewers. Another part of emotion in photography is the body language and what it conveys to the viewer. Psychology of the nonverbal communication and emotion in photography will help photographers understand the reason behind the photograph.

The Effectiveness of Management Tools

Samantha Gile, Janiel Nelson (Mentor)

Utilizing every method of management tools is better than relying on one because the probability of success is greater. Common management tools include the human memory, computerization, using things as reminders, and informal reminders. It is possible for each time management tool to be effective on its own, but there is also an even greater chance of being ineffective because of the limitations of each tool. Using multiple tools of management is more beneficial because it provides more opportunities to remind a person to accomplish what needs to be done. This study shows the advantages to each of the common management tools listed above, but it also explains the loop holes to each tool when standing alone. People have their own ways of what works for them, but it is unwise to rely completely on one tool alone.

The Essentials of Leadership

Roger Johnson, Stephanie Watson, Alysha Anderson, Katie Kelly, Kye Cormier, Robyn Bergstrom (Mentor)

Our topic will discuss an important aspect of leadership. That important aspect is how to inspire and motivate group members to achieve their highest level of performance. Leaders achieve this goal by being role models and examples to their employees, communicating effectively, praising their employees, harboring a safe environment of open communication, and recognizing the importance of conflict. Effective leadership is essential in meeting any organizations goals.

The Top Five Mistakes Teams Make

Emily Johnson, Jeremy Welch, Joshua Petersen, Megan Jueschke, Hannah Horman, Robyn Bergstrom (Mentor)

With the growing emphasis on groups and teams both within the culture of the university and in the globalizing corporate world, it is becoming increasingly necessary to understand the dynamics of teams. This research paper is the culmination of months of research into the functions of leadership, methods of participation, decision biases, external influences, and influence of internal culture in teams. Now for the first time, this research will be shared with the scholarly community at large. It is the hope of the authors, that teams and team members everywhere can benefit by the enlightening understanding of the most common and deadly mistakes in teams.
What Personality Type Are You?

Linzie DeVane, Janiel Nelson (Mentor)

The two most common personality types that people have are Type A and Type B personalities. This theory was created by two cardiologists who tried determining what made people more prone to having coronary heart disease. Type A people have high stress levels and tend to worry about everything. Type B people are very relaxed and are able to just sit back and not stress over things that aren’t very important. The cardiologists found that people with type A personalities are those who have more risk of having coronary heart disease, as well as high blood pressure. Although people who are classified as a Type A personality get a lot done in one day, they are not as healthy as the more relaxed personality of a Type B person.
Are advertisements on campus helping to prevent jaywalking?

Josh Powell, Sara Ainscough, Chad Morrill, Charlie Alemon, Tayler Christensen, EJ Picard, Lane Williams (Mentor)

This study was done in conjunction with the advertising campaign done by I-comm in behalf of the Rexburg Police Department. About a year ago, signs went up advertising to pedestrians that jaywalking is a crime, telling them of the fines and consequences. In the study, the meta-question, “Are advertisements on campus helping to prevent jaywalking?” is explored. The main contributor of information is a survey that was conducted. This survey asked many questions about various ideas of jaywalking, as well as some factors that the group felt may be contributing to a high number of jaywalkers on campus. The survey is based on a random sample of the population of BYU-Idaho students of which 85 students were surveyed, 43 male and 42 female.

BYU-I Campus Advertising

Taylor Ann Markus, Tim Carter, Rachel Racicot, Michael Sessions, Lane Williams (Mentor)

Soapbox Agency is a student run advertising and public relations agency at Brigham Young University-Idaho. The agency focuses on creating professional level services from the entirely student lead staff. They work with real clients ranging from on-campus departments, to off-campus businesses looking to gain a larger influence in the public space. Soapbox offers full advertising and public relations campaigns that include research, copywriting, graphic design, video, event planning, and social media plans. The backbone to any advertising is the research of the target audience. From that target, they can develop a plan to reach out and influence the targeted consumer. On-campus, there isn’t much research defining what mediums reach the student population most effectively. Sooapbox needs to know which medium works best for different demographics on campus. Our research will help to determine which of all the media the campus has to offer is the best to influence student decision. We will look at print media, video, online, and many other options to determine the best plan of action and categorize our findings.

How the Decreased Minimum Age for Female LDS Missionaries Has Affected Dating for Male LDS College Students

Lydia Bringhurst, Callyann Hamilton, Kristina Dikhtyarova, Leighton Yuma, Janelle Etzel, Lane Williams (Mentor)

When the changed mission age was announced for both men and women, it spurred a mix of emotions for LDS young adults. Many were excited to enter the field early. Others were confused at the implications the change might have on their dating lives. The minimum age was lowered by one year for young men and an outstanding two years for young women. Traditionally, LDS men don’t date very seriously before their missions. LDS women however, may not have all anticipated serving a mission before the change was announced, but resolved to go afterwards. They may have participated in serious dating that was beginning to lead towards marriage. Where does this leave the men they left to serve The Lord? What implications does it have for men freshly returning from their own missions who would have liked to marry a younger girl, but find themselves with fewer options for dating? This is important to know because this information could possibly affect the choice for a woman to either leave on a mission or stay in school.
Is Ogilvy (Still) Right?

Aaron Olsen, Lane Williams (Mentor)

Print advertising practices advocated by the late advertising mogul David Ogilvy in his book On Advertising were scrutinized. An experiment involving two internet surveys and A/B testing of elements of faux ads was conducted. Results indicate that readers likely spend more time reading body copy than Ogilvy suggests. Also, illustrations were found to be just as effective as photographs in affecting respondents’ views of the brand, the persuasiveness of the ad, and the attention-capturing quality of the image. Headline placement did not make a difference in the aforementioned categories, but Ogilvy’s order of scanning ads was verified. Recall of information in serif fonts was higher in the headline, and recall of information in sans serif fonts was higher in the body copy. Implications for the advertising industry were discussed.

Student Employee Training

Tyler Minetto, Erin Ferris, Brandon Packerd, Ainsley Despain, Lane Williams (Mentor)

The research that we are presenting here looks at the research of six students finding solutions to how can expectations be clearly communicated between supervisors and new employees? This research draws upon primarily the results from surveys and research of peer-reviewed articles. The results presented us with a number of different findings. For example, student employees find it easier to go to their boss and fellow employee for answers. Also, the general results we are finding is that student employees are most satisfied with one on one training by their employer. In our research presentation you will find a number of different findings from our learning and studies.

Student technology preferences in the University Store

Sheila Rock, Elizabeth Sheldon, Lauren Hales, Mitch Jones, Ryan Holtom, Torre Slaeker, Lane Williams (Mentor)

Our study focused on the bookstore and the preferences students have to using either laptops, personal computers, or tablets. We then asked questions to find what brand students had when looking at one of these mediums. We also asked what brands people would like to see in the bookstore. Other accessories people would like to see in the bookstore was another additional question. The final question was whether students would rent TVs from the bookstore. On the poster we will present our five findings based on these questions.

The Awareness and Use of Competitive Sports Webcasting

Aaron Olsen, Kelly Jordan, Ian Andersen, Amy Westover, Mike Collett, Melanie Blankenship, Lane Williams (Mentor)

This research was conducted in behalf of the office of Competitive Sports in the Student Activities department. This study explored the students’ awareness and opinions of the school’s competitive sports webcasts. A survey was constructed and sent to a simple random sample of 300 students to ascertain the percentage of students who have seen the webcasts, comparing viewers who participated in the sports events to viewers in the general population. Associations between this real-world model and past research were considered. Survey data was analyzed using Microsoft’s Excel software and with several statistical tests. Implications of the study for timing, audience outreach, and delivery of the webcast were discussed. Suggestions were made on how to increase viewership and improve user experience were made.
The effectiveness of the BYU-Idaho Admissions website

Annie Mills, Danny Morgan, Jaime Barajas, Megan Marsden, Jamie Koger, Lauren Walker, Lane Williams (Mentor)

We are doing our research project on the new Admission’s website. After sitting down with the creator of the site and his manager I was able to ask exactly what information they wanted from this research. They are interested to see how new students view and use the new website. Their main objective is to find out if students are able to locate things easily on the website. They are mainly interested in students new to campus being able to find answers to their questions.

The Effects of Headphone Usage by Students at Brigham Young University-Idaho

Jonathan Perez, Craig Handy, Brianna Bair, Anthony Brady, Dan Sisco, Lane Williams (Mentor)

How does listening to music with headphones on campus affect students at BYU-Idaho? As more and more students choose to use headphones as they travel across campus to and from classes, social interaction seems to have declined. Many people in Rexburg believe that BYU-Idaho is no longer the “warm” and “friendly” campus it once was. Our intention is to determine why this occurred by surveying 200+ headphone-using students. We will ask what they listen to and what effect using headphones has had on their lives. With the data we gather, we will be able to determine how headphones affect people’s lives on campus.

The Media Preference Students Prefer for Reading

Samantha Crabtree, Gina Petersen, Lane Williams (Mentor)

The recent increase in new media platforms has created lots of questions for media producers. In an effort to discover public perceptions and preferences of print vs. e-books in a campus setting, our research team conducted a survey. Our team hypothesized that college students would consider hard copy formats for situations that required longer reading durations and vise versa for electronic reading situations. 300 students were sent surveys and 69 responded. The survey was designed to evaluate general perception as well as initial reading preferences when comparing various formats and reading categories. Our findings indicated that students initially lean toward hard copy formats. 73 percent of all students surveyed said that they preferred reading hard copy formats versus e-formats. When asked how much they preferred reading online formats versus print for Religious, Educational, Leisure, and News Purposes the results leaned toward print in all categories except for News. News leaned toward e format but still trended with a lesser amount of surety. Conclusively we would encourage media teams targeting college students especially among Latter-day Saint populations to continue to produce both elements for maximum effect where possible. Students appreciate both formats for different reasons. However initially creating media in the form of print should always be considered especially for educational purposes. Further studies should be performed to evaluate trends among varying populations and demographics.
Visual/Audio Learning vs. Text Reading in Communication Courses

McKenna Lawler, Marie Pacanos, Paige Marez, Ober Delgado, Taylor Birrell, Lane Williams
(Mentor)

For our project we did an experiment to compare visual/audio learning against reading a textbook in Communications Courses. We asked to enter a Comm. 100 Intro to Communications course held by Sister Scholes and perform a quiz. She has two classes throughout the day and we asked if through online we could have each one read or watch a different presentation and take a quiz based on the information in the assignment. The first class was assigned to read the PowerPoint presentation about Hard News Leads and the inverted Pyramid, a concept students learn in the Comm. 111 class. The second class was asked to listen to a Podcast with the exact same information as the PowerPoint. They then had to take a quiz to evaluate their level of understanding of what they just learned. The first question of our quiz was whether or not the student had taken the Comm. 111 course or not. If they had, the quiz immediately ended. If they had not, we went on to asked demographic questions and whether or not they had experience writing news leads. Then they proceeded to be asked 10 questions based on their learning. We compared the results of the visual/audio class with the text class to find which was most effective in the learning process.

What factors most strongly correlate with GPA?

Tanner Gilliland, Kevin Mohsenian, Laura Clair, Aubrey Taylor, Kristen Cagle, TJ Webster, Lane Williams (Mentor)

The purpose of this research project was to determine which factors most strongly correlate with GPA. The factors studied were: Location of Study (floors, of the library, at home, elsewhere on campus, or other), Hours Spent Playing Video Games, Hours Spent on Social Media, Dates Per Month, Relationship Status, and Gender. We obtained our data through a campus-wide survey disseminated through Qualtrix. The survey contained one question about each of the aforementioned factors. Our results will be displayed graphically through various scatter plots on a large poster.
Why don't people purchase wedding videos?

Lilly Leonard, Allison Whiting, Rex Warner, Destiny Tirrell, Brianna Evans, Christie Smith, Lane Williams (Mentor)

Weddings are some of the most memorable experiences that people will have in their lives, this day is full of moments that should be captured and preserved. Each year, millions of dollars are spent hiring a photographer to take wedding pictures, so why don’t people spend money on wedding videos? What are the main factors that deter people from hiring a videographer to capture these moments?

It was assumed that the main reason people don’t hire videographers for their weddings is because of the cost involved because people don’t want to spend more money than they have to, especially when they are already spending a lot of money on other wedding expenses. To figure out if this was the case, a focus group was conducted with married BYU-Idaho students to test this assumption. Students were asked a series of questions, all relating to why they did or did not hire a videographer for their wedding to find out their opinions.

It was found that the majority of students involved did not hire a videographer, but a photographer instead. This decision was mainly based on the price associated, as a videographer seemed like an optional cost where a photographer did not. These students were not interested in paying for a wedding video because they were too expensive as an addition to pictures which were more important to them than video. But it was also learned that these students were more likely to hire a videographer if it was included in a bundle package with the pictures. Even though this would most likely cost more upfront, it would still be cheaper than hiring out two different people to do the job. Lastly, it was found that most of these students wished they had purchased a wedding video after watching a sample wedding video or that they would have considered spending more money on.
Annulus: The Calendar Re-imagined
Andy Griffin, Brian Memmott (Mentor)

When the world transitioned from paper (analog) calendars to digital calendars, a lot of those traditional analog design patterns were carried across to digital interpretations. But some of those traditions weren’t well suited for digital interactive systems. This mobile web app aims to merge the strengths of analog and digital platforms with special consideration for breaking free from pagination, more intuitive visualizations, delightful interaction and an optimum mobile experience. Additionally, it is meant as a promotional tool for web-based experiences on mobile, which runs counter to the current native application craze. The primary visualization method will draw on metaphors established by the international ubiquity of face clocks. Two concentric circles, representing am and pm will show at a glance the state of the user’s schedule. Appointments will be touch-enabled to allow for intuitive and enjoyable manipulation within the constraints of the circle.

CarCalc - An Aid To Successful Car Shopping
Andrew Kurowski, Blaine Robertson (Mentor)

My project is a web site I am developing based around an idea I had to help someone determine if a used car that they are looking at is worth purchasing. I made an excel sheet and I am developing a java program to make the concept more portable, easier to use, and somewhat more difficult to be stolen. The rest of the site offers advice on how to avoid purchasing a bad car when seeing the vehicle in person and how to avoid scams and questionable business practices. With this in mind the objective is to get users to know how to be prepared before, during, and to some extent after. I say to some extent because citing law is out of the scope of the project, but I will make the user aware there are laws if there are issues after the purchase.

Cyber Warfare
Andy Griffin, Shawn Randall (Mentor)

The Obama Administration recently identified Cyber Warfare as its number one security concern this year. There aren’t enough of us that understand what it is and why it’s so dangerous. With greater education on the subject, we can combine our innovative power to protect ourselves. This research project, presented as an interactive web app, aims to help people: • Understand what cyber warfare is and come to terms with its consequences • Recognize unethical practices they personally engage in on the web • Identify ways they can better protect their digital assets. The app will be displayed for a time publicly on campus, but as it is a web-based product, the oral presentation can be done at any location with a networked computer and projector.

Xzert Fitness Tracking Web Application
Stuart Himmer, Rex Barzee (Mentor)

Xzert is a web application that I developed to simply record exercises and compare those exercise stats and information with the user’s friends. This is a dynamic web application using varying technologies like PHP, MySQL Database, JavaScript (AJAX, JSON, jQuery), HTML, and CSS. This presentation will cover the design and development of Xzert, the target audience, and a live demonstration of the application.
Zelda Dungeons: A Video Game in Java

Paul Barker, Blaine Robertson (Mentor)

This video game, written in Java and entitled "Zelda Dungeons," is a project I did for an Object Oriented Programming class. It was done in a period of one month, and incorporates all the principles of object oriented programming. The game is based off of a popular puzzle game called "Sokoban" in which a player must push objects to certain points on the game board in order to win. The game has been worked into a "Zelda: A Link to the Past" theme, a game developed by Nintendo and released in 1992 in America. I've incorporated sprites from this Nintendo game into the Sokoban puzzle. The project reflects almost every aspect of object oriented programming, and includes over 3,000 lines of code cumulatively.
3D Facial Recognition Using Microsoft Kinect
Altaf Hack, Michael Rowe, Aaron Butterfield, Richard Grimmett (Mentor)

The purpose of this project is to build a 3D facial recognition embedded system. Instead of using the conventional 2D imaging for facial recognition, we will use the Xbox Kinect for its VGA video camera and depth sensor. Using those capabilities of the Kinect we will be able to scan a user’s face in 3D and compare it to a database. The owner will have control on who can be approved to enter. This concept could be used for home users, military or any device which would like to have a security feature. It is expected that using 3D imaging can provide more security in terms of the unique features of a person’s face.

Finite Element Modeling of Integrated Circuit Test Probing
Dustin Whittaker, Stevan Hunter, Alan Dutson (Mentor)

Microscopic probe tip modeling by finite element analysis from ON Semiconductor published data. Cantilever probe tips are used in production for electrically testing Integrated Circuits. Probes leave a mark on the IC bonding pads, which is disrupting to the subsequent processes. This study first attempts to calibrate the model to match experimental data, then examines parameters that may affect probe mark sizes. In addition, stress analysis was conducted on sub-layers of the bond pad structure to predict whether cracks will initiate in the glass layers of the IC. This is important to the industry to be able to use the inexpensive cantilever probe tips and understand how to avoid cracks and large probe marks.

Garden Defense System
Paul Rossi, Justin Welch, Nathan Fife, Richard Grimmett (Mentor), Richard Grimmett (Mentor)

we got tired of small animals getting into our gardens and messing with out vegetables and fruits so we decided to do something about it. We developed a system that uses a webcam to scan an area and then controls a mechanism to aim and fire an air soft gun at the ‘intruder’ deterring it from trying to eat the vegetation in the garden.

Homestead Managing and Find Your Study Group
Nial Spencer, Dan Ard, Austin Lovell, Wade Huntsman (Mentor)

Have you ever wanted an easy way to pay your rent online? Have you ever wanted to live in the same apartment as your buddy? Or, have you struggled in a difficult class and would like to find a great study group to help you improve your grades? If so, then we have solutions to your dilemmas. The staff at DNA Visual Studio has also faced similar situations and we are developing two new applications to alleviate these problems. The first application in development, Homestead Managing, is a program which provides apartment residents and managers with a quick, user-friendly billing, contract and tenant organizer. The second application in development, Find Your Study Group, is a tool for students to speedily locate study groups for their challenging classes. We are extremely excited to present these two new concepts to the public.
Low-cost Hearing Aid
Taylor Martin, Jessie Lilya, Luke Lehman, Eric Karl (Mentor)

This project revolves around a low-cost hearing aid that will be able to be auto tuned by the user. It will have a user interface that will produce different tones that the user will determine whether or not he/she can hear it. Based on the user's input the different frequencies chosen will be amplified or left alone. The hearing aid will be pocket-sized and be able to be used anywhere.

Media Phoenix
Alan Pynes, Tim Teuscher, Blaine Robertson (Mentor)

For the Research and Creative Works conference our team would like to present a working wireless media server. A media server is a home computer that is generally hidden from the public but attached to the home WIFI. This home computer acts as a server by holding all of the media content such as, music, movies, pictures, and more so that these things can be accessed anywhere in the home at the click of a button. Have you ever wanted to watch a movie with your friends, but your sibling was watching it in another room? With a media server you can solve this problem and both of you can watch the film at the same time in different rooms without having to buy another copy of the disc.

Singing DRSSTC Tesla Coil
Jordan Thorpe, Richard Grimmett (Mentor)

The musical "Dual Resonant Solid State Tesla Coil" is a relatively small Tesla Coil capable of outputting up to 125,000V at the breakout point. There is a main power board which takes a regular 170Vp input from the wall, rectifies it, and sends pulses of current (up to 300A) through the primary coil of the Tesla Coil. These pulses are controlled by a separate interrupter which can play the Tesla Coil in two modes. It can either send signals from a MIDI file off a computer, or can send notes played on an electric keyboard. It can also play a set frequency also controlled by a potentiometer on the interrupter. The Tesla Coil is also polyphonic, meaning that it can play two notes at a time.

Tesla Turbine
Mark Moser, Kyle Urrutia, Richard Grimmett (Mentor)

We are using what is called a Tesla turbine to generate electricity. The turbine is driven by compressed air and the goal is to charge a cell phone. The turbine could also be used with steam and use a small boiler in a campfire to generate electricity. The turbine is unique because it is a bladeless design. It uses several disks spaced closely together on an axle. When a fluid like water, steam or air is forced across the disks the disks turn creating mechanical motion. We are going to harness that mechanical power to generate enough power to charge a cell phone.
The Plasma Speaker

Allen Halversen, Al Hack, Richard Grimmett (Mentor)

We are hoping to present our ECEN 390 project at this conference. Our project is a plasma speaker. A plasma speaker transforms the electronic signals from an MP3 player or other electronic device into a high voltage arc of electricity. This arc of electricity changes its frequency according to the frequency of the music which in turn, transfers the vibrations to the air around it, creating sound waves. Thus, it will appear that you can hear music coming from the high voltage arc. Plasma speakers have a similar purpose as a conventional speaker but they are more difficult to create and work with. We will need an easel for a poster and access to a power outlet for our speaker.
Aria

**Synchronous Vehicle Management System**

Christopher Garrett, Jon Blackburn, Kyle Shore, Richard Grimmett (Mentor)

The purpose of this system being developed is to provide a central control system for a vehicle network. By utilizing a camera in the “sky” we are going to implement a tracking system on remote control cars. The user in control will be able to specify a car on the screen and give it an end coordinate on the screen. The camera will track the movement of the car and relay to the system where to move in able to avoid other cars and obstacles. The system will be wired into the remote controls and control the movement of the cars as told by the camera feed.

**Auto-landing RC Airplane**

Kyung Jae Park, Jordan Thorpe, Richard Grimmett (Mentor)

We are using a F-27 Stryker C remote controlled airplane and by using an Arduino Uno microcontroller, we will be able to autonomously control the plane as it approaches the ground to land. The Arduino will take signals from the transmitter during normal flight, but as the plane senses that it is approaching the ground, the Arduino will turn control of the plane over to an accelerometer. The accelerometer will sense (via motion-sensor on the bottom of the plane) the changes in the angle and pitch of the plane and move the ailerons in order to stabilize the plane on two axes as it comes in for a landing.

**Autonomous Quadcopter**

Shane Herd, Matt Bonner, Jessie Lilya, Richard Grimmett (Mentor)

This project is using two quadcoptors that fly autonomously. The first quad is controlled using a ground station that is on our laptop. The mission is planned in advanced and programmed to the quad and once it is turned to auto mode, it takes off and does its thing. The second quad follows the other quad around and acts as a wingman.

**BYU Unmanned Air Vehicle-Idaho [BYUAV-I]**

Bryce Perry, Nathan Fife, Eric Karl (Mentor)

The BYU Unmanned Air Vehicle Idaho (BYUAV-I) is able to fly itself using pre-programed GPS waypoints that the plane has an onboard computer to guide it from waypoint to waypoint. BYUAV is launched by hand and initially flown by remote control. Once airborne the onboard flight system is activated by an auto-pilot switch on the controller. This unmanned air system carries an onboard camera that provides real-time view from the left wing. The camera can be panned or tilted from remote control or a custom designed headset. The onboard flight system will allow us to take control of the plane for landing.

**Control using facial detection and tracking**

Doug Slade, Richard Grimmett (Mentor)

Using facial detection software and a microprocessor my project allows users to control a small remote control vehicle using head movements. It will also have autonomous control via an on-board camera which will detect passers by and track them.
Grenade Cam
Jared Berrett, Kyle Urrutia, Kyle Hastings, Richard Grimmett (Mentor)

This project is a small wireless video camera that can be thrown or tossed into an area (i.e. room) without the need for personnel to be put in harm’s way. This will provide emergency personnel, law enforcement, and even military with information in order to help determine which would be the best action to take in a given situation.

Laser Tripwire Weight Lifting Aide
Robert Small, Richard Grimmett (Mentor)

Project was designed to aide students in weight lifting classes, especially with lifts such as Barbell Front Squat and Barbell Back Squat. When performing these squat techniques your focus should be centered on breathing and lifting. To perform the squat correctly, you must lower the barbell until you are in a squatting position with your thighs parallel to the ground. Old techniques use a rope or rubber band around the outside of the squat rack, positioned to your height when parallel, to indicate when you have descended far enough. Lowering the barbell until it has touched the rope line indicates that you are at parallel and may now push upward to complete the squat. As mentioned before your focus should be on breathing and weight distribution in order to safely and correctly complete the exercise. If you are looking to either side and checking to make sure you have descended far enough, then concentration is broken and this can result in injury. Using the laser tripwire we can safely lower the weight while focusing, until the laser beam is broken by the barbell and the alarm sounds. This indicates that we can push upward and complete the exercise without losing our focus and risking injury.

Reliability Study of Integrated Circuit Bond Pad Probing and Wirebonding
Tiago Rodrigues, Prakash Subedi, Shashi Sharma, Stevan Hunter (Mentor)

"Integrated circuits contain 'bonding pad' elements. These pads are coated with thin film aluminum to enable electrical testing when touched by tiny electrical probes and wire bonding to attach microscopic wires for attachment to electrical leads that extend beyond the package for connection to circuit boards. This experimental research, conducted at ON Semiconductor, Pocatello, ID, seeks to characterize the damage from probing on the pads, and to identify the specific issues that probe marks have on wirebonding reliability. The microscopic tungsten-rhenium probe tips "scrub" the thin aluminum pad surface to break the surface oxide and make electrical contact. The tip size, shape, angle, and force are all important factors in the probe mark results. Wirebonding requires welding of the gold wire onto the pad surface by a 'thermosonic' process which shakes the rubs the gold across the aluminum surface at ultrasonic frequency about 2000 times to form a gold-aluminum intermetallic. Probe mark topography and surface characteristics can adversely affect the bondability. This is tested by pulling the bonded wire to determine if the wire breaks before the bond lifts off the pad. Experimental results and interaction of the factors are presented in the poster. This work is supported by ON Semiconductor. Some of this work was presented at the international Semiconductor Wafer Test Workshop, San Diego, CA, Jun 2013; and additional work will be presented at the International Microelectronics and Packaging Society 2013 Symposium, Orlando, FL, Oct 2013."

Thursday, July 18, 2013
Search & Destroy Team 00 (DoubleO)
C. Von Hugo, Michael Packer, Jason Stockham, Richard Grimmett (Mentor)

The purpose of this project has been to drive a remote control car using a wrist watch with motion sensing capabilities through an Arduino and radio frequencies. Additional aspects included for the car have been a projectile launching system and a webcam. For the target of the projectiles our team has assembled a self-balancing, path-following robot to be knocked over by the user.

The Electric Motorcycle
Michael Packer, Eric Karl (Mentor)

The electric motorcycle is being built from a gasoline powered motorcycle. A group of Mechanical Engineers will be designing a flexible motor mount and battery encasement. A group of Computer and Electrical Engineers will design a motor controller and data collection system. The goal is to be able to design a universal controller that can be marketed to other enthusiasts to build their own electric motorcycle. This design must meet all legal requirements for motorcycles by the state of Idaho.
Compact Water Softener
Billy Evans, Jacob Bickmore, Darren Cherrington, Samuel Caramia, Joseph Hancock, Greg Roach (Mentor)

For those that don’t want a full home water softener, we’ve designed a compact water softener meant to fit under the sink and hook up to the dishwasher. This should not only prevent hard water spots on dishes, but should also help extend the life of the dishwasher. Ideally this product will also be able to extend to RVs, washing machines for clothing, and any other application where one would want to soften only small amounts of water.

EZ-TRAC Assisted Chaining System
Nathan Helm, Alex Argueta, Jeff Anderson, Michael Pond, Greg Roach (Mentor)

Every winter thousands of professional truck drivers haul as much as 80,000 pounds of products at a time, and sometimes much more. These drivers traverse not only this continent but all continents in all types of weather. The nature of the economy forces these drivers into long hours and tight schedules. To meet the needs of overhead costs, client demands, and management of precious time drivers gamble with theirs and others lives in many treacherous conditions. Adverse winter conditions claim millions of dollars and far too many invaluable lives both truck drivers and the normal winter travelers. If winter conditions are bad, which happens all the time, there is often not enough time to stop and wait until the weather clears as it can cost easily $200/day in revenue for such a delay, and even the time to put on chains can still cost companies in the range $100/day in revenue. Some fleets have hundreds of trucks in hazardous conditions every day. If the weather is bad enough the law requires in many states that drivers stop and fit the 8-10 drive tires and 4-24 trailer tires depending on the size of the truck and trailer(s). This costs time, money, and in some cases lives. Attempts at relieving some of the costs and danger associated with chaining up truck tires have been attempted, but in every case not effective enough to allow the average truck driver the needed assistance to reduce the major drawbacks. The real need is to eliminate the time spent dragging and hefting the chains from the truck storage, untangling, accounting for parts, getting chains lined up in the snow, connecting chains despite the tight fit needed for effective use, and all next to a road used by other motorist driving in the same dangerous circumstances. The design and construction of a semi-automatic truck and trailer chain installation and removal system was undertaken in an effort to reduce the dangers associated with installing chains on a truck and trailer. Our design consisted of a fender with a chain storage spool in the end of it.

Glide Stride
Shawn Seegmiller, Tony Foster, Ryan Carnahan, Greg Roach (Mentor)

The Glide Stride product is a personal transportation device which competes with other forms of non-motorized transportation, being most similar to standard rollerblades. It maintains the benefits of rollerblades, such as being fast, fun, and easy to use, but solves the associated problems such as being heavy, requiring another pair of shoes, stumbling on small objects, lack of decent braking, and uncomfortable vibration. This was accomplished using several innovations. The Glide Stride is lightweight and collapsible for convenient portability, attaches to any standard shoe, and retains the required leg and ankle support. The wheels are large enough to handle the bumps and cracks of rougher riding surfaces, and are mounted on flexible beam supports for shock absorption. Finally, a new braking system was developed so that the user can ride down steep inclines without fear of losing control.
Prankster

Todd Williams, Cong Peng, Tyler Trogdon, Kelsie Ray, Greg Roach (Mentor)

A team of engineering students was tasked with designing a projectile launching device capable of aiding in nocturnal, clandestine, mischief. The operational specifications of the device were determined through interactions with potential customers. These interactions indicated a strong need for the device to be light weight, quiet, and capable of launching projectiles over a standard two-three story home. Several different methods of energy delivery were explored using theoretical calculations. Three methods so explored were first, the use of compression springs, second, utilization of polytropic expansion of combustion products, and third, adiabatic expansion of compressed gasses. Calculations revealed that, of the three methods, adiabatic expansion of compressed gasses proved to be most favorable. The finished product was designed to use CO2 tanks of a readily available size to store the compressed gas and then expand it through a pneumatic system composed primarily of polymer based members.

Semi-Automatic Clay Pigeon Thrower

Mark Hill, Phillip Montour, Zach Smith, Michael Haack, Chaun Earl, Greg Roach (Mentor)

A group of students from ME 380 have been working on a project to modify a self-standing hand clay pigeon thrower to be a semi-automatic motorized clay pigeon thrower. The modification features an electric motor to automatically re-cock the ejecting arm and a cam mechanism to feed the next clay right in front of the arm. The launcher is fired by use of a foot pedal. This clay pigeon thrower requires minimal effort to operate allowing a single shooter to use the devise with ease.

Third World Bicycle Rope Maker

Abigail Tucker, Alicyn Woodrum, Elizabeth Kissell, Jamesen Birkel, Jaime Brown, Tyler Watson (Mentor)

In the small village of Abundancia, Paraguay, the villagers sleep in small houses with few to no walls and dirt floors. While sleeping on the ground is uncomfortable, it is also dangerous to their health due to the risk of diseases that come from bug bites, such as Chagas. Last fall, a group of BYU-Idaho students designed a bed frame that would be easy for them to build and would keep them off the ground. Our project was inspired by a need to make the rope that forms the netting of the bed in a more efficient manner than hand braiding hundreds of feet of twine together. Our rope maker was not intended to be the fastest, strongest or most high tech rope maker. Our design is one that can be easily replicated with resources in the area. It also is easy to transport and does not take complex engineering skills to reproduce and repair. We utilized as many parts of two run-down bicycles that we could as well as a few other supplies that could be found at a common hardware store. Besides making rope for the beds, our hope is that the villagers will be able to use the rope maker as a means to increase their income. Through the use of the rope maker they could start their own business making a wide variety of ropes of different strengths, textures and colors.

Tow two cars at once

Eric Christiansen, Taylor Harper, Evan Steel, Lucas Lopez, Greg Roach (Mentor)

The project is a design that would allow a tow truck driver to be able to tow two cars at one time with the use of a larger more expensive truck. There are times that more then one vehicle are needed to be transported, this design project will give the tow truck driver the ability to be twice as effective making it possible to generate more income and free up more time.
**Assistive Counting Device**

Marcus Miller, Ben Edwards, Dustin Whittaker, Alan Dutson (Mentor)

The Assistive Counting Device will assist the workers at Dawn Enterprises to be able to accurately count the products they manufacture, in preparation for packaging and shipping. Employees will no longer have to rely on memory to maintain count, and time and manpower will be saved by not having to check and recheck product count for accuracy. The Assistive Counting Device is comprised of a smooth metal slide that connects to a table, and slopes downward to a waiting box. It also includes an Arduino micro-controller with touch screen, sensor, and speaker output. It allows the user to place the product on it, have the product slide down into a waiting box, past the sensor near the bottom of the slide, thereby counting the item and displaying it on the screen read-out. When the pre-designated count limit is reached, the micro-controller outputs a visual and audio cue, letting the user know the count was reached, releasing a small electromagnetic flap to mechanically stop further product from being included past the required amount. By using our Assistive Counting Device to automatically count products prior to shipping and keep track of the tally, it truly becomes a labor and time saving device, particularly to employees who may have trouble keeping a mental tally of high numbers in the first place.

**E-Z Portage boat portage cart**

Justin Randall, Mark Neilson, Nick Jones, Samuel Peck, Greg Roach (Mentor)

This portage cart is manufactured in order to allow the user to easily portage small boats, such as kayaks, or canoes across the land. The unique features of the cart is the fact that it will be connected to the boat without any straps, and very quickly and easily. The cart, when not in use, and stored in the boat will fold up smaller than most any other portage carts.

**Mobile Server Lift Created by All Terrain Tech Transport for the BYU-I IT department for use in smaller tech rooms across campus.**

Joseph Gosar, Trent Evans, Tyson Goddard, Alan Dutson (Mentor)

Central to the tech rooms on campus is the industry standard 19 inch wide rack that all servers and IT equipment are mounted to. However, many of these racks are located in small rooms with minimal space to maneuver equipment into place for mounting. The equipment that goes into the tech racks can weigh several hundred pounds and needs to be mounted several feet in the air. Prior to this project IT staff would have to dangerously manhandle the equipment into place. Team AT3 was tasked with building an equipment lift that can maneuver the equipment into position for mounting even in the most awkward tech rooms. The server lift must also be capable of moving equipment between buildings and traversing outdoor obstacles. The server lift desired differs from existing equipment lifts which are designed only to work within large server rooms. The server lifts on the market have very low floor clearance and are very difficult to move between buildings. With the completion of the project team AT3 will have not only improved the efficiency and safety of those mounting equipment in server racks, it will have provided a solution for all institutions that use satellite style relay rooms.
RocketStove For Rural Paraguay

C. Von Hugo, Troy Seletos, Fielding Sarager, Bryce Merrill, Alyssa McCarter, Alan Dutson (Mentor)

The purpose of this project is to provide a rural village in Paraguay, called La Abundancia, with a new process and design similar to a rocket stove. The new process will allow the villagers to enterprise the stove and to help stimulate the economy. The design will target on reducing hazardous smoke inhalation, being fuel efficient, heating food and water hot enough to kill bacteria, and being durable. By researching Paraguay and brick making methods, prototyping different stoves, and analyzing failure modes, an assembly process and a fully functioning stove was created. The resulting stove uses a unique brick shape and layout pattern that allows for common home use in rural Paraguay with the prescribed benefits. This stove will not only help improve the economy, it will also provide a better living for the villagers of La Abundancia.

Toolaris

Shane Palmer, Alan Dutson (Mentor)

Polaris engineers have enlisted the help of a BYU-Idaho capstone team to think of new and innovative methods or tools to use on the assembly line. With the help of the capstone team they hope to have a solution that will eliminate costly tear downs while also increasing ergonomics for the assembler, decrease time spent on this operation, and reduce the chance of breaking piston rings.

Torque Load Simulator for Pneumatic and Electric Motors

Michael Duke, Jacob Skousen, Caleb Gunderson, Matthew Scott, Alan Dutson (Mentor)

A torque load simulator is designed to recreated torque loads on motors for simulation purposes in order to make design decisions based on motor response to various load profiles. This project is a simulation apparatus consigned by Brian Olsen in the Los Alamos National Lab Research and Development department. The purpose of this apparatus is to aid in design where motors are chosen based on their performance under specific situations. The apparatus will produce torque, RPM, and time data to correlate to performance. The type of motors being tested are air and electric motors. This testing device will allow engineers and researchers to fully understand how a motor will respond during random or sudden impulse loads. The torque load simulator design allows for high precision and quick response times of loads allowing for accurate simulation. When a motor is being considered for routine or common purposes, benchmarks are available to the consumer. In innovative or unique applications or in failure mode testing, the data desired is often not available or lacking. This kind of data is uncommon in the motor brochures available from retailers. In order to know which models or types of motors will work best in an application further testing is required. This device will be used in to test criteria otherwise unavailable to the end users. With more detailed data on motor performance the engineers will be able to design to more criteria such as failure modes or harsh operating conditions. With this information more robust systems using motors can be designed which will increase their longevity and utility.
Uganda Fire Log Press

Mark Peterman, Jake Anderson, JonCarlo Cabrera, Brandon Self, Alan Dutson (Mentor)

Ugandan families build open fires in their huts each day for cooking and have been using the trees for fuel. The population has grown such that deforestation is becoming a problem. BYU-Idaho faculty member David Pigott who liaises with the Ugandan Kkobe tribe leader, Ssimbwa Busulwa, charged the Engineering department to find a cheap and portable way to make fire logs locally. The result was re-purposing a caulk gun and PVC pipe that could be purchased at hardware stores in Uganda at low cost and with minor modifications. This hand-held press will reduce the rate of deforestation and may also use recycled paper for the fire log material.
"Steady Rhythms"
Kendra Ashcraft, Mark Bennion (Mentor)

“Steady Rhythms” is a short story about a high school boy named Jake who is a member of the basketball team. The district tournament is coming up, and while the team is preparing, Jake’s parents return from a work trip, bringing back a tension he would rather avoid. “Steady Rhythms” explores the complexity of family relationships as well as how people outside of a family can be completely unaware of what is really going on. It is the story of a teenage boy struggling to learn how to cope with the hardships life presents.

My Roommate from Hades
Christina Leavitt, Matt Babcock (Mentor)

A humorous non-fiction piece about the disagreements two roommates have on living standards with a mythological twist.

One Last Dance with Mary
Nicole Modugno, Gerald Stefl, Eric d’Evegee (Mentor)

This nonfiction essay, from my grandfather’s point of view, is dedicated to him and my grandmother. My grandmother passed away 2 weeks before my wedding, and I wanted to write a poem or some piece of writing based on their love story. In our country, lacking commitment and pregnant with divorce, my grandparent’s inspired me. After interviewing my grandfather, and getting the facts straight, I let my creativity take hold of the story and fill in the white spaces. My plan is to write a collection of nonfiction essays, showing the different kinds of love in one’s life; including pieces based on personal experiences with: my husband, my mother-in-law, my father, and more. I would like to publish these collection of stories one day.

Phoenix Flight
Anna May, Kendall Grant (Mentor)

Phoenix Flight is a cycle of poetry pertaining to Bipolar Disorder, specifically Bipolar II. These poems explore many aspects of the disease: depression, mania, medication, the stigma of mental illness, and the cycling nature of Bipolar Disorder. The poems, written in the last 11 months since my diagnosis, reflect my personal struggles and experience with my condition—with the way other people react, to my own impressions.

Secondhand: A Collection of Poems
Arthur Thomas Lee, Jack Harrell (Mentor)

A collection of poems about life, death, God, memory, words, and love. Oh, and beards, chewing on pens, smoke, and a vasectomy. Reflection: “In the beginning God created. In the beginning was the Word. / And by the word were the heavens made, / and all that in them are. / Then let us make man, God said, in our image, / after our likeness. / So, he spoke, and by his Word, it was done, / every man in the chambers of his imagery.”
The Origin of Happiness/The Planned

Tasha Wardell, Scott Cameron (Mentor)

The Origin of Happiness and The Planned are two short stories written and illustrated by Tasha Wardell, a Humanities major at BYU-Idaho. The first story uses Buddhism’s Four Noble Truths and a greedy fire to explain how earthly possessions do not bring happiness in a small Tibetan town. The second story is about two Finnish brothers who are mislabeled by the townspeople, despite the fact that these labels are contrary to their respective personalities. In the end, the boys play out their given roles and suffer the consequences.

Wild-Variety Children, Pterygota, and Poets

Kīra Jacobsen, Scott Samuelson (Mentor)

This is an eclectic group of poems, though they are underpinned by the motifs nature and voice. The first set highlights children: "Nudity in Georgia" and "Playmates." The former has a southern voice, the latter French. "Nudity in Georgia" is based on something that happened to me when I lived in Georgia as a child. I watched a television program about a tribe who live without clothes, and tried to be like them for a day. "Playmates" is about two eight year old friends, Gigi and Luc, who reenact a certain queen’s beheading in their game of Revolution. The second set highlights pterygota (pronounced terry-go-tah), or flying insects: "Morning Toilette Interrupted" and "Cylinders." They are based on two experiences I had last fall. One morning, a moth flew out of my bathroom drawer. On another occasion, I picked up an unused tampon and a dead dragonfly in the same morning. The voice is my own. The fifth poem, "The Romantics," has an English voice. It was inspired by Brother William Brugger, my Brit Lit professor this semester. A lecture touched on one of Wordsworth’s poems inspired by Tintern Abbey. In his day, the ruins were enthralled by nature. Now they are manicured and maintained by the government. The Romantics would scoff such a thing. In their ideology, nature, trimmed and geometric like the Hampton Court gardens, is inferior to nature wild and uncut. For example, William and Dorothy Wordsworth’s home, Dove Cottage, is teeming with flora. Brother Brugger joked: “So your dad says, ‘Go mow the lawn.’ ‘No, I am the product of British Romanticism. One does not simply, mow a lawn.’"
"Esther, Holden, and the Paralysis of Potential"

William Gibbs, Hawker Elaine (Mentor)

Plath’s The Bell Jar has suffered through its singular categorization as feminist literature. For example, Diane Bonds relegates Esther’s emotions as an “intolerable psychic conflict produced by trying to meet cultural expectations of women” (57), instead of exploring the general effects of mental illness. In this way, the novel is marginalized as a feminist novel—a “rite of passage” for girls. However, The Bell Jar is frequently compared to Salinger’s The Catcher in the Rye, such as Janet McCann’s reference “It is a Salingeresque tale of a young woman” (par. 12), without any actual qualifications for the connection. Despite Catcher’s more overwhelming popularity with readers and critics, The Bell Jar deals with a similar subject with a more productive outcome. This paper qualifies the connection between the novels, viewing them free of gender and societal issues of the 1950s. This allows for a critical reading of the core rhetoric: that options and potential can create a paralyzing affect which, unresolved, can drive its victims into madness. In this light, The Bell Jar deserves greater literary recognition, as its issues should not be confined by sex or historicism.

“One in a Thousand”: The Virginian Keeping Gender Roles Alive

Janessa Brown, Jason Williams (Mentor)

In Owen Wister’s The Virginian, we venture through the wild, Wild West with our manly protagonist, experiencing lynching, abuse, thievery, and murder, with a classic romance to tie it all together. While the plot is clever, humorous, and thoroughly entertaining, The Virginian also comments heavily on the seriousness of gender roles. Paving the way for the Western genre, it establishes standards and ideals for each gender that have been thoroughly scrutinized. Jennifer S. Tuttle argues, “The American Western has long been considered a genre inhospitable to women.” The pressure of such unrelenting female critique is seen as Molly moves west to escape traditional expectations for women. In the end, however, The Virginian seems to conquer his woman and, as Lee Clark Mitchell suggests, silence her feminism. I argue, however, that the Virginian affectionately seeks to protect Molly’s womanhood without intending to dominate. Through his willingness to learn from Molly, to let her make her own judgments and decisions, and to let her go despite his well-established love for her, we see that The Virginian’s affection and protection is not of a domineering nature. Many modern gender-equality arguments have forgotten gender identity and have turned to an egotistic individualism, which degrades both male and female roles. By embracing man’s role to protect as an act of virtue rather than an act of superiority, we can begin to truly accept our differences—as men and women—as equitable.
Father Latour: Phallic or Feminine?: An Examination of Gender Identity in Death Comes for the Archbishop
Leah Ward, Jason Williams (Mentor)

In Willa Cather’s Death Comes for the Archbishop, Cather cleverly addresses the theme of gender identity by using a Catholic priest as the protagonist. In much of literature, one’s gender is defined by those he or she finds attractive and by traits he or she exhibits. However, in Father Latour’s case, the first criterion is rendered useless by his status as a priest. As Jennifer A. Smith points out, “Father Latour’s calling as a Catholic priest, which requires celibacy, erases the category of sexuality as a marker of gendered identity; as a priest, Latour’s sexuality cannot be categorized as hetero- or homosexual.” I submit that one can still be categorized as hetero- or homosexual while remaining celibate, but as Father Latour does not overtly reveal his sexuality, he cannot be placed in either category. Because of this strategic placement, readers must take a close look at Father Latour’s traits to discover his gender identity. As he is introduced as a character, Cather paints Latour as this handsome, rugged, Western mountain man, but at the same time, a refined, sensitive Easterner. Such juxtapositions of stereotypical male and female characteristics continue throughout the novel. Close examination of the text reveals further and further ambiguity, leaving readers to accept a flexible, less defined view of what gender means.

Huck’s inner battle within himself: Morality against social expectations in Twain’s Adventures of Huckleberry Finn
Dain Mun, Jason Williams (Mentor)

Mark Twain’s novel, Adventures of Huckleberry Finn, expresses absurdity of society through a young boy’s innocent eyes. For Huck, who comes to experience social problems in civilized society, it becomes a prominent question to choose between right and wrong. Even though this young boy is somewhat influenced by social values, he finds his morality by traveling through the country to help his black friend, Jim. Goldman argues, “Huck’s guiding emotion is sympathy for his friend, Jim. Sympathy contains the implicit judgment that a person needs help in light of his situation. In Huck’s case, this emotion is entirely fitting, and its implicit judgment reflects awareness of the reasons to help Jim escape from slavery” (4). Goldman’s argument shows that Huck gradually develops his moral values because of emotions that he feels towards Jim. When Huck travels with Jim on the raft, there is a chance to reveal Jim’s existence, but Huck decides not to, even though it is against moral obligations. Another critic, Bollinger says, “Huck never moves into the realm of “abstract” morality. He never asserts a conviction that when two moral principles come into conflict. One will have priority because of the nature of the moral principle. Instead, he acts strictly through his sense of commitment to his friends” (2). He perceives that in this civilized society there is lots of violence and cruelty. Huck is unable to accomplish his goals, but through it all stays true to himself. Through his many trials with Jim, his perspective changes. Huck follows his conviction in silence in order to be free from the society.
So Much Depends Upon Context: “The Red Wheelbarrow” as a Cultural Artifact of American Modernism in the 1920’s

Timothy Hall, Jason Williams (Mentor)

William Carlos Williams’ enigmatic poem “The Red Wheelbarrow” has been called the masterwork of modern American poetry and can be found in most American poetic anthologies. While the sixteen-word poem’s genius seems largely unchallenged in literary circles, opinions vary as to its precise contribution to American poetry. Rizzo claims that the poem’s color scheme offers a unique perspective on American racial issues, while Gates celebrates its uniquely American syllabic rhythm. However, the poem’s most striking characteristic – its unconventional form – has received less attention. While critics such as Neumann and Lint have analyzed and commented on the poem’s singular visual presentation, I build on their observations by exploring how the poem’s form and imagery comment on the modernist movements of its time. Through innovative graphic arrangement and symbolic imagery, Williams uses “The Red Wheelbarrow” to bridge the gap between conventional forms and innovation. In a time when traditional forms of all kinds were being questioned, transformed, and even abandoned, Williams’ masterpiece calls for balance by blending primal, elemental imagery with avant-garde visual forms. The poem’s images, a wheelbarrow, water, and chickens, are all pastoral and agricultural, symbolizing society’s unchanged need for the fundamental elements of existence. The poem’s form, however, breaks new ground by using its words to create and manipulate visual representations of the key image, a wheelbarrow, creating ever-deepening layers of meaning. Without the cultural context of the quickly changing world of the 1920’s, it is impossible to appreciate the sociopolitical and artistic commentary in this classic American poem.

The Anxiety of Influence: Expectation and Responsibility in Shakespeare’s Hamlet

Zachary Johnson, Scott Samuelson (Mentor)

My investigation is based on William Shakespeare’s Hamlet. Within my research paper, I examine the psychological influence of responsibility and expectation between Prince Hamlet, Claudius, and King Hamlet. I give each character a specific role within the play: either “precursor” or “latecomer,” depending on each character’s social and political standing in relation to one another. I theorize that the latecomer must overcome the influence of its precursor in order to attain a position of prominence; this theory can be understood as the anxiety of influence, an idea evolved from Harold Bloom’s writings. My research submits that Prince Hamlet’s indecision is elicited by the anxiety of influence present in his life and is contrasted by Claudius’ own anxiety of influence. Claudius is the latecomer to King Hamlet, who is the precursor. Claudius’ reign is largely unsuccessful because he is unable to fulfill the expectations of King Hamlet; furthermore, Claudius does not responsibly define his obligations as King of Denmark, impulsively usurping King Hamlet’s power and then exploiting the power. Claudius fails, as a ruler and as the latecomer, to slay the influence of his precursor, and falls by the sword of his own poisoning. Prince Hamlet is also a latecomer to King Hamlet. The young prince manages to surpass the responsibility placed on him to avenge his father’s murder, a charge originating from the Ghost of the dead king. This request for vengeance is private vengeance—it does not hold any virtuous implications for the young prince, nor does it support Prince Hamlet’s notion of universal morality. Prince Hamlet stays his hand, upholding a sense of public justice that King Hamlet and Claudius consistently lack. The prince’s pursuit of Claudius’ confession to the murder of King Hamlet becomes Prince Hamlet’s responsibility, and as such, becomes his burden; or, his anxiety of influence. In death, Hamlet succeeds in casting away the influence of his father by giving Prince Fortinbras approval in regards to Fortinbras’ attainment of the throne. Hamlet destroys the decaying legacy of his father and uncle, and ends the generational violence of Denmark.
The Source of our Fears: Horror Fiction as Literature

Noah Patterson, Steven Stewart (Mentor)

For perhaps as long as story telling has existed, there have been stories told with the intent to frighten and horrify its audience. The horror genre seems to have always played an important role in society as either pure spectacle entertainment or as a reflection on our own humanity and fears. But between societal norms, christian movements, and the critical ideas of literary interpretation, there seems to have been a constant tension over whether or not the horror genre can be considered to have literary merit. By looking at the elements of horror, the development of the Gothic genre into today’s modern macabre, the elements of literature, and the moral implications therein we can see if horror truly has merit as a literary genre.
In waiting

Stephen Weatherholtz, Gary Larsen (Mentor)

This dance is intended to show many different things. It is about a friend of mine who’s husband passed away very shortly after they were married. This dance piece is intended to show love in many forms as well as support in trials and heartache and confusion. This project was taken on to show many different things and incorporate many different styles as well. We have ballroom, lyrical hip hop, and modern all summed up into one dance.
"American Oil: Old News?"

Noelle Doman, Shawn Randall (Mentor)

This project is for my Information design class with Brother Randall. I am focusing on the effects of oil on our country and the benefits of North American oil. My project is expounding upon that and using this positive information to promote and inform on the increase in different and debatable better technology when it comes to the consumption of American Oil. I am hoping to let people know the options that are given and the different pros and cons of all those different options. It is important for the community to be informed on the options given and not be bogged down by the different stigmas that we are taught. The exact method and size of this project is still undetermined. The plane is an exhibit that will benefit through the stand out quality that will enable people to notice and stop to read and view the information. I am hoping to have it simple and easy to move with no special equipment. Most likely through poster and some standing visual I will be able to communicate to the audience the benefits of American oil with the benefit of the different technology that is offered to the public. An informed public is a smarter one.

Shadow: The Truth Behind Eating Disorders

Kahli Steenstra Toussaint, Shawn Randall (Mentor)

For this Information Design project we were asked to research a topic for both qualitative and quantitative information then, using graphics, educational tools and scenarios tell a story. My story is about eating disorders. Its estimated around 11 million people in the US suffer from an eating disorder and with that significantly high number of people, a lot of stereotypes have been formed. There are a lot of misconceptions and misinformation about how eating disorders start, why they start and if there’s a bigger issue behind what triggers an eating disorder in someone. I’ve focused a lot of my research on the causes including psychological and biological. My conclusions will be demonstrated through two separate magazines. One will tell the story of anorexia nervosa and the other bulimia nervosa. Each magazine will focus on telling the facts while providing a story for the audience to both relate to and sympathize with. I will focus on factors that contribute to each disorder as well as how it effects their body, their emotions and those closest to them. I am also creating a poster abstract of each persona that is attached to each of the magazines/eating disorders. The posters will focus on the demographics and personality qualities of each of the personas. The poster will be displayed above or next to the associated magazine.
Stalking

Paul Pieper, Shawn Randall (Mentor)

My project is concerned with the crime/behavior known as stalking. I have examined secondary research and am conducting my own primary research to construct an exhibit. Some of the questions which I am endeavoring to answer through the exhibit may touch on the following: What is the nature of stalking? Who are the victims? Who are the stalkers? Are BYU-I college students at risk of being stalked? What are the unique characteristics of it? How can one get help for it? I’ve received information and insights from law enforcement and the family crisis center. I have also gathered feelings and viewpoints from actual victims and will include their quotes in my design to help people understand the answers to these questions. As part of my project I will continue to expand in this direction by making it interactive and allowing the audience to confirm whether they have experienced similarly. For example, they could indicate this by putting a check mark or sticker on the quote which they can relate with. This will generate awareness in individuals regarding the nature of stalking and surprise them to know that many of them have probably been stalked or perhaps even stalked in one degree or another. The subtlety and fuzziness of stalking causes a lot confusion and problems so knowing what to look for is critical in order to avoid/combat it. The latter part of the project will focus on how to get help. The fact that many do not report it or seek help is a huge issue and therefore it is not uncommon for stalking to continue for years or escalate and become increasingly threatening. We will examine the reasons why it goes unreported and untreated so that they can avoid the same misconceptions and have the courage to seek help and know how to do so. I have considered making the exhibit a tight, uncomfortable or circular space so as to reinforce the feelings of victims marked by loneliness, being trapped, having nowhere to turn, a never-ending resolution, etc.

Stay on the Right Track

Kevin Dench, Shawn Randall (Mentor)

The premise of my project is based on train accidents. Through earlier research, I have concluded that modern passenger railways are safer than cars. Therefore my project is called “Stay on the Right Track.” Trains have been around for over 400 years. There have been a lot of casualties due to train accidents. I am looking to find the correlation between number of deaths and new railroad safety laws. This is another goal of the project, to enlighten people about when which laws were created and why. I would also like to find information relating to innovations; what kinds of innovations came from too many railway deaths. Not only do I want to have strong facts presented in my project, but I would like to have a demonstrative part as well. I plan to find the crushing strength of a locomotive and the tinsel strength of your average vehicle, then have analogous items of smaller size (like a pop can and plate weights) to interactively show how little chance a car stands verses a train. In my research I have used photography of trains, and train accidents to cultivate a reaction out of the people being interviewed. I will be including those images with the respondents under it, posing the same question to the viewer. I want the viewer to realize that trains aren’t as scary as people think. I want to cultivate a healthy respect for trains in the people that view my project. This would be my main goal.
Tent Cities

Mikenzi Jones, Shawn Randall (Mentor)

For the past couple weeks I have been studying about the homeless people living in America. My research led me to some startling facts about our homeless. A sad reality that many homeless people face is where to seek shelter. Throughout my research I came across homeless communities living in tunnels under our cities and in living in tent cities. The images and stories shocked me and really propelled my project forward in this direction. The goal in mind is to bring awareness to these Tent Cities. They almost don’t seem like something that belongs in our country, but the truth is that they are all over the nation. For my project I want to create an exhibit that showcases tent cities. I want to have compelling information on display, as well as images and charts. My exhibit will feature a small “Tent City” made up of paper tents that have information displayed on the tent. The tent city is made seen outside either in the middle of a courtyard or up in the gardens hidden a little way into the trees. The courtyard location would be a great way to grab viewers attention. Many people chose to look the other way when it comes to this issue and this would be a great area to make people look. The woods location is great because many tent cities are either found in fields or in the woods so the location would be appropriate. Each tent will showcase information about our countries “Tent Cities”, facts about them, statistics, charts, images and information on how to help.

The Life of Mary Jane: a Look into Medical Marijuana

Julie Friar, Shawn Randall (Mentor)

The main focus of this project is to show the students at Brigham Young University- Idaho, the emotional and physical experiences of medical marijuana patients. By doing this, looking into the lives of those who have experienced medical marijuana for themselves. I want the students to be medically aware of marijuana and positive and negative sides to this drug. Also I want the students to hear first hand experiences of those who have received medical marijuana treatment.

The Reality of Texting and Driving Accidents

Crystal Kent, Shawn Randall (Mentor)

The basis of this project was to create an exhibit displaying statistics and facts that I have gathered about texting and driving. I chose to research the reality of texting and driving because I was curious if the anti-texting and driving laws have reduced the amount of related car accidents. I was surprised to find that they rather than decreasing the number of collisions, the numbers peaked. I further researched the reality of these accidents by conducting surveys around America. I found that a surprisingly high percentage of participants- almost 10%- had known an individual that had indeed died from one of these accidents. My overall approach was to create a moving display that will shock viewers enough to change their frequent texting and driving habits- creating a safer driving environment for all passengers traveling in vehicles. The materials used to create this display are car parts including tires, keys, and a license plate, caution tape, glass, asphalt, a stretcher, dummy, and white sheet, and informational posters.
The Truth about Eating Disorders

Kahli Steenstra Toussaint, Shawn Randall (Mentor)

For this Information Design project we were asked to research a topic for both qualitative and quantitative information then, using graphics, educational tools and scenarios tell a story. My story is about eating disorders. Its estimated around 11 million people in the US suffer from an eating disorder and with that significantly high number of people, a lot of stereotypes have been formed. There are a lot of misconceptions and misinformation about how eating disorders start, why they start and if there’s a bigger issue behind what triggers an eating disorder in someone. I’ve focused a lot of my research on the causes including psychological and biological. My conclusions will be demonstrated through two separate “restaurant” type menus that display my findings. One menu will focus on the various aspects of anorexia nervosa and the other bulimia nervosa. I’m not currently sure exactly how I’m going to display these but I plan on having at least 2 on a table for the public to look through. I’m also hoping to have a few hanging from a string on a wall.

Water vs. Soda

Brent McDowell, Shawn Randall (Mentor)

How does water and soda compare to each other? Which is better and why? Which is worse and why? Obviously we know that water is better for us, but why do we keep drinking soda? (Call to action) Will you stop drinking soda for 30 days with me? These are the basic questions in which I will be researching and then answering and displaying visually. I plan to develop a branding for the water on campus (primarily in and around the CrossRoads), with it’s primary persuasions being health oriented. Surveys, studies, analyses and observations will and are being conducted by me to better persuade people to water over soda. A small focus of my study will be toward the types of people that drink soda and water. This will better help me exploit “triggers” for people. I myself have been keeping a journal of myself in not drinking any type of soda for 30 days. These studies will help me identify my triggers and how I came over them. If successful, I hope to see a significant change in the consumption of soda with the CrossRoads.

Why we see what we see at the movies.

Bryant Hodson, Shawn Randall (Mentor)

Why are there so many superhero movies being made right now? When is the last time you had an incredible movie theater experience? Will movie theaters still be around ten years from now? These questions (and more), along with their data-supported answers will be on display in my information design submission. The presentation will be a visual display of my research and conclusions on the topic of what motivates people to pay to see certain films at the movie theaters. My data comes from a variety of researching techniques consisting of both primary and secondary sources. I am digging deep in order to understand the trends of the kinds of movies that are released in theaters. The results of my studies, observations, and surveys will be presented in the form of a physical exhibit that will include large-printed versions of my graphs, charts, and organized findings.
Your College Investment

Tyler Lemmon, Shawn Randall (Mentor)

A college education is an important investment for many people. College is a requirement for many career paths and often gives graduates opportunities they would not have otherwise. Many believe attaining a college education to be a necessity for life, however reaching this goal can be expensive. Paying for college is difficult or impossible for many students without the help of financial aid of some kind. There are many different options students can choose when financing their education. The decisions students make when financing their educations have significant consequences for better or worse long after college ends. Having a knowledge of the choices one is making during these decisions is crucial. The future quality of life and financial situation of graduates can be influenced greatly by the decisions they make when paying for school. Ironically many of these decisions take place before students have attended the place where they intend to educate themselves. For many the financial choices made during college are ones they greatly regret later on in life. Many make commitments and enter agreements they do not understand. A little planning and preparation early can save a student thousands of dollars and greatly free them financially for whatever awaits them after college ends. Financing an education is a balancing act. It is like crossing a tightrope. On the other side of the rope lies great rewards and opportunities. However if you take a bad step working your way across the rope you many never recover from the drop. The purpose of this project is to help students educate themselves in order to make informed decisions when investing in a college education.
Abortion Distortion: Learning the truth about the numbers behind abortion

Kimberly Turnbow, Shawn Randall (Mentor)

Everybody has their own stance on abortion, but how educated is that stance? When interviewed, it was found that most of the general public believes the numbers of abortion are a lot lower than they actually are. Many believe that teenagers have the most abortions and only 1 out of 10 American women will have an abortion by age 45, but the truth is startlingly different. Numbers collected by the Centers for Disease Control and Prevention show that women in their mid twenties have the most abortions and 1 out of 3 American women will have an abortion by age 45. Those and many other startling facts disprove the misconceptions that the general public holds. The research and findings for this exhibit will be analyzed and compared side by side, showing what people believe about abortion and the actual facts on it. An interactive side will also be created to help the general public understand and be better informed about the truth associated with the abortion methods. Overall, this exhibit seeks to address and correct the distorted views of abortion held by society today.

Anorexia nervosa in the U.S with ages between 10 to 25

Jaqueline Forman, Shawn Randall (Mentor)

This project is about eating disorder Anorexia Nervosa and the effect it has in the society in today’s world. I will be displaying information about Anorexia Nervosa specifically in the U.S and about how this is a problem in young girls between the ages of 10 to 25. I will be showing information gathered from online resources, books from library, survey, observation and questionnaire done by me. This project will contains charts pictures and brochures with information regarding this issue. The purpose of this project is to inform the audience about this problem and make them aware of what issues are going on in our society today.

Bull Riding Safety in Rodeos

Shannon MacTaggart, Shawn Randall (Mentor)

This piece is an information design research project. The information displayed is from a 25 year bull riding case study performed by the University of Calgary. The purpose of the information is to inform the general public about bull riding and just how dangerous it is. It is also informing what is being done to take the necessary precautions when involved with the sport. The case study gives valuable information, solidifying the danger that is involved with the sport, compared to other sports in rodeo. The research conducted by the student gives a brief history and introduction, as well as steps to properly ride a bull, informing someone who also may want to try bull riding or create a career from the sport.
Deception
Emily Vincent, Shawn Randall (Mentor)

The average person tells three lies per ten minutes of conversation. With the amount of conversations and words exchanged between people a day this makes the rate of lying extremely high. What is being lied about, and how can we tell. This is what my project will be about. I have conducted research on campus about which lies students tell most often, and which lies they consider to be acceptable and unacceptable. My project will consist of three posters. The first will be the results of my research and studies. This poster will have statistics on lying, and more specifically lying that occurs on campus. The second will explain micro-expressions, the facial expressions that result when we are trying to conceal our real feelings. The third will be a quiz so students can test themselves on recognizing micro-expressions. Lying is unfortunately a natural part of our make up. I hope that this project will help people realize how much they lie and how to keep themselves from being fooled by others.

Diversion: Cultivating Divergent Innovators
Rebecca Nielson, Shawn Randall (Mentor)

We live in a fast paced and ever changing world, saturated with information. In order to keep up we need creative innovators, willing to grow, learn and stay current with the changing world. Employers want problem solvers who can generate new ideas and solutions. They need divergent thinkers. In a study done by George Land 98% of the 1600 kindergarteners he tested scored in the genius level in divergent thinking. This dropped to 30% when the same children reached the age of 10. (Breakpoint and Beyond: Mastering the Future Today) In a survey I conducted on the BYU–Idaho campus, I found that most people attend school to help them get jobs. It seems, however, that schooling is not necessarily encouraging some valuable skills that employers are looking for. Often a student’s focus in their education is mostly spent on learning the right answers and getting good grades. This means they are scared to make mistakes and less willing to explore things that might fail. This does not help students become the innovators that our world needs. Taking this information into consideration, I decided to create a game to encourage people to become aware of the value of divergent thinking. Facts and research are presented throughout the game. This game also presents the opportunity and means to practice divergent thinking to help students become a more valuable employee.

Effects of Adoption
Hannah Bischoff, Shawn Randall (Mentor)

I am currently enrolled in the Information Design class on campus. We are working on a qualitative information project. For my project, I am focusing on the effects of adoption on adults, children, adoptees and adopters. I want my audience to be more aware of what really happens so that they can be more respectful and mindful of those who have been adopted and the effects it has on them. It is not as easy as most think. I have been gathering information from online sources and also from personal interviews with people in my life who have either adopted children or who have been adopted. For my end product I am planning on constructing a small scale “orphanage” about ten feet tall and six feet wide, made of cardboard with a wooden frame, with an opening so people can go inside. The interviews and information from the mouths of those affected will either be on the sides and inside the cardboard structure, or on a large-scale poster next to the structure.
Food Safety/Illness

Robert Barber, Shawn Randall (Mentor)

This project is an information design piece about food safety and food illness. The purpose of this project is to inform people about these topics through some sort of exhibit. I have chosen to create a website to help inform people. I also plan on having a poster or object to go along with the website to help invite people to walk up to the computer where the website is going to be displayed. Research for this project includes different methods. Secondary research was conducted to find quantitative data which will be included in the website. Other research methods were used and will continue to be used to find qualitative data that will help drive the final information and visual style of the website and overall exhibit. A questionnaire, survey, flow analysis, interviews, and error analysis have been used to help research so far.

How Chimpanzee are You?

Kelli Goldsberry, Shawn Randall (Mentor)

For my Information Design Exhibit piece I am researching how chimpanzees and humans are similar. I am going to look into attributes such as behavior, mannerisms, skeletal structure, and their day to day life. I am going to compare how similar they are to humans. For my actual project I want to make a circle that looks like a pie with a slice cut out of it. When you rotate the circle, it will reveal a new fact about the topic. I would like to set this up in the Clarke by the entrance where there are seats and stairs that go up and down. I don’t need anything special to set it up, just a wall and space that is the size of a person.

I - FAT

Gretchen Gehlbach, Shawn Randall (Mentor)

For my project, I have chosen to dive into fast food options here in Rexburg. I am fascinated by what I am and will continue to discover through research and observation. I am curious to know about correlation between fast food consumption and rapid weight gain of BYU-I students. My plan includes surveying a wide variety of students on campus, picking apart nutrition facts for these well-known restaurants, and showing the actual amounts of unhealthy matter that they are putting into their bodies. The reason that I have decided to research, design and present this topic is because I feel that students on campus need to be more aware of what they are putting into their bodies. My goal is that after my audience looks through my exhibit that they will eat more responsibly and have better health.
In Your Head: The Use of Cognitive Behavioral Therapy in the Treatment of Major Depression and Anxiety

Lucas Galo, Shawn Randall (Mentor)

My project is a desktop app meant to introduce students to a form of treatment to major depression and anxiety called Cognitive Behavioral Therapy (CBT). CBT is a wildly used form of treatment that helps patients identify and correct fallacies in thinking and behavior that may be triggering depression/anxiety. The app will include:

- Brief explanation of what depression and anxiety are and how much BYU-Idaho students are affected.
- A comparison of the efficacy of CBT against antidepressant medication.
- An overview of "self-defeating beliefs" (thinking patterns that trigger depression/anxiety)
- An explanation of the most used techniques/exercises used in CBT to help patients change their thinking/behavioral patterns.

The app will be displayed in a Mac computer, allowing the public to interact with it. A physical piece (yet to be determined) may also be included as well as a little poster to be displayed above the computer.

Organized Crime

Taylor Davenport, Shawn Randall (Mentor)

Since the early 2000's housing prices rose at a dramatically fast pace. Investors and homeowners both dove into the housing market only to find themselves trapped in an economic crisis a few years later. The explosion and instability of the housing market climaxed in 2008, when several of the world's largest banks collapsed along with the housing market. Our economic policies today are largely directed by the fallout of this collapse. Much of the housing bubble was caused by greed on part of both homeowners and investors. Homeowners, excited about the opportunity to live in bigger and better houses jumped into mortgages they couldn't afford. Investors, seeking larger profits, entered into dangerous credit lending practices which led to their downfall. While the bursting of the housing bubble has affected just about everyone in the United States, many students at BYU-Idaho are both unaware of it and are somewhat apathetic towards it. They do not see how the housing market and banking industry have any bearing on their lives today. I will provide an explanation of the contributing factors behind the growth of the housing bubble, how it continues to effect us today, and why students should care about it.

Perceptions vs. Reality concerning a college degree

Bryce Rogers, Shawn Randall (Mentor)

Presented herein are the findings of one misinformed youngster on the path to a brilliant and prosperous career. Cognizant of his knowledge gap concerning college he prepared a tool to educate and inform his peers of his findings, namely, that college and what comes after college are quite different from what a person may expect. His hope is that by doing so students may make better life decisions and make choices that will unlock their potential as human beings and creative individuals. His fear is that if poorly presented, students may find themselves one day locked in a cubicle counting the bubbles that come from the water cooler in the corner while trying to fend off mental vegetation.
**Play by the Rules: Intercultural Communication**

Ruby Parra, Ruby Parra, Scott Franson (Mentor)

*This is a graphic design project that is very research based. The project itself is about intercultural communication. My goals are to help people learn about communication with other cultures and help people realize that clashes in communication with others can come from not knowing that not everyone in the world communicates the same way you do. The project will consist of a display 12ft long plus a game that will be on a table, plus a floor piece where people could interact.*

**The most informational Kissing Booth yet.**

Brad Sant, Shawn Randall (Mentor)

*I will be exhibiting quantitative data of the scientific effects of kissing coupled with the general public’s view of kissing (qualitative data) via written and verbal surveys asking questions such as, “How many times have you kissed in the past week, month, year?” and “How long ago was the last time you kissed someone?” This data will be exhibited via a “Kissing Booth”. It will be made from a refrigerator box. On the front face of the booth, a square will be cut for a monitor that will be looping a 60-second edited video of BYU-Idaho students being surveyed on their thoughts toward kissing. The outer walls of the booth will have infographic-style statistics displayed via charts & graphs to encourage looking at the booth and not just the video looping in the cut-out of the booth. The overall effect of this exhibit is to inform students of what is actually happening physiologically during a kiss and to make it relatable by including the opinions of other BYU-Idaho students on the same topic that they are currently reading statistics about.*
Sky Herder - Collaborative Project: Musical and Visual Arts

Alicia Hansen, Darrell Brown (Mentor)

As a music composition major, I am always looking for and excited about writing a new piece of music or undertaking a new project. An opportunity to do just that arose last Fall when a discussion with my roommate, visual artist Anna Earley, led to the inception of a collaborative project. For her senior project as part of the Bachelor of Fine Arts program, Anna has developed concept art for a feature-length animated film. This includes story and character design, world design, etc. Since my career goal is film scoring, her film-associated project was very exciting to me. A casual conversation about the project led to just as casual a suggestion that I write music for the project, as if I were writing a score. Essentially, I was creating a soundscape to accompany the images for a potential cinematic setting. What was at first just an off-the-pale suggestion turned into a real excitement and determination to undertake this collaboration. The art is influenced by Latin American, specifically Peruvian, and Meso-American cultures, while also maintaining the individuality and imagination that is characteristic of Anna’s art. Because the art had loose ties to an already existing cultural atmosphere, I felt reflecting that in the music was only appropriate. The challenge was creating a sound that would suggest a culture while also remaining individual and original. I studied and used traditional Latin-American instruments as well as traditional Western instruments to create a sound that could imply that influence while departing from an existing cultural sound. The pieces written for this project are not geared toward actual storyboarding or animation. They are musical themes that could potentially become musical cues (elements of a film score). Three pieces were completed and recorded with musicians from the BYU-I Music Department. This project was an excellent platform for gaining a concept of the process of filmmaking, albeit on a smaller scale. I learned how to work with another artist, capture even just a small portion of their artistic vision, and employ a creative give and take to achieve a final product. That was exactly the result.
### Fashion Notes

Julie Friar, Scott Franson (Mentor)

Fashion notes: a quick easy fashionable way to talk to friends. This package contains of notes, cards, paperclips, stickers, pens and a stamp. The kit is designed for fun fashionable activities. These days children are using electronics to write to their friends and family but they are losing the art of writing. This kit is here to fix that. Fashion notes gives you the opportunity to help you become an expert writer.

### Mountain Man Shaving Kit

Mikenzi Jones, Scott Franson (Mentor)

I am creating packaging for men’s grooming essentials. The theme is a mountain man, outdoorsy feel. The kit includes the essentials for the mainly man. This semester we have been learning about packaging. This will be my final product package along with a tree stump point of purchase and mountain man trade show exhibit.

### PLANET O

Bryant Hodson, Scott Franson (Mentor)

Where is the line that separates package and product? Can the packaging have equal value to the product contained within it? PLANET O is a packaging design concept for a fictional brand of designer toys. My purpose in creating these packages was to experiment with materials and form in order to create a product and package that have equal value. I wanted to create a package that the owner would want to keep and protect just as long as the product itself. I also hoped to demonstrate how the packaging of a product can enhance presentation and consumer experience. I formulated a unified story that should be apparent to each person that interacts with the packaging. Much like the pages of a book, the story provides a common identity of the different elements included and should be equally valuable as a whole. A prototype of the packaging, a point of purchase display, a model of a miniature exhibit, and the toys themselves will be on display. A space of approximately 3’x3’x3’ will be needed for the exhibit.

### Precision Soaps

Brent McDowell, Scott Franson (Mentor)

I am a student in Brother Scott Fransons 3D design class. For our project we are to create a brand and three of it’s different but related products. The name of my fictional brand is “Precision Soaps”. My brand has 3 cubes of soap for men. One cube of soap is hair conditioner, another shampoo, and the third is body wash. Yes, shampoo in hard soap form. I will be creating a scaled down version (one inch equals one foot) of a booth for a exhibition. In the class we are to focus primarily on the design of the packaging. Although my product might be cubed, the packaging however, will change the way in which we see boxes. There is use of magnets and some metal which help add to the wonderful surprise of my boxes. Thank you.
Performing and Visual Arts
Package Design I, Poster Presentations
MC Grand Ballroom, 03:00 PM to 05:00 PM

Product Packaging, Point of Purchase Display, and Trade Booth Design for Critter Cube
Alison Ekersell, Scott Franson (Mentor)

Critter Cubes will keep little minds creative. With hundreds of possibilities, spend hours building new and fun critters. Poised Animals in patterned clothing will bring smiles to your little ones. Critter Cubes are made of pine and are non-toxic, perfect for little hands and big minds. This three part project was created for the Art 435 Course, Three Dimensional Design. After deciding on a product, multiple package designs were built and tested until there was one that fit the need of the product. The brand identity was designed for Critter Cube; it needed to fun and kid friendly, with bright graphics and whimsical illustrations. The Point of Purchase Display is intended for tabletop or counter use in retail stores or small shops, while the Trade Show Booth Design shows how the packaging and brand could be used on a larger scale to promote the company. This project shows the process of creativity from start to finish when creating a new product. For illustration credit contact author.

Red Bluff Gaming Accessories
Mark Grow, Scott Franson (Mentor)

I did a package design for a fictional gaming company called Red Bluff. I made the packaging, point of purchase and exhibit displays for Red Bluff and I also did the graphics and typography. I am going to be using this project to showcase some of the skills that I have developed in my 3-D Graphic Design. Some of these skills include making a dieline (template), printing cutting and assembling packaging as well as honing my skills in computer graphics and typography. There is also a large emphasis with this project on the concepting and visualization behind the project.

Root Haus | indoor herb gardens
Hannah Bischoff, Scott Franson (Mentor)

I am currently enrolled in the 3 Dimensional class on campus. For the class we are designing product packaging for a product of our choice. We have designed a style for our brand, product packaging, and a point of purchase display as well as a trade show booth. My company is called Root Haus. It is a company focused on growing something organic in an urban environment. They sell various sizes of either hanging or standing glass terrariums for gardening indoors. My product is an indoor window herb garden. The package I have designed contains a small glass terrarium, a small bag of rocks and soil as well as various herb seeds. Each package contains a different kind of herb, so the consumer can buy several, and hang each different kind of herb from each other in the window. For the Creative works conference, I plan to display a package with the product inside, my point of purchase display, and a very small scale model of my trade show booth. The point is to display my design skills in package design.
Seed Cubes Packaging

Justina Townsley, Scott Franson (Mentor)

This semester we have been working on package design in my Art 435 class. We spent all semester coming up with packaging solutions for different objects of our choosing. I chose to package seeds. The package that I will be showing at the conference is a new and innovative way to grow seeds. Dehydrated seeds and peat moss are compressed into a cube and when the cube is watered the dirt will expand and become soft. The packaging is made to function as a pot for the seed cube. As the dirt expands so will the box it comes in. All of the material used for the Seed Cube packaging is 100% biodegradable so that once the plant becomes too big for the paper pot the whole thing can be transferred to a garden spot outside. Each package has comes with 4 different types of seeds to start a garden. Also for this class we made a Point of Purchase display and a Trade Show booth to show how the package will be displayed at a store and also at a trade show. I will be showing these 3 things at the Research and Creative Works Conference.

Soul Sunglasses

Tyler Lemmon, Scott Franson (Mentor)

For this project I was given the challenge of designing a package for a common product using paperboard and other materials. In addition to the product's packaging I was required to design a point of purchase system, and a trade-show exhibit. For the subject of this project I chose sunglasses. Sunglasses carry with them strong lifestyle associations. Often sunglasses become the lens through which we see the most memorable moments of our lives. I chose to brand the sunglasses with the name "SOUL." I felt that this word brought with it associations and emotions that were very appropriate for branding sunglasses. With this project I aspired to build a brand supported by a visual system that includes each of the items.

Swimstream: Better, Faster, Stronger Swimwear

Bryce Rogers, Scott Franson (Mentor)

Swimstream is the brand born to compete with Nike, Adidas, and Tyr for swimwear dominance. Enhanced with special technology and born from the love of those who love to swim, Swimstream is the next step in swimwear evolution. The display will be a presentation of the product, packaging, a trade show mock up, & facts about Swimstream’s new enhancement technologies.

Tiny Terrains

Rachel Rudd, Scott Franson (Mentor)

Tiny Terrains is the brand I’ve created for a mini terrarium kit. The main objective for the brand is appeal to the crafty, creative, and visual women of today. The branding will be displayed in the form or packaging, a point of purchase display, and model of a 12’ X 12’ trade show booth. The brand will also help inform and spark the interest interest of the viewer of what a terrarium is.
Performing and Visual Arts  
Package Design I, Poster Presentations  
MC Grand Ballroom, 03:00 PM to 05:00 PM

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<tr>
<th>Vella Victoria: Nostalgic Soy Candles</th>
<th>Crystal Kent, Scott Franson (Mentor)</th>
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<td>The basis of this project was to create a series of packages based on the geographical location of Victoria, Canada. I chose to package candles to allude to the nostalgic quality of the old English town. The materials used to create this piece include chip board, candle wax, a wax seal, tissue paper, ink, plywood, wood stain, and a laser cutter. My overall approach was to create a series of packages hinting at the aesthetic of the arts and crafts era. Upon completion of the assignment I found the piece aesthetically pleasing because of the way the patterns, colors, form, miniature model, and point of purchase work together to create the experience of Victoria, Canada.</td>
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<td>This special edition packaging is for a CD called Weightless. It contains five songs of my own. I wanted to create something more than a simple casing for the CD. The title &quot;Weightless,&quot; comes from a track on the album about letting go of the things that hold you back. Within the lyrics of the album it talks about journeying to the moon and becoming weightless. I wanted to create visuals that matched what the album talks about so I decided to create a space themed design. The goals for this project were to create a package that encompassed three items, and to make the package have a special feature. I came up with the idea to make the package not just be titled &quot;Weightless&quot; but also become weightless by having it double as a kite. Within the package there is the CD, a kite tail, and kite string. To use it you simply unfold the package, connect the stings, connect the tail tail, and you're free to fly! My personal goal when designing the packaging was to communicate visually what the CD sounds like. The music on the CD has a lot of hip hop influence mixed with indie, acoustic, and pop. I wanted the packaging to feel like that, very fresh, modern and geometric but also have an organic influence. With this package I hoped to not only design a kite to be weightless, but to make the user feel as if their troubles have flown away with the carefree twists of the kite. Accompanied with the lyrics and melodies on the album it is sure to make even the darkest day a little bit brighter so you too can feel weightless.</td>
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"Adorn", a branded conference booth which promotes its point-of-purchase display for earrings marketed to women in their mid-20s.

Mary Bradbury, Scott Franson (Mentor)

The earrings displayed here come with packaging designed specifically to be reusable as an interlocking wall piece for storing and displaying a woman's earrings. This provides easy access to the earrings, with the ability to view the variety available to them with ease, as well as appreciate them as an added decoration to their bedroom or wherever they choose to hang the connected pieces.

Bootblack Shoe Shine Package Design

Justin Reyes, Scott Franson (Mentor)

I have researched product design, specifically in the shoe shine niche, to be able to design a package that would be successful on a shelf. As I researched retail norms, production limitations, and consumer patterns, I came to a firm conclusion in the form of a brand and a package. The project embodies three phases of research and executions: The package design, the point of purchase design, and the trade show booth design.

Botanique - Flower bulb packaging concept

Lucas Galo, Scott Franson (Mentor)

This is a packaging project for a brand of premium flower bulbs called Botanique. The package is an anniversary edition "lilies collection." It consists of a rectangular paper box containing three individual bulb-shaped paper boxes, each with a bulb inside. A few of the boxes will be displayed in a basket with a wooden base and a wooden panel behind it. I will also be displaying either a miniature mock-up of a trade show booth or a few panels showing drawings with different angles of the booth.

Chloe Shampoo

Emily Vincent, Scott Franson (Mentor)

People buy products all the time without knowing why. Why is one brand of milk any different than another? It is all about the way that the product is packaged. A package can appeal to a certain audience. It can target a specific type of person. For my 3d packaging class I have packaged and branded a french luxury shampoo. I have created a point of purchase display as well as renderings of what it would look like if it was to be shown in a trade show exhibit specializing in this type of industry. I look forward to presenting and teaching others about how we judge books by their covers everyday and seeing if someone would buy this product simply by its design.

Comfort Cubes- Package Design

Rachel Burtenshaw, Scott Franson (Mentor)

Comfort Cubes is a company I thought of for my three dimensional graphic design class. They sell pacifiers, pacifier sanitizing wipes, and pacifier clips. I designed the box structure and the graphics for the box as well as the point of purchase display and the trade show booth. The box structure was designed so that the parents could keep the boxes and let their kids use them as stacking blocks. The boxes have a unique design so that they can stack like normal blocks as well as stacking on their corners.
Performing and Visual Arts
Package Design II, Poster Presentations
MC Grand Ballroom, 03:00 PM to 05:00 PM

Cray Play, art kit product
Trina Parkin, Scott Franson (Mentor)

I am a graphic design major with advertising as a minor. This semester I am enrolled in a 3d graphic design class. As part of our final project our class is submitting our 3d product display in the Creative Works Conference. My product is called “Cray Play”. It is an art kit containing crayons, colored pencils and stencils. It will be targeted to children aged 4-11. The kit is about 6x3x4 inches. At the Creative Works Conference I will be displaying the point of purchase display and a model of the tradeshow booth displaying the product. The model will be 2x2x1 ft and the point of purchase will be 2x3x3 ft. I will need a table to display my product that is about 5 ft wide, enough space to fit my display.

CUT & RUN (Bandage Repackage)
Marijke Hulbert, Scott Franson (Mentor)

Cut & Run© has you covered with all your basic organizational bandage needs! Finding what you need when you need it has never been easier. This simple box organizes each bandage by size into separate compartments from large to medium to small. The pull-and-tear method is engineered to fit in a handheld box that provides the uniquely safe and hassle free bandage retrieval system, giving you one more reason to Cut & Run©

Cutthroat Racquetball Gear
Noelle Doman, Scott Franson (Mentor)

This is an original brand and concept. For my 3 Dimensional class we were assigned to create a brand for a package and create a structure that could be sold in stores. There is the original package along with a point of purchase and a small mock up of a trade show booth. This brand is one that is supposed to compete with big brands such as Nike and Adidas. It is a strong brand that is something that would stick out and catch attention of those that are going through any different sports good store. The package contains racquetball accessories which include; racquetballs, sweatband and a glove. The audience for this product is addressed through the style and visual language that is used. This product is different and unique due to its form and also the durability of the box. The packaging is designed to withstand the quick life of an athlete. This package is one that can be thrown into a gym bag and forgotten about until the actual game. Through the package, point of purchase and trade show booth I hope to show the benefits of a complete system that can work together and be pleasing to not only the consumer but the buyer as well.

Designing Skirts for Bellissima
Trenton Evans, Kari Hardi (Mentor)

Our I.B.C. company this semester deiced to sell maxi skirts as a business. After projecting our start-up costs, loan amount, and training everyone how to sew, the only thing left was to design the skirts. Using the ASTM International standards for an adult female body, I designed a maxi skirt that would be fashionable for those wearing it, yet easy enough for people who have never sewn before to produce them. Using this same standards and techniques, I was able to design custom skirts allowing our company to fit any body type. Maxi skirts are slightly fitted to body and extend down bellow the ankle. Maxi length skirts have been around for hundreds of years but have been made popular once again by designers like Calvin Klein and Gucci and can be found in many other clothing retailers. The ones we created for our company are made out of knit fabric and come in a wide verity of colors.
Dirty Lickings: The Surf Wax Company  
Kahli Steenstra Toussaint, Scott Franson (Mentor)

*For this 3 Dimensional Design project we started by creating a company and package design of a product that interested us. We were then to create a point of purchase display where we would display the product package on in order to sell it at a store that would typically sell our item. The final step of this project was to create a trade show exhibit that we would take to a specialty trade show. For the purposes of this project we scaled our presentation down from a 12x12 foot area to a 1x1 foot model to present. My company is Dirty Lickings and we are a specialty surf wax company. We sell cold, cool and warm water wax. The foundation of the company is simplicity and our aesthetic is 1960’s beach bum. Our target audience is the dedicated surfer ranging in ages from 17 to 25. The California surfer that is willing to hit the waves as soon as the sun rises, skip their morning classes and always seem have a constant pool of sand in their vicinity. My entire company attempts to sell directly to that demographic through my packaging, point of purchase display and trade show exhibit model.*

Father & Son Fishing Kit  
Paul Pieper, Scott Franson (Mentor)

*I will present a father & son fishing kit that I developed for my 3-D/Packaging class. The package is one that features two sections side by side, one belonging of course to dad’s tackle and one to son’s. This reinforces the concept of the activity and that fishing together will strengthen the bond and keep them close. When the package is closed, the father and son are viewed separately but when opened the pictures come together and show them fishing side by side. The front panel has a photo of a large and small bobber in the water, subtly hinting at the overall idea. The inside panel contains a short poem. Overall, it is intended to be sentimental and emotionally charged, emphasizing the relationship of the father and son perhaps over the products and actual act of fishing. The package is rectangular (8 in. x 4 in.). I will be displaying the package within a point of purchase which will be...*  

Fit Survival Kit  
Paden Henson, Scott Franson (Mentor)

*Fit Survival Kit provides you with the tools you need to stay alive, all that you need is your wits. The kit contains a knife, fire starter, and paracord with hooks. All this is put into a unique box to organize and contain the items for any situation. This will be the perfect box to throw in a pack on a camping trip, or simply put in your pocket as you set out with only the essentials. Fit Survival Kit is a must for any outdoor enthusiast, but is also extremely viable for any number of other situations as well. If you want to be a part of this great product line, make sure you come by and learn more.*

Glass of ’13  
Ruby Parra, Scott Franson (Mentor)

*Trade show and point of purchase display for a glassware company. Life size mock ups of products inside the packaging and a trade show scale model of 1ft by 1ft.*
Odd Return
Mikenzi Jones, Scott Franson (Mentor)

I had the opportunity to create a clothing brand for my BFA in graphic design. I have gone out and found thrift store and antique store clothing and created a brand and clothing line from it. I have been learning for the past two semester about businesses, clothing companies and branding. I focused on trends, branding, product design, editorial design and advertisement. I really wanted to have a unique clothing business that made the customer feel special and unique. For my display I am showcasing my branding through a storefront window display. In the display I have examples of my branding through posters, photography, magazine spreads, logo, packaging, branding guidelines, stationery and art work. I also will have the clothing displayed in a unique way that stays within my branding that I have created. The display will be located in the front double doors of the Spori art building. I have learned so much about branding, and the difficulties and excitement that comes with it. I am excited to show you what I have learned and how I have applied it to my display.

Splash from the Past
Whitney Detweiler, Kari Hardy (Mentor)

In the Department of Home and Family’s Line Collection class I have designed and created a line of vintage inspired modest swimwear. Each piece is unique and one of a kind. There are six different swimming suits, each capturing the vision of vintage. They were created to modestly fit unique bodies, because comfortable, modest swimwear can be so difficult to find. These swimming suits were featured in a fashion show in Chicago, and will also be in the fashion show on campus at the end of this semester.
Beyond Flatland: The Shape and Geometry of Space

Crystal Lawrence, Benjamin Woodruff (Mentor)

It is easy for us to explore and comprehend a two dimensional space like Flatland. Taking what we can discover and imagine there, moving up to third dimension and higher brings unique and complex struggles. What does space look like when it is curved? How do you play tic-tac-toe on a donut-shaped torus space? What happens to the angles of a triangle if we are not in a “flat” Euclidean space? How can you tell? These questions lead to studies on manifolds, conjectures about the nature of our universe, and what we might find depending on the shape and geometry of space.

Invariant Visual Similarity and Separation Preserving Mapping (iVSSPM)

Alexander Douglass, Kirk Ashdown, Larry Chilton (Mentor)

In the past 15 years, video surveillance cameras have become very capable and inexpensive. As a result, terabytes of video data are collected daily (even at BYU Idaho) but using all this video effectively is humanly impossible. This study focused on indexing video to make it possible to quickly and accurately find objects and events of interest in the video (think Google for video). Two technologies were explored to this end: singular value decomposition and compressing sensing. Our goal is to computationally cluster image segments into groups that contain visually similar image segments in such a way that the clusters are visually distinct.
All Purpose Tactical - Options when you need them most.

Colter Angell, Keith Grover (Mentor)

With the rise of criminal organizations in the world police departments have created teams of highly trained individuals known as Special Teams and Tactics also known as S.W.A.T. These professionals run extreme risks of body and life to apprehend fugitives. Their goal is to safely do this while minimizing any chance of collateral damage. To help them achieve success, I have come up with innovative tools for the tactical community. The first is the A.P.B also known as the All Purpose Breacher. This unique tool enables law enforcement to enter buildings that before were not easily accessible. The A.P.B allows police to enter objects from as hard as brick walls to small interior doors. The Rexburg Police Department has been testing this for over six months and is now using it as their main entry device. The second tool is a window breaker. This device allows S.W.A.T. to tactically break a window without exposing one’s self to the dangers inside. It allows for a flash bang grenade to be attached for safe detonation of device. The unique feature of this device is that it has a telescoping feature that is the only one on the market. For the first time, police can safely change the length of this pole to hit up to a second story window if needs be. These tools give law enforcement options when they are needed most. They have undergone extensive engineering and testing. The designers were able to work with a S.W.A.T. team during many training exercises and were able to see firsthand the success of these tools. We were also able to act as a fugitive and safely witness officers create doorways through once walls to apprehend the “criminals”. These tools bring contentious standoffs to a safe end.

Characterization of the Electric Field During Simultaneous Chromatography and Electrophoresis

Kishor Prasain, Brae Petersen, Kei Furukawa, David Collins (Mentor)

Simultaneous chromatography and electrophoresis is a novel and developing two-dimensional separation technique that has been demonstrated to improve the separation of vitamins, dyes, and amino acids in comparison to the use of TLC alone. Because the electric field concurrently promotes an electrophoretic separation orthogonal to the chromatographic separation, compounds are separated both electrophoretically and chromatographically in reduced analysis times in comparison to two-dimensional separation techniques performed in series. However, previous work has suggested the presence of a non-uniform electric field when using the current instrumental design. In this work, apparatus modifications were made in an attempt to characterize the electric field across the plate as a function of position and time. Changes to the apparatus design, plate design, and solution concentration were tested to identify conditions yielding a more uniform electric field.
Computational Positron Annihilation Spectroscopy

Josh Heiner, Evan Hansen (Mentor)

The purpose of this research is to learn and understand more about computational positron spectroscopy. Computational positron spectroscopy involves modeling elements or compounds accurately and comparing those models with actual data. This is done by becoming proficient at space groups and solid state physics, analyzing data, and convoluting data outputs. My research uses the MIKA/Doppler program, which calculates the Density Functional Theory (DFT) to help model and understand what is happening in a given unit cell. I will be discussing the challenges that are faced before using the MIKA program. These include converting between coordinate systems, understanding space groups, and symmetries in solid state physics. An understanding of convolution theory is needed to manipulate the MIKA output before it is ready to be analyzed. This modeling helps in understanding defects, impurities, and solubilities in elements and compounds.

Exercise of heat-treating an age-hardened aluminum

Brad Plummer, David Johnson (Mentor)

It is common for aluminum motorcycle wheels to be post-market powder-coated, but it involves elevated temperatures. This may cause the material to suffer degradation of mechanical properties. Powder-coating process may alter the ultimate tensile strength, and yield strength. To investigate this, material properties of an original heat-treated specimen, and a post powder-coated specimen were investigated by experimental, analytical, and numerical methods. It was found that heat-treating through the powder-coating process reduced strengths by approximately two thirds of the original strength.

Finding the Concentration of Defects Using Positron Annihilation Spectroscopy

Dylan Cliche, Evan Hansen (Mentor)

Positron Annihilation Spectroscopy (PAS) has been used to find interesting facts about different materials in the world of material science. One of the interesting things that can be found in materials using PAS is the concentration of mono-vacancies in a given sample. To calculate the concentration of defects, $C_V$, you need to know a few parameters. These parameters are called $S$-parameters. It has been shown that when a sample has been annealed that the $S$-parameter will be the smallest that it can get, for that material, and has become defect free. With our new equation we have come up with pieces of software that we have developed, that will help find the number of defects for any $S$-parameter, with the annealed $S$-parameter as a comparable result.
Physical and Mathematical Sciences
Physical and Mathematical Sciences, Oral Presentations
TAY 160, 04:00 PM to 06:00 PM

Positron Annihilation Spectroscopy Data Analysis
Timothy Harbison, Evan Hansen (Mentor)

The atomic lattice is the foundational building block of many materials that we deal with in our daily lives. Characteristics of the electronic structure of these lattices such as electron density, momentum density, and the existence of vacancies and impurities in the lattice alter the physical properties of the material. The analysis of data received through Doppler Broadening Positron Annihilation Spectroscopy gives us a precise and noninvasive insight into the electronic structure of materials to determine these properties of their atomic lattices. The various forms of analysis used to evaluate these characteristics include the production of S-Parameters, W-Parameters, ratio curves, and various visual plots. The existence of background, Compton scattering, and peak drift, along with the need to analyze multiple datasets simultaneously and determine the uncertainty in each of these calculations, complicates these evaluation methods and makes the calculation process long and cumbersome. The recently developed Positron Annihilation Spectroscopy Data Analysis (PASDA) program, built at BYU-Idaho, gives us a powerful tool to quickly and efficiently analyze the output data received through Doppler Broadening Positron Annihilation Spectroscopy and evaluate properties and characteristics of the electronic structure in various metallic and crystalline materials. This presentation will include an account of the development and production of PASDA, an overview of its capabilities and functionality, a description of the science upon which PASDA is founded, an explanation of its usefulness in current research being done at BYU-Idaho, as well as a demonstration of PASDA’s processing ability.

Toward a global equilibrium constant for hydroxy-peroxy radical-water complexes of R-α-pinene: Determining water-radical binding energies
Elizabeth Buchmiller, Michael Goytia, Tyler Southam, Jaron Hansen, Ryan DaBell (Mentor)

High level ab initio studies of hydroxy-peroxy organic radical-water complexes have been of increasing interest in recent years. These radical species are responsible for a number of important and notorious atmospheric processes, such as formation of tropospheric ozone and NOx. The complexation of organic radicals with water is accomplished primarily via hydrogen bonding between water and the hydroxy and proxy moieties of the radical, with predicted binding energies of 3-8 kcal/mol. The current study examines the binding energy of R-alpha-pinene derived peroxy-hydroxy radicals. In this work, we also investigate a number of low-energy stereoisomers and rotamers that may have significant Boltzmann populations at atmospheric temperatures; these species, along with the ground state, may be examined as a cohort in order to determine a Boltzmann-weighted average binding energy, as a precursor toward determining a global, Boltzmann-weighted equilibrium constant for the system.
A Recursive Algorithmic Approach to the Finding of Permutations for the Combination of Any Two Sets

Diego Fernando Carrión L., Lee Barney (Mentor)

In this paper I present a conjecture for a recursive algorithm that finds each permutation of combining two sets of objects. This algorithm provides an efficient way to navigate this problem, as each atomic operation yields a permutation of the union. The permutations of the union of the two sets are represented as binary integers which are then manipulated mathematically to find the next permutation. The routes taken to find each of the permutations then form a series of associations or adjacencies which can be represented in a tree graph which appears to possess some properties of a fractal. This algorithm was discovered while attempting to identify every possible end-state of a Tic-Tac-Toe (Noughts and Crosses) board. It was found to be a viable and efficient solution to the problem, and now—in its more generalized state—it is my belief that it may find applications among a wide range of theoretical and applied sciences. I hypothesize that, due to the fractal-like nature of the tree it traverses, this algorithm sheds light on a more generic principle of combinatorics and as such could be further generalized to perhaps be applied to the union of any number of sets.
Government and Happiness
Katelyn Sangster, Tiff Jenson (Mentor)

How does government strictness impact the public’s happiness and why? Henry Sturt (1903) defined happiness as a general impression that is distinct from pleasure and is a normal result of virtuous activities. In both democracies and republics, people are given the power to decide the fate and ruling of the country and how the government is chosen. In this form of government, it is crucial that the citizens understand what their government is, how it is run, and what they want from it; without knowledge and guidance from the people, these types of governments will fail (Passos 1914). Here, we will define government strictness as tightly measured control of behaviors, actions, and the amount of freedom allowed to the people by their political leaders. Happiness will be defined as the level of contentment in current life, situation, and circumstances. I think it is important to have more articles on government strictness and how that alone can affect happiness in a nation. In this article, I will endeavor to add my observations to the rest. Participants will be asked to rate how happy they are on a scale of 1 to 4 with 1 being Not Very Happy and 4 being Very Happy.

Household Income and Crime
Kelly Huffaker, Tiff Jenson (Mentor)

In this study I am looking at how household income impacts people committing crime. I will be using secondary data from the National Survey on Drug Use and Health, 2005. The findings from my study are still being analyzed. The findings from my research will contribute to knowing that the household income of someone will potentially determine how likely they are to commit crime.

How does debt impact marital satisfaction and why?
Samuel Child, Tiff Jenson (Mentor)

This study examines the effects of debt on marital satisfaction, providing further support and replication of past research analyzing this relationship, as well as adding new ways to examine debt and marital satisfaction. Data was collected from the fourth wave of the National Study of Adolescent Health (Add Health). The Add Health is a longitudinal study of a national representative sample of adolescents in grades 7-12 during the 1994-1995 school year. In the year 2008 computer surveys were used to interview these individuals as adults. Of the 19,962 cases, 80.25% participated in the survey. The results are yet to be determined.

How does Humanitarian Aid impact Malnutrition Rates and Why?
Danielle Schulthess, Tiff Jenson (Mentor)

The study seeks to find how a change in the dollar amount of humanitarian aid impacts a change in malnutrition rates in Africa. The data gathered for the study was gathered from various government and non-governmental organization’s websites. The results and implications of the study will be explored.
How Does Social Economic Status Affect Crime and Why?

Aaron Bates, Tiff Jenson (Mentor)

This article explains the relationship between social economic status and crime. While this topic has been thoroughly researched, this paper is unique in that it uses a social interactionism based theory. A theory popularly used to explain the relationship between race and crime, and uses it to explain SES’s relationship to crime. Findings could suggest that SES has a stronger relationship to crime than race. Data from the 2000 National Neighborhood Crime Study (NNCS) is used in analyses of the article. The NNCS data set contains 9,593 census tracks taken from 91 US cities in 64 metropolitan. Is comprised of seven of the FBI’s crime index offenses, tract information on socioeconomic inequality, and of tracts regarding social disadvantages, population and other various control variables.

Idaho Agriculture Pulse Industry and Growth Opportunities

Erikson Callis, Allan Walburger (Mentor)

Idaho agriculture is the state’s backbone. In fact, Celia Gould (2010), Idaho’s Director of Agriculture, states: “The Idaho State Department of Agriculture has an ever-important place in one of the state’s largest industry sectors. We recognize Idaho’s economic well-being is forever tied to the health of its farming... We also recognize new opportunities exist that will redefine the future of agriculture in Idaho.” The purpose of this research is to identify these “new opportunities” within Idaho’s pea, chickpea, and lentil industries. In 2012, $62 million worth of raw production was produced between these three crops in Idaho (National Agricultural Statistics Service, 2013). In addition to the raw production, enormous value is added to these crop products most of which occurs outside of Idaho. Thus, this report identifies further growth opportunities in Idaho’s agricultural economy. This information can be used to strengthen these industries to grow Idaho’s overall economy. To accomplish this task, a value chain and an industry analysis was conducted. The value chain analysis categorizes all the distinct stages that a particular commodity may encounter from seed to the dinner table. Once all stages have been identified, the value chain will estimate a value for each stage. The value chain analysis enables one to easily identify the most valuable stages of production for a particular commodity. Identifying which value adding processes take place out of Idaho is the final step. The research has identified that Idaho lacks food manufacturers which incorporate peas, chickpeas, and/or lentils. For example, the primary ingredient in hummus is chickpeas. Last year, hummus retailers realized revenues of $530 million (Pepsico, 2013). Currently, the largest hummus manufacturer, Sabra, is attempting to grow chickpeas in Virginia to minimize transportation costs. Adding a food manufacturer to Idaho’s economy could capture enormous value adding processes within the state. These conclusions could have great implications for Idaho’s economy. Keywords: Idaho, agriculture, pea, chickpea, lentil, value chain
The curse of poverty: Why poor countries can't win global sport events.

Daniel DaGloria, Allan Walburger (Mentor)

There appears to be an interesting connection between wealth of a country and their success in sporting events. When looking at competitions such as the Olympics and World Cups, the countries that are most likely to win these competitions are more often the wealthier countries of the world. My research shows the lack of success of poor countries in global sport events. It seems despite the economic circumstances of the many countries of the world, the ability to participate in national and international sporting venues is pursued. The number of countries participating in the Olympic Games, according to a research done by CNN, has grown exponentially over the past decade alone. One need only watch the opening ceremonies to witness the discrepancy between the number of athletes participating from economically poor countries and economically rich countries. It should come as no surprise that the wealthier countries are often observed to win these competitions more often than the poorer countries. For poor countries to compete in the Olympic games or World Cups—compete, not win—it often comes at a high cost to the country overall. At first glance it might appear solely to be a matter of money—wealthier countries can build excellent training facilities, hire experience coaches, recruit the best athletes, create programs for the development of future athletes, etc. However, there appears to be more to this puzzle. Organization, administration, networking, and media are additional aspects affecting the success or failure of a country’s sporting teams. For example, poorer countries generally do not have access to media to allow them to see their competition. This lack of media awareness leads to another observation: poor countries initially believe that they can compete and win but quickly experience otherwise. Why does this matter? Because there is a lack of patriotism and morale and increased belief that in order to succeed one must leave their own country.
Family Prayer’s Impact upon Christian Youth’s Participation in Premarital Sex

Austin Rigby, Tiff Jenson (Mentor)

My research paper is about if and how family prayer is one of religiosities deterrents to pre marital sex amongst Christian Youth. The data was collected through Wave 1 of the “National Study of Youth and Religion.” The data was collected between July 2002 and April 2003 by random digit dialing in which one child and one parent was interviewed. There were a total of 3,370 cases that were completed. The major findings and results of this research paper are still in the works. There has been a lot of research about how religiosity can be a positive deterrent in stopping premarital sexual intercourse amongst Youth, but not a lot have been focused on family prayer. This study seeks to help enlighten the field by either adding a new religious deterrent to pre marital sexual intercourse or concluding that it doesn’t have much of an impact amongst Christian Youth.

How does childhood exposure to Domestic Violence between parents impact how likely they are to be violent towards their own spouse and why?

Bailey Collins, Tiff Jenson (Mentor)

This study examines the effects of childhood exposure to parental violence/abuse and whether this makes them more likely to be violent/abusive in their own relationships further on. Data was collected from the “International Dating Violence Study” from 2001 to 2006. Researchers at 68 universities in 32 nations collaborated to obtain the data. The samples were taken from students in the researcher’s classes and other classes where the instructor allowed administering the questionnaire. The percentage of students who chose to participate ranged from 42 percent to 100 percent, with most participation rates ranging from 85 percent to 95 percent. Results will be discussed during presentation.

How Does the Availability of Contraceptives for Teens Impact Teens’ Sexual Activity and why?

Jasmine Bennion, Tiff Jenson (Mentor)

The key focus of this study is how the availability of contraceptives for teens impacts teens’ sexual activity. The data used is the National Longitudinal Study of Adolescent Health (Add Health). The research of both the availability of contraceptives and teen sexual activity analyzes impacts by age, gender, and media usage. The results and analyses are still being researched and calculated.

How Gender Effects Classroom Comments

Stephanie Hodge, Johanna Frias, Logan Finlay, Matthew Alba (Mentor)

We are studying the impact of gender by the length and number of comments students make in foundations classes. We will note who makes comments (male or female), the length, and the frequency of who makes the comments. We are looking for differences or similarities in comments made. The analysis is in progress. We will discuss the findings during the conference.
**Improving Company Production: The Role of Organizational Incentives in Enhancing Employee Discretionary Effort on a Micro-basis**

Max Black, Tiff Jenson (Mentor)

*Current research on the relationship between organizational incentives and how they impacts workforce behavior is well researched. One aspect however that lacks in this area of study is the relationship between organizational incentives and employee discretionary effort. Specifically this study focuses on employee effort on an individual basis rather than on a macro level relating to organizational incentives. To examine this relationship data from the Professional Worker Career Experience Survey, (PWCES) United States, 2003-2004 was analyzed; the unit of analysis was individual employees and the sample size was 752. Results indicate a very significant relationship between organizational incentives and employee discretionary effort. Discussion of variables will follow.*

**Media and it's Effects on Sexually Aggressive Behavior in Today's Young Adults**

Travis Klug, Tiff Jenson (Mentor)

*Several studies have been completed regarding the influence media has on violence and sexual behavior in correlation to young adults. An area that has not yet been fully explored is media’s effect on sexually aggressive behavior. As media continues to become more violent and more sexual in nature, it is important to find the influences thereof. This study uses the National Longitudinal Study of Adolescent Health (Add Health), 1994-2008, to examine how media consumption effects the level of sexually aggressive behavior within young adults, and whether there is a correlation. The results of this study include a deeper understanding of media’s influence on the lives and behavior of today’s young adults. With this understanding, media in the future might be adjusted to curve the sexually aggressive behaviors that are seen today.*

**Parental Supervision & Children's Drug Usage**

Andrew Carmon, Tiff Jenson (Mentor)

*The focus of my study is on the influence that parental supervision has on children’s drug usage. The data set I am using was collected from a survey given to 8th and 10th graders throughout the United States. The section of the survey that my study focuses on is the questions on usage of marijuana, heroin, cocaine, and hallucinogens usage and hours spent after school unsupervised. Analyzing the data has shown that a child’s drug usage increases the more time a child spends after school unsupervised. This study looks to provide information on the effects of parental supervision on children’s drug usage.*

**Relationship between autonomous goals and happiness**

Jordan Pyper, Tiff Jenson (Mentor)

*This paper examines the association between autonomous goals (self-motivating goals) and happiness. The National Longitudinal Study of Adolescent Health (Add Health) Wave 4 collected from 2007-2008 was the data set used for this study. When an individual achieves happiness it is hard to understand if it comes intrinsically or extrinsically. Individuals who achieve goals intrinsically are more likely to experience happiness than those who experience it extrinsically. Through the analysis, the relationship between autonomous goals and happiness was supported. Suggestions and implications for future research will be discussed.*
Does Cohabitation affect Marital Satisfaction?
Sarah Powers, Tiff Jenson (Mentor)

This study examines the effect of Cohabitation on Marital Satisfaction, providing further support and replication of past research analyzing this relationship, as well as adding new ways to examine cohabitation and Marital Satisfaction. Data was collected from the first wave of the Marital Instability over the Life Course. In the fall of 1980 a random-digit-dial telephone interview was used on married individuals from ages 18 to 55. The procedure yielded 2,034 interviews. Results to be determined.

Length of Courtship and Age for Urban and Rural Demographics
Melissa Carr, Matt Carter, Brianne Stander, Tom Rane (Mentor)

There is a strongly held belief that the typical courtship from first date to engagement or marriage on this campus is very brief. Our study was conducted to test the validity of the stereotype concerning the length of courtship at BYU-I. We sent an e-mail survey to 300 randomly selected married students at BYU-Idaho to test our hypothesis, which is; "The length of courtship at BYU-Idaho is significantly less than that of the national average." We also tested for the difference between the length of courtship and age of married students from urban and rural demographics to see if there is a correlation between the length of courtship and urban and rural values.

Divorce and adolescents’ academic success
Kimberly Harris, Tiff Jenson (Mentor)

The focus of this paper is to find out how parental divorce affects adolescents’ academic success and why. Other issues that may be factors in academic success such as parents educational attainment, family meals, and parents involvement is also looked at. The data analyzed in this study comes from the educational longitudinal study, which encompasses more than 16,000 adolescents. The results are still being examined. This study is a contribution to the literature because the data on adolescents’ success had not looked at divorce as a factor for 20+ years and the outcomes were contradictory to each other. My study will provide a more recent look at the issue, and will provide a better understanding of the relationship divorce has on academic success.

Do children of divorce parents have a high sexually activity within teenager years?
Giovanna Jensen, Tiff Jenson (Mentor)

This paper examines the relationship between how divorce parents have impact on teenagers high sexual activity. The data used in this study comes from the National Study of Youth and Religion (NSYR) wave 1, which was collected in 2003 from a national survey via phone. The interviewers were teenagers between the ages of 13 and 17 and their parents. The method that was used for this survey is a random digit dial (RDD) to reach a better representation on age and gender, parents were asked to conduct the survey with the teenager who had the most recent birthday in the household. Sex is everywhere and those most vulnerable are the youth, results will be discuss and show at the conference.
Eating Disorders influenced by Family Structure
Danielle Seger, Tiff Jenson (Mentor)

While there have been many studies on eating disorders, proponents of a family perspective offer a different approach to studying this issue. There is some evidence that eating disorders arise from dysfunctional families (Vandereycken 1987; Blissett and Haycraft 2011). This study examines how family structure influences the development of eating disorders in one’s lifetime. Data was collected from the National Comorbidity Survey Replication (NCS-R) survey where they interviewed adults 18+ residing in households in the United States. Individuals were selected to be part of the study by a probability sample. Questions consisted of personal family life (including closeness with parents and relatives, head of household, etc.) and health issues (including anorexia and bulimia and whether or not they received medical treatment). The results to this study are to be determined.

Family Influence and Juvenile Delinquency
Christian Grant, Tiff Jenson (Mentor)

This paper will discuss the influences that can occur in the home and how they affect a juvenile. I will discuss what sort of factors can cause a juvenile to become a delinquent and whether or not they are significant. Such variables will include: drugs, alcoholism, and violence in the home. These negative influences can create an outcome of truancy, theft, drug dealing and consumption, solicitation, vandalism, and violence. I believe that the conflict between parents, or guardians, can have a negative influence on the child’s social interaction. If social interaction is negative, then this can lead to or become deviant behavior. This paper explores the idea that family conflict causes juvenile delinquency. As family dysfunction begins, the bond that is interwoven within a family unit begins to deteriorate.

Family Matters
Michael Hardman, Tiff Jenson (Mentor)

This study examines the influence of family structure on depression in adolescents. This study was conducted using the first wave of the National Longitudinal Study of Adolescent Health collected in 1994. Adolescents in grade 7 through 12 were surveyed with a total number of 20,754 adolescents who participated. Results are pending. Forthcoming implications of this research include a better understanding of the need of parental influence on the well-being of their children and to further support and replicate the past research analyzing this relationship. As we further our understanding of the influences that can increase the risk of depression in adolescents we can implement strategies that minimize the exposure of these influences.
Religiosity's Effect on Views of Matrimony
Kayla Merrell, Tiff Jenson (Mentor)

This study focuses on the possible connections between a person’s religiosity and their views on marriage. The 1996 wave of the General Social Survey was the data set used for this study, which focuses on gender, emotions, market exchange, giving and volunteering, and mental health. This study is still being tested and the results in connection to these variables are not yet completed. Through the analysis of this study, I will find if the relationship between these variables is significant. Suggestions and implications for future research will be discussed as the study is concluded in the coming weeks.

The Effects of Marital Conflict on Children’s Self-Esteem
Kaydee Mace, Tiff Jenson (Mentor)

The impact of divorce on children has been researched thoroughly, however there is significantly less research on the subject of marital conflict’s impact on children. Therefore, this study’s focus is the effect of parental conflict on children’s self-esteem. It is hypothesized that children’s self-esteem will decrease as their parents’ marital conflict increases. This study will test the hypothesis using data collected from the 1994 National Longitudinal Study of Adolescent Health (Add Health), Wave 1. Other than adding to the research, this study will also add a new aspect to the research by looking at marital conflict and self-esteem exclusively. It will also add its own unique theory that will attempt to explain the hypothesis through Symbolic Interactionism. Results will be analyzed using Linear Regression and will be further discussed.

The Impact of Parent Marital Status on Child Well-Being
Kayla Kearsley, Tiff Jenson (Mentor)

This study examines the effects of single parent homes on juvenile delinquency, replicating previous research examining the correlation existing between these two variables. Data was gathered from the first wave of the National Longitudinal Study of Adolescent Health. Researchers gathered a sample of 27,000 adolescent participants who were given questionnaires along with their parents. Participants in the questionnaire were asked about family, relationships, behaviors, religion, and social lives. Results are to be determined.

The Influence of Popularity on Depression
Heather Winn, Tiff Jenson (Mentor)

The aim of this specific study is to answer the question: how does an adolescent’s level of popularity and social status influence depression, and why? It is proposed that the lower an adolescent’s level of popularity is, the more depressed they will be. The National Study of Youth and Religion, Wave 1 (2003) will be used to analyze the relationship between the two variables, popularity and depression.
The Ties Between Income and Adoption

Karaska Crow, Tiff Jenson (Mentor)

This paper examines the association between household income and the number of adoptions being made within the United States. The National Longitudinal Study of Adolescent Health, Wave 1 (Add Health from the school year of 1994-1995 was the data set used for this study. Adoption is such an expensive process that tends to burden some of the most desired families. Through the analysis, the relationship between household income and the number of adoptions being made within the United States had some significance. Suggestions and implications for future research will be discussed.

The Truth of Retirement

Shanel Talbert, Janiel Nelson (Mentor)

Preparing for retirement should be a crucial step in anyone’s career in life. Some people may wonder whether to worry about retirement or not. People live longer; can work in many different fields, technology and medical are more advanced then ever so why worry? People do not think of things they cannot control such as disease, and even job loss that may cause them to retire early. This powerpoint illustrates the cautions of not preparing for retirement, how to better prepare for retirement, and what to be aware of after retirement. Studies have shown that “Only about “one quarter (23%) of aged 55 and older have savings and investments worth $250,000 or more” and the “largest portion (28%) have saved less than $10,000 (Goldsmith, 2012, p. 224). Less and less people are getting prepared for retirement, and possibly preparing themselves for a lot of stress in the long run.

Violent Crimes and Single Parent Households

Cynthia Gibson, Tiff Jenson (Mentor)

This study examines the effects of living in a single parent household and the likelihood of committing violent crimes when they are older, providing further support and replication of past research analyzing this relationship, as well as adding new ways to examine single parent households and violent crimes. Data was collected from the National Longitudinal Survey of Youth 1997. Both the 1997 and 2003 national samples consist of 8,984 youth from 6,819 households. The data from the NLSY97 covers topics such as schooling, employment, training, marriage, fertility, and income. The results of the data and the significance between living in a single parent household and the likelihood of committing violent crimes will be discussed later on in the paper.
2013 Qatar Water Policy Brief
Logan Lloyd, Jeremy Lamoreaux (Mentor)

Qatar has a growing population but imports 90% of its food and currently runs desalination plants to produce its water. The water storage capacity for fresh water in Qatar only lasts two days, leaving the country vulnerable should something happen either to the importation of food or to the desalination plants. Qatar has no rivers, one of the lowest rates of annual rainfall, and one of the highest water consumption per capita in the world. This policy brief examines the energy-water-food security nexus and offers policy options to secure water and food for the Qatari people. These policies include continuing importation of food, education on water conservation, integration of renewable energy, increase in water infrastructure, and new farming techniques. These policies are reviewed critically and one recommendation given hypothetically to the Ministry of Energy and Industry of Qatar.

The Global Burden and Distribution of Disease
Christian Burstall, Jeremy Lamoreaux (Mentor)

The author exhaustively reviews the academic literature related to fatal disease, its global distribution, and what effort states make to combat the diseases. The literature suggests that while traditionally, the developing world has suffered from communicable diseases, and noncommunicable diseases have been the burden of developed states, increasingly the developing world suffers from the simultaneous incidence of communicable and noncommunicable diseases. Some effective public health measures by states, NGOs, and IGOs are considered and compared. Because the causes of global disease are so widely varied, there is no universal policy that could be shown to eradicate disease, but some research suggests that a global tobacco ban would do more than any other single measure.

Predicting Political Behavior: Argentinian President Cristina Fernandez de Kirchner.
Juan Pablo Araya, Neal Carter (Mentor)

This research study is intended to predict probable behavior and leadership style by Argentinian President Cristina Fernandez de Kirchner when encountered with conflicts such as The Falklands dispute with Great Britain among others. This study utilizes Margaret G. Hermann’s Leadership Trait Analysis, which uses spontaneous material such as informal interviews by the media to assess the political leader in question. The scores obtained from the analysis are then compared to the averages of 122 national leaders across the past two decades in order to classify Fernandez’s traits in relation to the other national leaders.
The Intersection of Gender and Environmental Security in Sub-Saharan Africa: A Policy Brief

Susan Bell, Jeremy Lamoreaux (Mentor)

The connection between women’s rights – indeed, gender security in general – and environmental security is a strong and fascinating one. This is especially true in the Global South, where the development of civil society, distribution of public and political goods, access to education, and protection of minority groups is minimal where it exists at all. Sub-Saharan Africa provides an exemplary case study for these issues, as an area with chronic political and social instability as well as rich natural resources. These two factors are not only mutually reinforcing, but also tend to lead to the exploitation of minorities and the environment simultaneously. As the protection and advancement of women’s rights increases around the world, so too does the protection and attention given to local and regional eco-systems. This policy brief will focus on the issues related to female empowerment and responsible environmental action, and how sub-Saharan African countries can improve their practices to facilitate greater social and environmental health and responsibility as they relate to women and the environment.
A Character Profile of Vladimir Putin

Michael Brawner, Neal Carter (Mentor)

The goal of my research is to develop an overall character profile of Vladimir Putin. I will analyze the leadership type and operational code of Vladimir Putin. I will be looking to answer the following questions with my research are: What type of leader is Vladimir Putin? How does he see the world? What are the fundamental political beliefs that underpin his international and domestic policy? Since his first term as President, has Vladimir Putin’s political ideology remained constant or shifted over time? Does President Putin become more or less open to contextual material over time or does he feel that he knows it all now, making him more closed to incoming information? Vladimir Putin is undoubtedly one of the most influential world leaders of our time. Forbes Magazine named him the 3rd most powerful person in the world, preceded only by American President Barack Obama and German Chancellor Angela Merkel. As world affairs continue to unfold, Vladimir Putin will undoubtedly play a large role in these developments. With these considerations in mind, diplomats and experts in foreign relations, as well as decision makers would do well to study and understand the President of Russia. The answers to the before-mentioned questions will provide a guideline which can be used to chart a way forward in negotiations and diplomacy with this important world leader. To conduct my research analysis, I will primarily be using material taken from interviews and speeches given my President Putin throughout his career both as President and as Prime Minister. I will use Herman’s leadership trade analysis in addition to operational code.

A Comparative Profile at a Distance of President George H. Bush and President George W.

Trevor Bell, Neal Carter (Mentor)

Profiling political leaders at a distance is a developing field within political science. This paper profiles and compares President George H. Bush and President George W. Bush. The main focus of this research focuses on the work done by David G. Winters on analyzing political leaders motivations through speeches and formal done by leaders. This paper also applies the research done in the field of profiling the operational code of political leaders done by Stephen G. Walker, Mark Schafer and Michael D. Young. Through the state of the union address and other formal speaking done by President George H. Bush and President George W. Bush this paper analysis and compares the father son duo to see if there is a difference between the two leaders on domestic and international issues, and if the presidents have a similar developmental arc over the course of the time spent in office.

Second Term Presidents

Katy Mackey, Neal Carter (Mentor)

After President Roosevelt four terms in office a law was changed that presidents cannot serve more than two terms. After comparing and contrasting these presidents it will be clearer why some get reelected and some don’t. I will be using Winter’s Motivations, Hermann’s Leadership trait analysis, and operational coding to get down to many aspects of these presidents cognitive development. This research is important not only to further understand past presidents, but also to be more knowledgeable about what future presidents are capable of. Do presidents have the same thinking process and motivation going into their first term as their second? If they are the same are they more likely to get reelected or not? My hypothesis is that there are similar personality traits in those who do get reelected. I will test this out by Hermann’s Leadership trait analysis. In Hermann’s Leadership trait analysis there are seven traits that are analyzed. I also believe that those who do get reelected according to Winter’s motivation that whatever their main motivation is in the first term will lessen in their second term. They could be a lame duck president.
The Builder or Destroyer of Peace in the Middle East: A Psychological Assessment Profile of Benjamin Netanyahu

Corey Smelcer, Neal Carter (Mentor)

Israel has been made popular in western culture primarily because of Holy Land its borders encompass which is associated with Christianity, Judaism, and Islam. Rather than acting as a unifying point of interest Israel’s location and significant Jewish population has been a center point for violence and conflict in the Middle East ever since the political creation of Israel in 1948. Consequently the leaders of Israel have had a decisive hand in the outcome of several Middle East conflicts mainly because several of them involve the Jewish state or their western allies, predominately the United States of America. Thus, we can conclude that the political leaders of Israel, namely the Prime Minister, are a prevailing variable in relations between the West and the Middle East. This essay will focus on the current Prime Minister of Israel, Benjamin Netanyahu who is serving for a second term as Prime Minister (2009-Current), a decade after completing his first term as Prime Minister (1996-1999). A psychological profile will be conducted using three different methods to assess the personality, motivations, and leadership traits of Netanyahu in order for us to find confidence in answering the following questions: How has Netanyahu’s leadership evolved since he first took office in 1996 and most recently in 2009? And how have conflicts and political environments in the Middle East been affected his personality, motivations, and leadership traits? The focus will be primarily on Israeli - U.S. relations and Israeli - Arab relations so the methods will be applied and analyzed in these two separate contexts, and compared between his two terms.

What Word Count Analysis among other Methods can Reveal about Joe Biden’s Personality and if it has Transformed throughout His Rise to Political Power

Allen Jensen, Neal Carter (Mentor)

This project’s purpose is to study the personality of the United State’s current Vice President, Joe Biden, and discover through several methods of word count analysis whether or not his personality and leadership type has been fixed throughout his political career or has it changed. The academic debate over contextual complexity and whether personality is a fixed trait or simply a state that is in continual flux has been well documented. Research and data collection is being analyzed using interviews, debates, town halls, and other public forums where Biden has spoken without a script. Through the analyst of spontaneous performances it is the purpose of this study to determine whether the shift from junior senator, to committee chief, to presidential candidate, and finally to Vice President also brought a change in personality and leadership traits to the middle class kid from Scranton. Results will also be compared to other more casual observances of Biden’s personality. Methods will be further explained and results given and defended at the conference.
Academic Preparedness & Academic Outcomes
Austin P. Wood, Eric Gee (Mentor)

Learning theories and strategies are often used at universities to assist students to successfully master concepts and reach academic objectives. Teaching students how to be more cognitively engaged by applying effective learning strategies improves their academic performance (Weinstein, 1994). At BYU-Idaho, the Learning Model (LM) is a theoretical and principle-based model widely known among students and faculty that establishes a framework for students to employ specific learning strategies as college students. Another diagram directly related to the LM is the “Academic Preparedness of Students” diagram developed by Academic Vice President Fenton Broadhead. It is a visual representation of specific categories of outcomes that students should be striving to reach. The outcomes are intuitively connected to the practice of the LM because the LM is the process and principles by which those outcomes are achieved. The LM has been promoted again and again to BYU-Idaho students and faculty during meetings, student orientation, and in introductory BYU-I classes. There has been a BYU-I webpage designated to understand the LM as well as a committee on campus promoting the ideas of the LM. The Academic Preparedness of Students diagram has not received near as much attention. Does the student body perceive this diagram as something valuable to students? Do they feel it is valuable enough to be delivered to new and existing students? There has been no study that describes these perspectives of the student body concerning the Academic Preparedness of Students diagram. If data were collected to show that the student body does perceive the information in the diagram as highly valuable to students, this might be compelling information that assists in deciding to more fully implement the diagram as a supplement for the university’s LM. The purpose of this study then is to determine the student body’s perspective of the Academic Preparedness of Students diagram. I hypothesize that a significant amount of students will feel that this diagram is valuable for students to understand.

Consumer Analytics Group Market Research
Karla Melchin, Shaundra Stoddard, Stephanie Taylor, Chelsea Murphy, Courtney Rippstein, Karrah Sampson, Jill Glenn, Jason Smith, Rachel Tonks, Samantha Litke, Yohan Delton (Mentor)

Our group provided an assessment of the Consumer Analytics Group website. The assessment was carried out using three different methods. First, two focus groups were run to gather initial information about first impressions of the logo’s used and other aspects of the website. Using the information from the focus group, a survey was created. The survey has participants rate various logos, business cards, flyers and other aspects of the website that were identified by the focus group. Finally, using an EEG the electrical activity of participants was measured to determine their frustration or excitement while navigating the website. The results will be analysed and recommendations will be provided to the Consumer Analytics Group as to what the public liked and what should be changed.
Hand Guns and Aggression

Rachel Tonks, Eric Gee (Mentor)

Imagine you are in a small town that you go to often where you see everyone all the time. Now imagine there is a man you see quite often but you don’t really notice him much. However today you do. Today you notice that he is carrying a hand gun around his waist. What do you think? One possibility might be that you perceive him as being more aggressive. Klinesmith (2006) tested testosterone levels in males who interacted with guns and found that the males who interacted with guns displayed higher levels of testosterone which did make them more aggressive, mere interaction with them did seem linked to aggressive behavior. In addition, perception of aggression is also implied by the presence of a gun. Banscombe (1991) found that of 80% of responders to a survey on attitudes toward guns indicated thought that many murders would not have taken place if a handgun had not been available. 87% of them also responded that easy access to handguns is likely to result in increased crime rate. People in this study perceived people with hand guns as having an association between guns and aggression. The purpose of this current study is to discover whether or not people perceive someone carrying a hand gun as aggressive. This kind of information can be helpful in the study of why people react to guns. Also, from my research there has been many people who have studied in depth how people react to guns after they have handle a gun but no one has studied the perception of guns. In the times we live guns in general have a negative connotation and finding out whether or not people associate guns with aggression can shed some light on these attitudes. My hypothesis is that people will perceive someone carrying a hand gun as being more

Measuring Satisfaction Level in Salt Lake Express Customers

Hannah Gunderson, Meagen McDonald, Wendy Pooley, Katie Howell, Lindsey Carpenter, Eric Johnson, Leisl Paligo, Morgan Harper, Yohan Delton (Mentor)

For this project we are trying to better understand and measure customer’s satisfaction levels from past experiences with Salt Lake Express. We are specifically looking at what the overall customer satisfaction level is and what the customer’s experience with the driver is. We formulated a focus group to gather information then generated that information into survey questions and sent them to customers who have used Salt Lake Express within the last two years. Our results will help Salt Lake Express locate specific areas they can work on and tips to improve their customer satisfaction level within their organization.
Musical Inspiration: Music’s Effect on Education
Jackson Millard, Eric Gee (Mentor)

In the movies we are entranced and emotionally driven by the music and the themes can be unforgettable. This is probably because music elicits emotions that can often be recalled years later. (Eschrich, Münte & Altenmüller. 2008; Terry, Williams & Carter, 2010; Lima & Castro. 2011) Music has the capacity to affect us emotionally and can be used as a mnemonic device. Several studies have shown the many things music can influence, such as the brain, exercise, emotions, and our thoughts. (Alfredson, Risberg, Hagberg, & Gustafson, 2004; Lane, Davis, & Devonport, 2011; LaMarre, Knobloch-Westerwick, & Hoplamazian, 2012; Zatorre, Chen & Penhune, 2007) To clarify mnemonic devices are memory aids that help people retain information better than if they did not use them. (Laing, 2010; Fitzsimmons & Lanphar. 2011) These are all important to know to help understand just how influential music can be on people. The purpose of my study is to show music can be used to improve emotional responses to academic information and therefore help the participants to recall more information than a common mnemonic device such as acrostic mnemonics which is memorizing information using the first letters of each piece of information. Participants will be BYU-I students and I will use a posttest only two group design.

Testing and Blood Glucose
TJ Osburn, Eric Gee (Mentor)

I am looking at how taking academic tests changes blood glucose levels. I have one group of students taking part of a non-revived practice GRE, and a different group of students watching a half hour movie. Both groups will have their blood glucose level checked before and after the half hour task that they will be assigned. The medical procedures will be done by people that have credentials in the medical field. A statistic analysis will be done on the blood glucose levels of both groups to see how taking the test changed glucose levels in comparison to watching the movie.

Testing and Time Limits
Karla Melchin, Eric Gee (Mentor)

The purpose of this study is to examine the effects of timed testing on an average student population. It is predicted that the group with a time limit will have lower scores than the group with no time limit imposed. The participants for this study are undergraduate students at Brigham Young University Idaho. Students will be recruited from various classes offered on campus. Students will be taking a test consisting of 40 multiple choice questions from the Henmon-Nelson test of Mental Ability. The design used for the research study is the post-test only control group design. Students will arrive and will be randomly assigned into the experimental or control group. The experimental group will be told that they have 15 minutes to complete the test while the control group will be given as much time as needed. Participants in both groups will be told that the top three scorers will earn a gift card in an attempt to have participants take the test more seriously. Once all the tests from the experimental and control group have been gathered, they will be scored. The last 10 questions will not be scored and will be used as a “buffer zone”. This will take into account the people who are not able to complete all the questions in the given time and will allow those scores to be included in the analysis. Results will be analyzed using an independent samples t-test.
The role of "need for cognition" in choosing undergraduate field of study.

Jason Smith, Eric Gee (Mentor)

Need for cognition (NFC) is a personality trait which indicates an individual’s predisposition to engage in and delight from effortful thinking. (Cacioppo & Petty, 1982). Those individuals who have a high need for cognition enjoy tasks or pursuits that require serious cognitive effort. Conversely and naturally, those who report low need for cognition do not enjoy these same demanding cognitive activities. It should be mentioned that the NFC scale is not a measure of ability, but of an intrinsic desire or motivation to seek after and fulfill this “need” (Steinhart & Wyer, 2009). The NFC personality trait (for outliers) has shown to account for individual differences in many areas of choice or behavior. High need for cognition has shown positive correlations to fluid and crystallized intelligence (Hill et al., 2013). NFC has been shown to account for some variation in internet usage (Junqi, Chen, & Mei, 2011). High need for cognition has shown to correlate strongly with high openness to experience, which is one of the big five in the five factor model of personality (Sadowski & Cogburn, 1997). The differences between those who are high or low in need for cognition and enjoyment of their type of employment has also shown to vary greatly (Park, Baker, & Lee, 2008). With NFC shown to account for or at least correlate with so many individual differences, it follows that choice of college major may not be an exception. Thus, the hypothesis for this study is that the outliers on the need for cognition scale should be more prevalent in certain college majors.

The Spacing Effect: A Study of Lagging Effect's Impact on Learning and Retention

Ferry Fleurimond, Eric Gee (Mentor)

Memory and learning are two of the most well-known subjects that are of interest to researchers. In order to measure and understand memory and learning, the spacing effect has been of particular interest to researchers. This phenomenon has been found in recall learning, paired-association, and short-term memory experiments (Bellezza, Winkler, & Andrasik, 1975). Also, Vlach, Sandhofer, and Kornell (2008) found that the spacing effect enhances memory and learning in children more than massed presentations. It is apparent that spacing study sessions have many more advantages. However, there appears to be one concern with the spacing effect. Cepeda, Vul, Rohrer, Wixted, and Pashler (2008) addressed that problem by stating that short-term studies cannot answer with confidence questions about the timing of learning. For example, what is the optimal time in between study sessions for learning? How much time is necessary between sessions to increase learning and retention? The purpose of the current study is to seek answers concerning these questions surrounding learning. The study consisted of two groups. The experimental group was given 15 minutes in between the two study sessions while the comparison group was only allotted five. The breaks between study sessions are known as lags. Kahana and Howard (2005) have found that longer lags lead to better performance. Hence, we hypothesize that subjects in the 15-minute lag will learn and retain more information than subjects in the five minute lag. Implications and limitations of the study are explored as well as possible future studies.
Abuse and Delinquency

April Moon, Tiff Jenson (Mentor)

This study examines the effects of childhood abuse on delinquent behavior, and also provides further support of past research analyzing this relationship. Data was collected from the National Institute of Justice, specifically the study of Childhood Victimization and Delinquency, Adult Criminality, and Violent Criminal Behavior in a Large Urban County in the Northwest United States, 1980-1997. The study consists of a sample of abused and neglected children who were made dependents of the Superior Court of a large urban county in the Northwest between 1980 and 1984, and a matched control group of children. Records and data were collected from the county court house, Department of Health Birth, data from juvenile arrests from juvenile court records, and data from adult criminal records. Results have yet to be determined.

Child Abuse and Delinquency

David Bowen, Tiff Jenson (Mentor)

This study examines the effects of child abuse on delinquent behavior, providing further support and replication of past research analyzing this relationship, as well as adding new ways to further examine child abuse and delinquency. Data was collected from the National Incidence Studies of Missing, Abducted, Runaway, and Throwaway Children (NISMART). Survey was taken in 1999 using a Random Digit Dial (RDD). The data was obtained with a sample size of 5,015 youth with a response rate of thirty-five percent. Results are pending.

Child Abuse Influences on Juvenile Delinquency

Rebecca Rohner, Tiff Jenson (Mentor)

This study examines the effects child abuse has on delinquent behavior. Data was collected from the National Incidence Studies of Mission, Abducted, Runaway and Throwaway 1999. This study was split into 6 different parts and was collected by a survey data interviewing youth, the victim, perpetrator and case. Parts 1-2 were gathered by random-digital dial. Parts 3-6 were collected by telephone interview. Interviews consisted of discussions concerning results to child abuse and the involvement in delinquent activity. Results will be discussed.

Drug Offenders, Recidivism, and The Impact of Treatment

David Fitzgerald, Tiff Jenson (Mentor)

Past research has been done to examine the increase in drug crimes across the country, the accessibility of drugs within prison, and the effects prison has on drug violators as it relates to recidivism. Research has also shown the effects of treatment for those in prison. This study reexamines these questions and specifically studies how chances of recidivism for drug offenders are affected by receiving treatment in prison. Data was collected through the United States Department of Health and Human Services, the Substance Abuse and Mental Health Services Administration, and the Center for Substance Abuse Treatment. Questions were asked to respondents in the first three weeks of receiving treatment, at the time of their discharge from treatment, and one year after discharge. Results will show the effect treatment has on drug offenders while also showing the effect of controlling for race, gender, and age.
Immigrant youth and delinquency: Who is really more deviant, immigrants or citizens?

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While deviance has been studied from a wide variety of perspectives over an extensive period of time, less research has been published on immigrant juvenile deviance. Some studies have found no connection between immigration and crime, while others have found a negative correlation. Data was collected from the National Longitudinal Study of Adolescent Health, a nationwide study on school aged youth. The nature of the data is self-reported criminal activity of 12-20 year olds. The results indicate that non-immigrant youth are more delinquent than immigrant youth. Additional results will be discussed. These findings can potentially be used to create new strategies to lower the rates juvenile delinquency.

Marital Status and Domestic Violence Among Substance Abusers

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Marital Status and Domestic Violence among Substance Abusers ABSTRACT The available research literature is comprehensive and thorough in regards to how substance abuse influences a greater likelihood of domestic violence in a household and among individuals. What has not been researched in depth is how marital status influences the severity of domestic violence among substance abusers. This study uses the International Dating Violence Study, 2001-2006 to examine how the severity of violence among substance abusers differs depending on marital status. Results of this study are still pending. Through understanding if there is a difference between those substance abusers who are married, dating, engaged, or cohabitating we can better understand perhaps other factors besides the substance abuse that causes domestic violence not only in the United States, but worldwide.

Police Brutality: An Analysis by Race

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The videotaped beating of Rodney G. King by three Los Angeles police officers in 1991, combined with the proliferation of network media, was one of the first of many highly publicized events that raised the public’s outcry against police officers exercising excessive force (Independent Commission on the Los Angeles Police Department 1991). The effect of these events subsequently lead to a large amount of research analyzing the relationship between the police and the public, especially as it pertains to biracial interactions. This analysis is centralized on police brutality, and determines whether the reportage of excessive force by the respondents increases or decreases according to the respondents’ race. The information for this analysis was gathered from the 2008 Police Public Contact Survey (PPCS), whose purpose was to compile information on respondents who had contact with the police in the last twelve months. As this research has no yet been completed, the results are pending.

The Impact of Child Sexual Abuse on Adult Romantic Partnerships

Anne Hayes, Tiff Jenson (Mentor)

There has been extensive research over the years on the impact sexual abuse can have on a child throughout his or her life. Child sexual abuse can lead to low self-esteem, depression, suicide, and unhealthy sexual interactions. This study uses the International Dating Violence Study, 2001 – 2006 completed at the Inter-University Consortium for Political and Social Research Wave 1, to examine how child sexual abuse impacts adult romantic partnerships. Results of the study will be explored. It is important to understand if child sexual abuse impacts adult romantic partnerships so that they have a chance to understand the effects of the abuse and improve the quality of their romantic partnerships.