Honors College Research Symposium and Impact Day

Monday, November 20, 2017
1:00PM–4:30PM

Illinois Rooms
Student Center East
750 South Halsted Street
November 20, 2017
1:00 PM–4:30 PM

Schedule

11:30 AM–1:00 PM  Judges and Students Registration and Set-up

1:00 PM–3:00 PM  Poster and Oral Presentations and Judging Session

3:00 PM–4:30 PM  Reception

3:30 PM  Keynote and Awards Presented

Sponsored by the UIC Honors College, UIC Impact, and the Center for Student Involvement
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1 Socially Responsible Investments  
Ali, Ehsan  
_Undergraduate - Honors College_

I have decided to conduct research on an investment topic related to Socially Responsible Investing. Socially Responsible Investing (SRI) aims to gain financial return while simultaneously bringing good change to our society. This includes making investments into financial instruments that will improve the quality of life and our environment. These type of investments avoid investing in “sinful” companies or strategies. Alcohol, gambling, guns and adult entertainment all fall into the “sinful” category. SRIs work hard to invest in companies that show concern to our environment. There have been many firms that have developed strategies that are Socially Responsible Investments. This is a topic that is growing at a very fast pace. Investors have been looking to invest their money into companies that care about the environment as they believe they will be able to be profitable for a very long time.

2 Monocyte/Macrophage Control of Induced Bone Repair Application  
Atallah, Feross  
_Undergraduate - Honors College_

This project explores the effects monocyte depletion has on osteogenesis in mice of different variations.

3 Alteration in Inflammatory Response of Wound Healing in Diabetics  
Barot, Viraj  
_Undergraduate - Honors College_

Type 2 diabetes has been proven to cause poor wound healing. However, the mechanism of dysregulation is not yet known. We hypothesize that metabolic syndrome causes epigenetic changes that result in pro-inflammatory phenotype dominance in macrophages in the wound area. An inflammatory phenotype causes inaccurate and inconsistent wound healing in diabetic individuals. The study was performed on CCR2/RFP male and female genetically modified mice. After feeding half the mice a diet high in fat to induce a metabolic syndrome model, a wound was inflicted in all mice and its healing was monitored. CCR2 accumulation in and near the wound area was also examined during wound healing. Expression of inflammatory cytokines was studied using bone marrow derived monocyte macrophages grown in medium that mimicked conditions of metabolic syndrome i.e. high glucose and high fat. We found that the rate of healing in CCR2/RFP mice with induced metabolic syndrome was slower compared to normal diet mice. CCR2 accumulation was also delayed and prolonged in high fat diet mice. In bone marrow-derived monocyte macrophages grown in high glucose and high fat medium, pro-inflammatory cytokine expression was higher compared to monocyte macrophages grown in normal medium. The findings of the study confirm that metabolic syndrome induced epigenetic changes in bone marrow-derived monocyte macrophages along with delayed cell recruitment and inflammatory cytokine expression together cause poor healing in mice with metabolic syndrome.

4 Effect of Dried Fruits Consumption on Regrowth and Glycolysis of Human Dental Plaque Biofilm  
Berger, Shira  
_Undergraduate - Honors College_

Plant-derived natural polyphenolic compounds in dried fruits such as raisins, dried plums and cranberries have been shown to inhibit growth and viability of oral pathogens. We hypothesize that chewing and consuming selected dried fruits delivers antimicrobial compounds to the oral cavity, and inhibits metabolic activity of human dental plaque biofilm. The objective of the study was to investigate the effect of chewing and consuming selected dried fruits on acid production and regrowth of human supragingival plaque biofilm. A non-flavored gum base was included as control. Methods: 4 adults (18-64 years old) participated in this randomized controlled cross-over study. Overnight fasting supragingival plaque from buccal and lingual surfaces in the left maxillary and mandibular quadrants of a participant was collected using a sterile swab (baseline untreated plaque.) The participants then chewed and consumed one of the test foods for 5 minutes (craisins or gummi bears) or chewed non-flavored gum base. Their right maxillary and mandibular quadrants were sampled 20 minutes
after chewing. All plaque samples collected were dislodged from swabs, re-suspended, and assessed for regrowth and glycolysis after 2 and 4 hour incubation at 37°C (White et al., 1995). Results: Chewing craisins for 5 minutes reduced short-term regrowth (4 hour, averaging 17%) of human supragingival plaque biofilm. Although the craisins did not show statistically significant inhibition of acid production likely due to the small number of participants, a clear trend of inhibition was noted when compared to the gum base and gummi bears. Chewing the gum base and gummi bears did not inhibit subsequent regrowth or glycolysis of plaque biofilm. Conclusions: Selected dried fruits may be healthier alternatives over the popular sugary snacks while providing protective benefits against oral pathogens and contribute to oral health. (This study was supported by the Pediatric Dentistry Department, UIC College of Dentistry.)

5 Doomed from the Womb: How Conditions in Fetal Development Affect Our Economy
Buttice, Steven
Undergraduate - Honors College

Underpinning the framework of this paper is what is known as the Fetal Origins Hypothesis which states that health shocks to an expecting mother not only transfer to the developing baby but establish lasting detrimental effects. This paper attempts to answer the extent to which health shocks negatively impact the microeconomic performance of such individuals who had experienced certain health shocks as well as explore the broader macroeconomic impacts this phenomenon has. More specifically, three distinct aspects are studied: the impact the effects of the Fetal Origins phenomenon has on the educational attainment of individuals; the extent to which this phenomenon affects work capacity; and lastly the implicit burden assumed by relevant polities because of the effects of the Fetal Origins phenomenon—particularly that of the federal government.

6 Ecological and Social Impacts of the Return of Big Predators to Illinois and Midwestern America
Dorestani, Zahra
Undergraduate - Honors College

Long before humans dominated the region, midwestern United States, specifically Illinois and the surrounding region, was the home to three big predators – grey wolves (Canis lupus), black bears (Ursus americanus), and cougars (Puma concolor). As the population of humans in the area increased, and their land use practices changed, the numbers of these three species decreased due to hunting, loss of habitat, a decrease in their food supply, and behavior that conflicted with local inhabitants. Ultimately, they were almost completely eradicated from the region. Over the past years, ecologists have begun to notice a trend of the three species moving back into a number of places in Illinois. As these species return to an ecosystem that they do not yet have a prominent role in, there will be huge effects, both ecological and social, on natural and human-altered ecosystems. This paper is a literature review of the research done on this subject. Examining all publications, both gray reports and peer-reviewed papers, I will report on the possible impacts and their management implications of these returning predators of Illinois. I will specifically find out the direct and indirect impacts of the return of these big predators in their habitat use, prey population regulation, the renewed human-wildlife conflicts and possibilities of coexistence. Furthermore, to develop a potential trend of impacts when a big predator species is reintroduced to an area, I will compile, compare and contrast similar cases from within North America and Europe. Through this research, my aim is to provide a strong case as to not only why the reintroduction of grey wolves, black bears, and cougars should be permitted but encouraged. This is based on my hypothesis that as these three species repopulate the Illinois and Midwestern United State region, the species diversity within the ecosystems will increase.

7 Teaching the Public History of Haymarket
Gibson, Michael
Undergraduate - Honors College

I will be continuing original research of public history, how it intersects with the events of the Haymarket Affair, and why it should be taught in this manner, specifically at a CPS school. Key elements include the public history of events and how memorials impact the memory, as well as how the presence of two stories for one event provide a great opportunity to teach a culturally relevant, inquiry based lesson.
8 Understanding How a Business Works
Using Capsim
Hauser, Julie
*Undergraduate - Honors College*

Capsim is an online software that simulates how a business would run. In class we learned the different aspects of business from marketing to research and development to finance. All have different yet equally important roles. As a requirement I was to take the Capsim final, called CompXM and be against “computer run businesses.” Through the knowledge I learned at UIC I was able to set the curve in my class by having the highest score.

9 Emotional and Social Functioning in Individuals with Schizophrenia
Ignaciuk, Jola
*Undergraduate - Honors College*

In this study I am analyzing research on the abnormalities in emotional and social functioning in individuals with schizophrenia. I looked into the relationship of schizotypy in individuals and the relationship it has with social cognition and social functioning. I tested how individuals with and without schizotypy score on three given tests: affect recognition and naming, integrating prosody with affect recognition and integrating prosody with interactions between pairs of people. With the help of 114 participants I could do so. In this study it was discovered that individuals whose schizotypy score is greater than or equal to 63 (identified as an individual with schizophrenia) scored lower on the affect naming test and prosody, and scored higher on the pairs test than that those who scored lower than 63 and did not identify to have schizophrenia.

10 A Critical Analysis of the Affordable Care Act
Khateeb, Ranya
*Undergraduate - Honors College*

The purpose of the research study we are conducting is to understand the multiple factors that contribute to the poor health care of the minority populations. The research was conducted at the University of Illinois College of Dentistry’s pediatric department; a survey was handed to those parents willing to participate in the study. The objective of the study is to determine the impact of a patient's demographics on his/her oral health. This research is specifically exploring the effect of one’s lifestyle on their oral health. The survey was composed of multiple questions including those regarding demographics (race, ethnicity, educational level, range of household income, etc.), physical health (dietary habits, weight, medications, etc.), behavioral health (depression, anxiety, alcohol abuse, etc.), and finally oral health (condition of their teeth and their tooth brushing habits). The parent of the patient was asked to complete the survey and answer the questions pertaining to his/her lifestyle, as well as the child's. The survey was provided in both English and Spanish. One of our initial observations was that the great majority of patients were Spanish-speaking. The analysis of the results will highlight the key obstacles that prevent many individuals from accessing proper healthcare, whether it may be a financial issue, lack of insurance, or cultural/language barrier. Ultimately, the aim of the study will be to spread awareness of the disparities and unequal distribution of healthcare to populations of differing social standing.

11 Sensitive Question Survey
Khudeira, Reem
*Undergraduate – Honors College*

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12 Juveniles in the Justice System
Kneeland, Mariah
*Undergraduate - Honors College*

Our justice system has become really strict on juveniles in every step of the justice system. Some are being sentenced as adults and put into adult facilities. Others are getting harsh sentences for misdemeanor and non-violent crimes. We have forgotten why and how the juvenile justice system was designed and created. These juveniles are experiencing lifelong traumas and physical scars upon being imprisoned. The criminal justice system has to start treating juveniles as they are mentally and physically, children who have not fully developed into adults yet. We have to talk about how incarcerating children affects every aspect of their lives negatively.
Then we have to discuss using better alternatives to deal with juveniles more fairly and effectively.

13 Oakbrook Express Car Wash Business Plan
Mrowca, Christian
Undergraduate - Honors College

Oakbrook Express Car Wash is a $3 car wash model that will fix society’s car wash problem by providing a high quality wash that is faster, cheaper, better! By doing so, we will be able to differentiate ourselves from our competitors, which are self-serve, hand wash, touch-less, and detailing car wash services. Our car wash will be fully automatic with 30 self-serve vacuum stalls that are free to all customers. Our target market is very broad ranging from: 1) new car owners, 2) old luxury cars, 3) sports cars, 4) dealerships, 5) and local businesses and so forth. Therefore, by having a target market that reaches out to the everyday customer, we expect to attract a large number of customers from our $3 model concept. With the $3 car wash as our lowest package offered, we will still be able to generate a large amount of capital from our other packages that we offer as essential “luxury” washes. The prices on these washes range from $6, $10, and $15.

14 Mycorrhizal Symbiosis and Soil Acidity
Nader, Nour
Undergraduate - Honors College

Different mycorrhizal species are known to affect the soil they exist in. This includes differences in acidity, nutrients cycling, and exchangeable ions. We quantified soil acidity of samples collected from three forest floors in Indiana to correlate the acidic effect with arbuscular mycorrhizae (AM) and ectomycorrhizae (EM) presence. For each of the forests, soil samples were taken from plots characterized by different percentage of trees that are associated with having either EM or AM symbiotic relationships. Results show increase in soil acidity as the ratio of EM fungi increases. The results are also consistent for all three forests. Predicting the nature of a cause-effect relationship is important as it adds certainty to our knowledge regarding the mechanisms that lead to these observed changes in the soil. Knowing how the changes take place would explain how mycorrhizal association affects the surrounding environment and ecosystem and vice versa.

15 Oral Cavity Corrosion
Najjar, Abrar
Undergraduate - Honors College

Metals have been consistently used clinically in the dental arena as biomaterials. When metals are used in dental implants they tend to wear at surfaces that encounter the surrounding environment. Wear is also caused to the implants by the chemical process of corrosion. The combination of these two forms of wear is called tribocorrosion. The level of effect of the tribocorrosion a metallic biomaterial has depends on the mechanical, physical, chemical, and structural attributes of the metal’s surfaces. This includes the protective passive oxide film that forms naturally. In my experiment I will be testing whether metal dental implants cause saliva to entail metal ions. Such a presence can cause corrosion within the oral cavity and thus be detrimental to patients. This will be tested sing artificial saliva and biosensor technology. A biosensor is a tool used in many labs today in order to detect measurements of a biochemical quantity.

16 Borderline Personality Disorder and the PID-5 as Predictors of Suicide
Nannini, Sierra
Undergraduate - Honors College

Borderline personality disorder (BPD) has distinguished itself as a serious mental illness among the medical and clinical communities. Studies have shown individuals with BPD are at a high risk for suicide and suicide related behaviors. Most of this data comes from individuals diagnosed using the categorical model. However, this model has resulted in heterogeneity among individuals diagnosed. An alternative model, proposed in the DSM-5, includes a trait approach designed to reduce heterogeneity, and capture, more fully, the disorder. It is unclear whether any of the specific traits assigned to BPD have been associated with suicidality. Therefore, we are interested in which traits are associated with suicidality and if these traits combined predict suicidality. We used data from a larger study in which participants completed the Personality Inventory for the DSM-5 (PID-5). Anxiety, depressivity, emotional lability, hostility, impulsivity, risk taking, and separation insecurity have been shown to be valid measures of BPD pathology. Suspiciousness has also shown to be relevant to the disorder. Therefore, we included as a trait associated with BPD. Suicidality was measured using current thoughts of death from the Structured Clinical
Interview for the DSM-5 (SCID-I), as well as the suicidality subscale on the Inventory for Depression and Anxiety Symptoms (IDAS-II). Anxiousness, depressivity, emotional lability, hostility, impulsivity, and separation insecurity were all individual positive predictors for current suicidality for both the IDAS and SCID. Additionally, our combined model showed hostility and depressivity remained positive significant predictors for both measures of suicidality. The results from this study are consistent with other studies measuring the risk of BPD on suicide. Specifically, they suggest anxiousness, depressivity, emotional lability, hostility, impulsivity and separation insecurity are all individual risk factors for suicide. However, in our combined model, which more closely resembles an individual diagnosed with BPD, only depressivity and hostility remain risk factors.

17 Behavioral Characterization of a Novel Model of Accelerated Cognitive Impairment and Traumatic Brain Injury for the Utilization of Preclinical Models for Age Related Dementia
Nepomuceno, Emily
Undergraduate - Honors College

Dementia is characterized by progressive cognitive decline that currently affects 5.3 million Americans and 30 million people worldwide with the most common form being Alzheimer’s Disease. Currently, there is no cure for AD because the mechanism is unknown, and current models utilize the very rare genetic mutations associated with familial AD. While sporadic AD (age-related dementia) is more common, there are no available models. Therefore, we propose to characterize the Aldh2-/- mouse model as a novel model for age-related dementia and as a preclinical model for relevant drug discovery. The Aldh2-/- model focuses on the oxidative stress hypothesis, an early biomarker of AD, since Aldh2-/- mice lack the major detoxifying enzyme for 4-HNE (a product of lipid peroxidation, caused by oxidative stress). The model is characterized behaviorally through hippocampal-dependent learning and memory tasks including novel object recognition, Y-maze, and Barnes Maze. Cognition deficits are seen in the knockout mice as early as 3.5 months, plateauing around 6 months. 4-HNE was understood to play a role in cognitive deficits in the Aldh2-/- mice when confirmed using a 4-HNE scavenger. The model was validated with the administration of known FDA approved neuroprotective drugs and then tested for its effectiveness as a preclinical model using novel neuroprotective compounds made in our lab to see their procognitive effects. In addition, recent reports have correlated traumatic brain injury (TBI) to increased risk of developing dementia. Therefore, we utilized the Aldh2-/- mice as a model of accelerated cognitive impairment with the addition of a “2nd hit” event implemented with a closed head free weight drop model to induce mild TBI. Future work will include multiple paradigms of single and repetitive mTBI to mimic falls/concussions/sports related injuries in humans so that the mechanisms linking mTBI with early onset dementia can be studied.

18 Synaptic Transmission by SNARE Proteins
Patel, Dhara
Undergraduate - Honors College

Description of activity: Neurotransmission in Caenorhabditis elegans is regulated by many endocytic and exocytic transport pathways in different animals as well as humans. Many protein-encoding genes are involved in these pathways and are essential. To understand their roles, researchers often analyze synaptic transmission when the gene function is perturbed. In the Richmond lab, we use the genetic model organism C. elegans for this type of mutant analysis, as unlike mammals, most synaptic proteins in worms are encoded by a single gene, reducing the complexity of the characterization. The current research examines the role of cdk5(ok626) along with unc104 mutations on synaptic transmission in C. elegans.

19 The Study of Nasonia Wasp’s Gene Expression Patterns and their Differences Among Other Arthropods
Patel, Mayankkumar
Undergraduate - Honors College

The diversity of life results from the fact that gene expression patterns differ from species to species. Understanding how and why these patterns change in the course of evolution is therefore a fundamental goal of modern biology. This paper is based on understanding whether Nasonia evolved independently from Drosophila or not. Drosophila, Tribolium, and Nasonia are different insect species with specific types of Wnt genes in their genome. These genes become expressed at certain stages of embryonic development. The comparison of different genes and analysis of embryogenesis of diverse group of insects will enable us to understand how Wnt genes
expression has evolved. Frizzled genes, APCDD, Pangolin, Arrow, are also among the other genes that are studied for their expression pattern. Nasonia are more closely related to Drosophila than Tribolium. Both of the insects have long germ band compared to short germ band in Tribolium. Long germ band are observed in insects that has the ability to grow from the anterior to posterior axis of the egg at the same time. Thus, large part of the egg would have embryonic germ. Short germ band are seen in insects that grows from the anterior to thorax region of the egg. They develop gradually as the embryonic stages progress. Thus, they are present in minor portion of the egg. The study of embryonic development and gene expression patterns between these three species will enable us to further understand about evolutionary pattern in insects. RNA interference is used to block a gene function in a species. This type of technique includes double stranded RNA being injected into pupae. Their offspring are used to study for any type of defects in the development of the species. This technique has been vital for understanding embryonic developmental patterns in different species.

20 Hydrodehalogenation of 9-Chlorofluorene Using Palladium Colloids Synthesized in Polydimethylsiloxane
Poon, Hevin
Undergraduate - Honors College

Metal nanoparticles, with sizes typically smaller than 100 nm, have been shown to catalyze a number of chemical reactions. Their high surface area and reactivity have made them the focus of many catalytic studies. Palladium nanoparticles, in particular, are useful in the catalytic hydrodehalogenation of halogenated hydrocarbons. Palladium nanoparticles were synthesized within a polydimethylsiloxane (PDMS) matrix using either tetrahydrofuran (THF) solvent or ethyl acetate solvent and utilized in the hydrodehalogenation of 9- chlorofluorene. Reactions were performed to determine the reaction order, rate, and temperature dependence of this catalysis using visible light spectroscopy.

21 Low-Voltage Ionizers for Environmental and Microrobotic Applications Using Engineering Nanostructures
Sahagun, Alvaro
Undergraduate - Honors College

Field emission is the release of electrons from the surface of a conductor or semiconductor under the influence of a strong electrostatic field; dependent on the electrostatic field, work function, and electron affinity of the material. This phenomenon is explained by quantum tunneling where a particle tunnels through a potential barrier when there is a sufficient potential gradient at the emitter surface. Sharp geometry of the emitter also improves the efficiency of its field emission because it will have a highly-concentrated electrostatic field around its edges. Our research direction is to create an efficient field emission device by using low-omic p-type silicon pillars that are coated with nitrogen-doped ultra-nanocrystalline diamond (N-UNCD) to reduce the work function, increase the electric field, and obtain a negative electron affinity of the material.

22 Bird Abundance in Community Gardens
Schnorenberg, Rebecca
Undergraduate - Honors College

This project looked at the abundance of birds in community gardens around Chicago. Different aspects of the gardens were looked at in order to determine what factors of the gardens had impacts on the bird abundance of the garden. Factors that were studied were garden area, garden distance from water, and amount of woody vegetation available for the birds.

23 The Effects of hlh-10 on Ventral Cord Neuronal Differentiation
Shaban, Nadeen
Undergraduate - Honors College

HLH-3 is a basic helix-loop-helix transcription factor, belonging to the Achaete/Scute (Ac/Sc) family. There is evidence that this protein has a role in the differentiation of hermaphrodite specific neurons (HSNs) and in the ventral cord type C neurons, VC neurons both necessary for egg-laying in C. elegans. However, animals with the loss of function allele, hlh-3(tm1688), do not show a complete penetrance in abnormal differentiation of HSNs or VC. This observation led to the hypothesis that HLH-10,
another basic helix-loop-helix transcription factor sharing the predicted target genes with those regulated by HLH-3 and is also expressed in VCs could work in parallel with hlh-3 in regulating VC differentiation. To address whether the product of hlh-10 might be working alongside the product of hlh-3 in VC cell differentiation, we examined VC differentiation in a hlh-10(ok516) mutant background using a VC-specific marker, pln-11::mCherry,myo-2::GFP. To determine whether defects in either gene could be additive, we proceeded to examine hlh-10(ok516) and hlh-3(tm1688) double mutants, observing if a more severe VC differentiation phenotype would be seen. Our results indicate that 21/58 of the hlh-10(ok516) mutant hermaphrodites had altered reporter expression; 8/58 specifically have a missing VC. Our results also showed that 5/58 animals had at least one distal VC was not detected under florescent microscopy while in 3/58 animals had at least one proximal VC that was undetected. When the double mutant was observed, our results indicated that 50/50 animals had at least one VC that was not visible. Our results also showed that there was a preference to distal VCs with 45/50 animals showing at least one missing distal VC. Our findings suggest that hlh-10(ok516) does display an additive function to that of hlh-3(tm1688) and both are critical to the differentiation of ventral cord neurons.

24 Effects of Different Mathematical Problem Solving Methods on EEG
Soni, Margav
Undergraduate - Honors College

There has been a lack of reliable studies pertaining to how solving various types of mathematical problems can affect brain wave patterns observed through electroencephalogram (EEG). In this study we aim to study the effect of mental math on EEG waves in adults. Our broad stimuli set includes mathematical addition, subtraction, multiplication and division problems. Simple (one-digit) and complex (two-digit) problems are included where we expect it to induce retrieval and procedural skills. Based on previous findings that retrieval processes cause theta wave synchronization, and procedural processes cause alpha wave desynchronization, we hypothesize that the simple problems will lead to theta wave synchronization, and the complex problems will lead to alpha wave desynchronization. Better understanding of how math problems affect brain waves will lead to better knowledge of human brain. It can also help introduce better tutoring methods to students.

25 Effectiveness of Social Media Sentiment Analysis as a Tool of Investment
Subieta, Mariana
Undergraduate - Honors College

Social media provides a source of rich and timely information. Whether this information has any effect on stock prices is still an open question. In this study, I will use the sentiment analysis to classify comments on Twitter into positive and negative ones and then evaluate if the change in the aggregate sentiment can be used to predict short-term stock returns. Initially, I will implement the approach over the period of 1 month for two stocks, Equifax Inc. and Apple Inc., which recently experienced some dramatic events. This will allow me to measure the degree of correlation between the public reaction on major news and the subsequent market reaction. More generally, in this study I will evaluate the potential of social media sentiment analysis for developing new trading strategies and improving investment decisions.

26 Domains of Future Thinking
Vargas, Jadisha
Undergraduate - Honors College

An individual engages in future thinking when he or she imagines possible future events or simulates hypothetical future scenarios. Studies indicate that this cognitive behavior has a great adaptive value as it allows individuals to consider the potential consequences of actions before they take place, and serves for the promotion of behavior that facilitates goal attainment at an individual level (Chiu, 2012). This was phase one of a 2-part study investigating how young adults think about the future. This study developed a coding system by analyzing participants’ responses about their thoughts concerning their personal future, and later coding for the frequency in which specific life domains of future thinking appeared on participants’ responses, along with their respective valance. Overall, this study asked which life domains of future thinking do individuals prioritize, and whether they are thought of positively or negatively. To access this information, 40 participants (UIC undergraduates) were randomly assigned to engage in a Future Thinking Fluency Task (FTT), in which they were asked to think about the things that worried and excited them in the short- (week), medium- (Year) and
long-term (10 years) future. Responses were then coded. Our data showed that, indeed, there is a similarity in the way UIC students prioritize certain life domains more than others (e.g. “social relations,” career”, and “romantic life” versus “Health”). While previous findings indicate that individuals generally tend to think about the future positively, little is known about whether if this remains consistent over time. The second phase of this study will use the coding system developed here to accesses the stability of individual’s thoughts about the future over time.

27 The Effects of College Location on Occupational Migration: Evidence of Sorting
Wontorczyk, Alex
Undergraduate - Honors College

The purpose of this paper is to discover why so many people from all over the country migrate to the cities to get jobs. We see that many people commute from the suburbs to their jobs in the cities on a daily basis. Why not just find a job in their hometown. The data gathering method that was performed was random sampling which was randomly selected on LinkedIn. The data was then put into a regression; the data was analyzed; and a conclusion was made.

28 Incidence of Venous Thromboembolisms after Implementing a Compression, Anticoagulant, and Mobility Prophylaxis Bundle
Ymson, Darlene
Undergraduate - Honors College

Many patients in the neurosurgery unit of the University of Illinois Hospital had developed venous thromboembolisms, or VTE’s. An intervention known as the VTE bundle was implemented in April 2016 to prevent further VTE events. It improves the compliance of mechanical devices and medication and promotes mobilization to allow blood flow. The VTE rates one year before and after the implementation of the VTE bundle will be analyzed to determine if it had affected the rate of VTE occurrence. Independent risk factors for VTE will also be identified. Electronic health records dated from April 2015 to March 2016 and April 2016 to March 2017 will be reviewed to extract data relevant to the study. VTE rates and independent risk factors will be compared using Pearson’s chi-squared test and multiple logistic regression.
The UIC Student Activities Board (SAB) is an organization devoted to enhancing the UIC student's college experience. Our core mission is to plan interactive, entertaining, and educational events that bring the UIC community together to form long-lasting relationships. SAB directly impacts the community as we connect students through engaging events. Events like our Flames After Dark Party, hosted during UIC’s Weeks of Welcome, provide a safe environment where students can mingle and connect while enjoying late-night activities. SAB also hosts socially impactful events like our Self-Image experiment which raises awareness about the detrimental effects of negative self-image and builds a safe space for positivity and creativity. Through events like this, we feature relevant topics that are important to the UIC community, stimulating students' interests and passions. Our impact on student interaction at UIC is displayed through the development of our own SAB members. Our members problem-solve and overcome obstacles that arise when planning high impact events, nurturing problem-solving skills as well as overall leadership skills. We encourage members to take on leadership roles in the event planning process by contacting vendors, identifying the strengths and weaknesses, and leading committees at events to make sure the programs are running smoothly. The skills developed through a membership in SAB are applicable and desirable in pursuing a career. We have felt the impact of being an integral part of SAB through our leadership development in speaking up about passionate topics and connecting with students on campus.

When I came to campus as a transfer student in the Fall of 2016, I was seeking a space to call my own. This extended beyond how I felt about UIC into other aspects of my life. The LeaderShape Institute, a 6-day long leadership retreat that focused on personal reflection and meaning, paved the way for my own acceptance of my social identity. Even though I was hesitant to engage in this type of group atmosphere, I chose to be vulnerable and share my experiences with people unfamiliar to me. This had positive effects on my own interpretation of my past, but it had an even greater impact on those around me. I was able to curate a safe space for others to break down their walls and acknowledge the trauma they have lived through. Collectively, we supported one another to the point that our trauma did not seem so traumatic. The Institute also swayed me to pursue a field where I can continue to create these spaces for others to heal. If I had not attended the LeaderShape Institute, I may never have found the stability and passion to complete my undergraduate degree and pursue student affairs as a full-time profession.

A presentation about entrepreneurship and using connections of the university to bring forth progress in a business and community front, while those responsibilities build on yourself. The presentation will cover a personal experience on how ambition to succeed can be found, how over-zealous can make drive you into stagnation, and finally how having a university like UIC to empower can break down walls for a career path and also help create opportunities that without are not probable. The presentation will
cover the academic and career path taken of a 23 year old entrepreneur that is finishing his degree at UIC, and how that impact molded his character.

32 Discovering a Family within the School’s Diverse Community
Gonzalez, Pedro
Undergraduate – UIC Radio/Spark in the Park

Presentation Type – Oral Presentation/Impact on Self/Career Development

Moving from Mexico City to Chicago the same year I turned 18 led to a transformative stage in my life that came along with very demanding challenges. Fortunately for me, UIC’s community allowed me to quickly adapt to a new language, environment, and culture all in a very short period of time. I can confidently state that at 22 years old, the diversity and wide-range of programs in the school allowed me to connect with various groups of people at such a personal extent that I consider them to be family. Throughout my tenure at the school, I have been involved in the Management Leaders Association, the American Marketing Association and several intramural teams, but arguably, no other organization had a bigger impact on me as UIC Radio and its subsidiary, the Spark in the Park Committee. Its significance went beyond a career learning experience and rewarded my spirit and, more importantly, the community I love. As a marketing major with a passion for music, being a part of the committee gave me hands-on experience organizing and marketing a big-scale music festival for UIC students. It also introduced me to wonderful fellow classmates who inspired me to be better by learning their studies and sacrifices they had to make for months in order to set up the event. Yet, personally, the most impactful moment was the day of the festival. Seeing thousands of students congregate outdoors to enjoy music in a safe space was humbling. I saw young people laugh, dance and even cry together as artists performed their hearts out on stage. It reminded me of when I was a freshman, and I attended my first Spark in the Park and all the friends I made then. That is what UIC is all about, bringing people together to form a lifelong family.

33 Empowering Others with Passion
Qutub, Amru
Undergraduate – Campus Recreation

Presentation Type – Oral Presentation/Impact on Self/Leadership & Involvement

I enjoy empowering people with what I am passionate about. As I entered UIC my freshman year I came from a very active and athletic background. I was involved in powerlifting competitions with a great team that pushed everyone to be the best versions of themselves; your teammates’ success was your success. I wanted to bring that to UIC. Since founding the powerlifting team at UIC, we have performed at a level I or anyone else would have expected from an urban university in the midwest. This has been both humbling and inspiring from where we as a new team started, with essentially no recognition, to placing second in the nation just this fall. To compare where our members/teammates were just 12-18 months before to where they are now is exceptional. If a group of people with a common goal put their minds to achieve something, it will take a force larger than them to stop them. It is truly empowering to be part of this. I have done similar with my academic and professional aspirations. After a year-long co-op working on autonomous vehicle systems, a peer and I started the Vehicle Electronics & Systems Engineering student organization to work with students on projects that are related and applicable to the industry. We are bringing projects from the industry to interested students to work on. Through my leadership positions in these organizations not only was I able to find people to share my passion with but more importantly learn the importance of effectively getting work done through others. This is extremely paramount. If groups are not able to communicate clearly and effectively, the whole mission and vision could instantly perish. I have truly enjoyed working on something I am passionate about with others that are just as passionate.
**34 Recognize Your Potential**  
Tambeaux, Samuel  
*Undergraduate – Campus Recreation*

Presentation Type – Oral Presentation/Impact on Self/Leadership & Involvement

With any new experience, you never know the value that it may provide, the enlightenment it may bring, and the community it may establish. Employment with UIC Campus Recreation supplies an environment that promotes student development, values all student employees, and optimizes potential for growth. Although knowing your niche and aspirations enhance your ability to achieve your goals, ambiguity can be your biggest catalyst for recognizing your potential as a future professional, leader, and better human-being. Being afforded a blank slate, such as UIC Campus Recreation, forced me to have faith in my abilities, reinforce self-confidence as a leader, and recognize that my potential can only come from giving every experience my best self while always having an open heart. As an office assistant and previously as a student manager, the evolution from position to position has ingrained the ability to acclimate my skill set and realize my strengths. One of the behaviors was leadership. While I was able to recognize my potential as a leader, that recognition required an accumulation of experiences such as self/co-worker-affirmation, seeking position advancement, and realizing that you can have potential in a multitude of ways. Likewise, becoming a leader with UIC Campus Recreation gives me great pride to encourage other student employees to recognize their potential. Being part of opportunities such as a student panel about leadership and Campus Recreation further established that, as a future professional, I desire to inspire others. Moreover, embodying leadership has different qualities depending on the person. Partaking in the ability to motivate and inspire the individuals that I report to as well as supervise creates an environment that optimizes student growth. I have made use of UIC Campus Recreation as a platform to persistently develop as a student, impact our community, and continue to recognize my ever-changing potential.

**35 How To Make School Work for You**  
Wu, Trixha  
*Undergraduate – Center for Student Involvement*

Presentation Type – Oral Presentation/Impact on Self/Leadership & Involvement

Two years ago, I started UIC, swaying in the unsurety of what I could learn. The 3-click Rule is a term that suggests that a user should be able to find any information with no more than three mouse clicks. During my time in UIC, I faced challenges, which I often describe as the 20-click rule—an awkward spot that came with departmental runarounds, 404 error pages and the need for ibuprofen. However, from these impediments arose opportunities and avenues for personal growth. My presentation will discuss how I utilized audacity and maneuvered my way around these obstacles to make school work for me. Two years ago, I started UIC, swaying in the unsurety of what I could learn. In a month, I leave UIC, assured of the impact that I leave behind.
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