

2014 TRU Undergraduate Conference Abstracts

Session A1: 9:30 -10:30 IB 1008 Crimes and Punishments

Visualizing Patterns and Trends in British Columbia Court Data

Alwehaibi, Sultan

Abstract:

Recently, delays in the B.C. court system have become a major social issue. The average wait time for a two-day trial is more than 11 months, even 16 months in some cities. This might have been caused by a lack of financial resources or manpower. Some people believe that the government might have told police to stop arresting criminals. In order to truly understand what has been going on with the B.C. court system, the actual court data should be analyzed and studied. Since the volume of court data is very large, it is difficult to understand and analyze. Thus we developed a software tool that visually renders the court data in a particular way, so that it is easier to discover patterns and trends. Human eyes (and brain) are very keen in recognizing trends and patterns among huge numbers of elements when these elements are displayed in particular ways. The visualization tool that we developed incorporates many principles of information visualization to assist analysts in identifying existing patterns and trends in the court data.

Some Historic Lessons from the Study of Eugenics

Venos, Jessie

Abstract:

Eugenics, brought to public attention by Sir Francis Galton in 1883, has remained controversial and important due to its global impact and historical and current abuses. By looking at past abuses, we can try to understand the dangers of eugenics and how to prevent them. History shows that in 1925, with the publication of *Mein Kampf*, Hitler used the study of eugenics to outline the perfect Aryan race, by dividing humans based on physical appearance and other characteristics. When he was elected in 1933, Hitler used a racial policy based on eugenics to identify and wean out “undesirables” creating health courts specifically for that purpose. Hitler also developed the Aktion T4 Programs to euthanize the mentally ill, and used the Einsatzgruppen in 1939 to kill 3.3 Million Jews in Poland. Could something similar happen again? Will history repeat itself? By examining this topic, we look at past abuses of human rights and freedoms through eugenics, and ask if the use of eugenics could affect the global balance of tolerance in the future.

Aboriginal over-representation within the Canadian Criminal Justice System: How an Indigenous lens may inform the CCJS approach to mental health and substance use during incarceration and reintegration of First Nation, Inuit and Metis individuals

Fines, Colleen

Abstract:

Over-representation of Indigenous people within the Canadian Criminal Justice System continues to be a growing issue, with undeniable intersections between criminal justice involvements and mental health and substance use concerns. Because mental health and substance use concerns are strongly correlated

with recidivism rates, the therapeutic approach to these issues is paramount. The lack of culturally-safe programming during both incarceration and reintegration fails to acknowledge conflicted worldviews. Dissonance between cultural understandings of health and wellness acts as a serious impingement to working with Indigenous individuals. Applying an individualized approach to those who understand interdependency cannot result in a sense of holistic wellness. An approach based upon cultural safety allows for both understanding how intersections of oppression have created over-representation, while also addressing the issue of First Nation, Inuit and Métis over-representation. Cultural concepts of wellness and how wellness is achieved must be honored to ensure that individual needs are appropriately met. Holistic wellness is viewed as a non-static process. Connections with culture, family, community, and Nation must be made, and allowed to be maintained. Wellness is therefore possible through the use of traditional practices and a connection to one's culture. Incorporating culture into healing encourages balance; balance equates to wellness, and wellness equates to wholeness. I undertook this research as a Metis woman who has been directly impacted by the over-representation of Indigenous people within the Canadian Criminal Justice System. My search consisted of a thorough review of available and current literature on this issue. My intention is to address the limitations that exist in the area of mental health and substance use treatment/assessment/policies for First Nations, Inuit and Metis incarcerated individuals. Specifically, my view is that the integration and use of an Indigenous worldview would address this issue (incarceration and recidivism as a result of mental health & substance use) in a more culturally appropriate way, while also moving away from over-representation and high recidivism rates, and closer to healing for Aboriginal people within the Criminal Justice System.

Session A2: 9:30 – 10:30 IB 1010 Costs and Savings

The Cognitive Costs of Emotion Regulation with Positive and Negative Stimuli

Ste Marie, Mark

Abstract:

The study of Emotion regulation (ER) examines cognitive and behavioural control over emotions under the framework of Gross' process model of emotion regulation. The process model of ER takes into account the trajectories of various emotions and the regulation strategies that regulate those emotions—including both the antecedents and the response to an affective stimulus. The main ER strategies examined in ER research to date are reappraisal (re-evaluating an emotional eliciting stimulus in a less emotional way), suppression (refraining from expressing any overt behavioral responses to an emotional eliciting stimulus—staying straight-faced as it were), and distraction (avoiding attending to an emotional stimulus altogether by purposely focusing on a neutral stimulus). Evidence has shown that employing ER strategies is cognitively effortful. This has been shown through slowed reaction times on reaction tasks when a concurrent ER strategy is employed compared to no strategy implementation. To date, the majority of research examining the cognitive costs of ER has looked at the effects of regulating one's emotions with negative emotional stimuli. The purpose of the current research is to compare the cognitive costs of ER—specifically reappraisal and suppression—when employed with both positive and negative emotional stimuli. This study is noteworthy because, as far as the authors are aware, it is the first of its kind. By comparing positive and negative emotional stimuli, this study will show whether there is a difference in the cognitive effort it takes to emotionally regulate dichotomous emotional stimuli (i.e. positive/negative) of equivalent intensities.

North American Affordable Housing Strategies: An Overview

Oliver, Simon

Abstract:

Affordable housing is often defined as housing that is affordable to those who earn a particular country's median income. It is a reoccurring issue in urban geography and land management. Housing demands themselves are not uniform across nations with significant differences in what is considered acceptable varying from place to place. This literature review will cover the various strategies that have been employed to combat increased housing costs and to provide housing for the majority of the North American population. Factors that increase the demand for affordable housing, such as population density and economic activity, will be briefly reviewed. In the past, examples of affordable housing strategies such as the creation of suburban development, government-run housing and urban renewal have been employed to help meet housing needs. This review will discuss the successes and failures of past strategies. This review will provide insight into past and present strategies that tackle the affordable housing issue.

Tax-Free Savings Accounts

Macedo, Colin

Owen, Deanna

Abstract:

In 2008 the Canadian government released the Tax Free Savings Account (TFSA), a tax pre-paid investment vehicle proclaimed by the government as "the single most important personal savings vehicle since the introduction of the Registered Retirement Savings Plan." For the purposes of Canadian citizenry, the program was released to improve welfare for "Canadians from all income levels and all walks of life." This project will investigate the relationship between the various incomes and ages of the user base of this program as a distribution of the Canadian population by analytically reading through peer reviewed articles to see if any statistical trends or significant correlations occur in order to determine the effectiveness of this policy implementation. If there is a trend or gap to be found it would create an area for further investigation and analysis.

Session A3: 9:30 -10:30 IB 1015 Challenging "Normal"

Jane Jacobs - The women who changed the way we think about cities

James, Heather

Abstract:

In the mid-1950's city planners saw the opportunity to develop new areas outside of the city's core. Under the promise of urban renewal, there was a push to tear down the historical hearts of cities to build major highways in order to transport residents from the working city core to the green lawns and picket fences of the North American suburban dream. Journalist and activist Jane Jacobs's seminal 1961 book *The Death and Life of Great American Cities* took on one of New York City's key planners, Robert Moses, and fought back against his urban renewal philosophy. It was an attempt to salvage the heart and soul of the inner city core from what she described as the desecration of America's cities. The purpose of this paper is to gauge a better understanding as to how a woman with no formal education

has changed the way in which many urban planners, geographers, sociologists and economists now view the development of cities.

The Spatial Process of White Flight: Examining Postwar Paradigm Shifts

Tardif, Rene

Abstract:

Racial segregation — as experienced in today's American cities — has its roots in the many processes and forces which have played out during the time of the Second World War, and in the more than fifty years since (Boustan, 2010, p. 417). The spatial process at play is called "White Flight," and urban geographers have used several paradigms to explain the many reasons behind it. Understanding this spatial process is important because of the impact it has had on the American culture and economy, as well as the implications it has for ethnically diverse countries. This research takes a look at the evolution of "White Flight" since the postwar period and examines its treatment through the various schools of geography. To build on this, a summary of two influential articles in the field that explore the main actors and criticisms of the pattern as a whole will be given. This presentation will explain why it is that most American cities have experienced "White Flight," yet not all are experiencing the counterforce of gentrification.

The Unnatural Order of Things

de Jong, Adina

Abstract:

This creative non-fiction piece stems from a sign hanging in my current family home, proudly declaring "Normal is just a setting on the washing machine." This motto conveys the essence of my family and I, our often unconventional tendencies, and the numerous nerdy activities we enjoy, the latter of which is my focus. Many such enterprises are most commonly associated with adolescents, perhaps considered something to outgrow and move beyond. I do not believe this passion can be so generationally assigned and divided, and would like to erase this line written in the sand. I do so by writing creatively and humourously about my family and our experiences, using many authentic and concise anecdotes. We are geeky and subsequently "weird." We are part of the unnatural order of things.

Session A4: 9:30 -10:30 IB 1020 Our Sense of Place

The Practical Person: Defining the World

Pineau, Tyler

Abstract:

This presentation will explore the process of how humans define the various tangibles and intangibles that make up the world. I will explore how we do this, why we do this, the dangers of the process, and some suggestions for overcoming the limitations. My presentation will be both descriptive and prescriptive. Theories from Descartes, Hume, and Putnam will be used.

Kevin A. Lynch: Mental Mapping and the Perceived City
Moore, Hailey

Abstract:

Kevin A. Lynch is an American urban planner who is recognized for insight as to how the city is perceived at the individual level. In “The Image of the City”, published in 1960, Lynch focuses on the meaning of the city for its residents. He makes an important contribution to urban geography by using mental maps to better understand how people navigate their space. The mental map is a sketch of an individual’s environment from memory. Lynch found that five elements are common in all mental maps of the city: nodes, districts, paths, landmarks, and edges. The purpose of this presentation is to look at the contributions that Kevin Lynch has made to the field of urban geography and urban planning.

Understanding employees' sense of place at a snow-sports resort and its role in serving as a competitive advantage for retention of the staff: The case of Sun Peaks Resort

Gill, Sarbjit

Abstract:

British Columbia’s tourism industry currently faces a 30.7% voluntary turnover rate compared to 8.6% across the private sector. Retention has become a prominent issue rather than recruitment, especially for rural and resort communities which are very seasonal in nature (Vaugeois et al., 2013). With the upcoming labor shortage, more than 100,000 jobs are projected to go unfilled by 2020 in the tourism sector. Thus, it is not only about recruiting the best for the future, but retaining the best for the coming years (go2hr, 2012). So far, the resorts have placed emphasis upon “lifestyle” incentives as a retention strategy (Vaugeois et al., 2013). However, no study has directly examined understanding “sense of place” as a possible strategy for employee retention at a snow sports resort. This proposed research study examines the employees’ “sense of place” at a snow sports resort and its possible role in serving as a strategy for employee retention, creating a competitive advantage for the resort. It looks in-depth at how employees at a snow sports resort form bonds and relationships with the place, the depth of their attachment, what factors influence this relationship, and how the 'sense of place' influences their employment decisions. This research study makes an introductory addition to the literature on the topic of “employees’ sense of place at a snow sports resort and its role in the retention of the staff”. The results of the proposed research can be utilized to better understand the relationship between employees and the place, and the influence of that relationship on their employment decisions with the resort. The results will also allow a snow sports resort to learn their strengths and weaknesses in relation to the bond between an employee and the place, as push and pull factors will be uncovered. Lastly, the results can also provide an opportunity for the resort to focus on “creation of a strong sense of place” to differentiate it from other snow sports resorts in the area/province, thus improving their turnover rate and building a competitive advantage in terms of retention.

Ambulatory Blood Pressure Monitoring in the TRU Sleep Clinic: Should High Blood Pressure and Sleep Apnea be Tested for and Treated Simultaneously?

Holtslag, Kayla

Abstract:

Recent and ongoing research has demonstrated a strong correlation between obstructive sleep apnea (OSA) and high blood pressure (hypertension). Furthermore, studies have shown that treating OSA can lead to an improvement in blood pressure levels. Despite this knowledge, many sleep clinics still do not test their patients for hypertension and have yet to develop comprehensive treatment plans that aim to target both issues. The TRU Sleep Clinic currently sees patients referred by local physicians for overnight ambulatory blood pressure (ABP) monitoring and upon their first visit, the patients are also questioned regarding their sleep habits and complete questionnaires designed to illuminate possible sleep issues such as OSA. In light of this, I hoped to be able to identify patients who had visited the clinic for ABP monitoring, been identified as having OSA, had subsequently been treated for OSA, and then bring those patients back for another ABP test to determine whether the OSA treatment had been effective in lowering their blood pressure. Unfortunately, no such patients existed; files were being archived as soon as the ABP data was sent to the doctor and before the possible OSA issues were addressed. My project became about solving this issue and exploring ways that the clinic could achieve the goal of comprehensive patient care regarding the connection between OSA and hypertension.

The Pharmaceutical Industry Has “Special” Interests in Disease

Fomicheva, Olga

Abstract:

The top 50 pharmaceutical companies — called Big Pharma — are making an enormous amount of profit from global pandemics. The causes of pandemics include the rapid spread of disease due to global travel, and the rise of “super bugs” which seem immune to traditional vaccines and treatments. Global media coverage and the growing numbers of pandemic fatalities, in turn, are creating a culture of fear and increasing the demand for anti-viral drugs. Big Pharma clearly profits from the sales of vaccinations and the medicines for viral treatment. What remains unclear are the ethical responsibilities of these pharmaceutical corporations. This paper will examine the low levels of treatment success, the wide range of drug side-effects, the global overproduction of drugs and the related rise of immune “super bugs,” and the possibility of man-made viruses being created for profit.

Emotional Attachment: Does Place Play a Role?

Holmes Shawna

Abstract:

It is well documented that natural spaces and positive connections to nature are important in the field of early childhood care and learning. It would be beneficial to explore possible relationships between childhood attachment to a physical place, natural or urban, and whether it relates to secure adult emotional attachment. This questionnaire-based research project adds to the discussion about the correlation of place with emotional attachment. The results of this analysis indicate (a) there is a

relationship between emotional attachment and physical place; and that (b) females are found to have stronger physical place attachment than males.

Session B2: 11:00 – 12:00 IB 1010 Being and Becoming Human

What We Are Becoming: Perspectives on the Posthuman in the Works of Margaret Atwood and Douglas Coupland

Hayes, Gavin

Abstract:

Present societal, technological and environmental factors are forcing humanity to adapt in ways that make current understanding of humanity out of date. In the book *The Posthuman*, Rossi Braidotti suggests that humanity view itself as one component of a larger system instead of a separate entity. Using Braidotti's ideas of humanity becoming-animal, becoming-earth and becoming-machine as a basis, I will be discussing the posthuman themes present in works by Margaret Atwood and Douglas Coupland. This will include the presence of a literal posthuman species in Atwood's novels *Oryx and Crake* and *The Year of the Flood* and the cultural and societal implications of a posthuman shift in *Player One: What is to Become of Us* and *Generation A* by Douglas Coupland. From there I will look at the perspectives on posthumanism that can be taken from these works.

In 'Ley'mans terms: An examination of David Ley's contributions to Human Geography

Ellis, Jordan

Abstract:

David Ley, currently a professor at UBC, has left a tremendous mark on the field of Human Geography. His career includes multiple book publications and journal entries, with a major focus on a wide array of urban, social, and cultural issues. At the forefront of his career is the contribution to the development of Humanism within geography. He is also known for his great role in developing our understanding of gentrification. The cultural turn that Human Geography experienced was also influenced by Ley's work. The purpose of this presentation is to view the evolution of Ley's many contributions to the development of knowledge regarding the city and Human Geography.

Dasein's Danger

Newstrom, Elon

Abstract:

This presentation will explore the novella *Dasein's Danger* — a complex story surrounding the relationship between a father and daughter of two differing generations with seriously different values.

Ants, living in coarse woody debris, as a food source for bears in west-central British Columbia

Johnson, Mitchell

Abstract:

In west-central British Columbia, bears are known to tear open logs to feed on ants, but the species of ants consumed is unknown. This project is one part of a study created to assess whether certain ant species are consumed preferentially, or if they are eaten in proportion to their abundance in the environment. . Nine plots in pine leading, sub-boreal spruce forests, ranging between 8 and 25 years post-harvest, were sampled with the use of 4 X 100m strip plots. Coarse woody debris that showed signs of feeding activity was sampled for ants, which were then identified in the lab. We found that *Formica aserva* (approximately 35% of collected samples), was the most abundant of all the ant species collected, followed by *Camponotus herculeanus* (approximately 15%), *F. neorufibarbis* (approximately 14%), and *Myrmica alaskensis* (approximately 12%). Other species such as *Formica accreta*, *F. fusca*, *M. incompleta*, *C. modoc*, *Lasius pallitarsis*, *L. alienus*, and *Leptothorax muscorum* made up the other 24%, with some species only found in only a single area. These data will be compared to the overall assemblage of ants in the study areas sampled. This research provides valuable insight into bear myrmecophagy and reinforces the importance of coarse woody debris and ants in sub-boreal food webs.

Determination of Vitamin K2 in Canadian Cheese Using Liquid Chromatography-Mass Spectrometry

Hartling, Ivan

Abstract:

Vitamin K2 is a fat soluble vitamin required for the activation of several proteins that help prevent osteoporosis, heart disease, and cancer. Awareness of the role of vitamin K2 and its health benefits is growing rapidly, but the amount of this nutrient present in most foods is unknown. Studies in Europe indicate that dairy products are one of the best sources of vitamin K2, but this has never been investigated in Canadian dairy products. The goal of this study is to determine the amount of vitamin K2 in Canadian cheese using liquid chromatography-mass spectrometry (LC/MS). Fat soluble vitamins extracted from local supermarket cheese and cheese made from the milk of be quantified using LC/MS. Results will show whether cheeses made from the milk of these two types of cows differ in vitamin K2 levels and whether the vitamin K2 content of Canadian cheese differs from that measured in Europe. It will also help us determine whether Canadian cheeses are a good source of vitamin K2.

Strategies for SME Wine Businesses for Global Competitiveness

Paish, Matthew

Gill, Sarbjit

Abstract:

This project looks at strategies for global competitiveness in the small wine tourism business in the Thompson Okanagan region. Research includes looking at the current industry trends, as well as strategies being used by wine leaders in the new world to attract tourists (USA, Australia, South Africa). This includes looking at advertising and marketing campaigns, organizational and cluster structures, alliances, social media, and other initiatives being used in this global industry. From this research we hope to locate any gaps that may exist. We will utilize this information and conduct informational calls

to 3 wine clusters in BC to confirm our findings and gather any missed information. We will then utilize this information to conduct a workshop for SME Wine Tourism Enterprises in BC, which will detail global competitiveness strategies for small wine businesses. Our research, findings, and presentation will help small wine tourism businesses in the TOTA region compete on the global stage and gain more market shares. The overarching goal of this presentation is to help small wine tourism businesses compete on a global scale.

Session B4: 11:00 – 12:00 IB 1020 Poetic Journeys

Protest on Paper: Britain's Anti-War Poets of World War One and Societal Perception

Potestio, Justin

Abstract:

It is often argued that the First World War is remembered through its poetry more than any other medium. Today, when we read such verse we not only construct a view of what the war was like, but also feel moved by the description. That was not the case for war-time Britain. Focusing on British anti-war poets of WWI, this paper will look into how much of the Great War's poetry got through to the British public at that time. This essay will discuss British society and the view of war they had been taught for nearly centuries. Following will be a look into who Britain's war-poets were in terms of their background and reasons for joining the effort. This essay will then look into the role of propaganda and censorship on the Home Front. The central thesis is that despite the works of British anti-war poets, their verse did not come to influence the perceptions of British society towards war on the Home Front. A significant product of this thesis is the discussion of why there was no such influence.

Metaheuristic Algorithms

Moore, Ben

Abstract:

Certain real life problems can be modeled using bi-level optimization. An example of a bi-level programming problem would involve a company trying to set an optimal price on a product—one that would maximize profits. The company cannot control all the variables in the scenario, however, as the customer isn't completely predictable. Thus, there are two levels to the problem: one including variables the company can control, and the other involving variables that are out of their control. In general, finding solutions to these problems is difficult. However,, an approximate solution can be achieved using meta-heuristic algorithms. I performed a comparison of certain meta-heuristic algorithms (particle swarm optimization, genetic algorithms, simulated annealing, memetic algorithms, etc.) and their variants on the quadratic bi-level programming problem to compare their efficiency, speed, and accuracy.

From Abstract to Concrete: A Poet's Journey

Curry, Lindsay

Abstract:

This collection of poems is the product of one poet's journey, from imagining abstract concepts through to the use of concrete and specific language to express those ideas and to evoke emotion in the

attentive reader. The author uses images and figurative language to recreate vivid experiences, and she plays with techniques including sound, line breaks, and stresses to suggest various psychological states. The result is a collection that causes the audience to see fragments of life in a slightly different way, to perhaps shift perspective and gain new insight. “Breakup” shows the thought process of a person in the aftermath of a parting from a lover, noting and reacting to the indifference of the wider world to the state of individual relationships, regardless of how consequential those changes can be to the individuals involved. “Paper Doll” is an exploration of the sense of the feminine from the perspective of society and from the developing perspective of a little girl. It is also a statement that there is beauty in imperfect and perhaps scarred things, and a recognition that a child instinctively grasps that truth. “Suffering” is an extended metaphor describing the abstract idea of suffering; this poem explores the sacrifice that one person is prepared to make for the sake of a loved one. The form of this poem increases tension and creates an irritating feel that echoes the subject of the poem.

Session C1: 1:15 – 2:15 IB 1008 Studying our Cities

Effects of Natural and Urban Settings on Emotion Regulation Strategy Used

Davison Tracy

Abstract:

Research shows that spending time in nature reduces stress and increases psychological well-being (Berman et al., 2008). Kaplan’s Attention Restoration Theory (ART) (1995) explains how nature reduces stress. In ART, Kaplan proposes that urban settings demand directed/voluntary attention that requires effort and involves choosing to pay attention to certain stimuli while ignoring others (Fan et al., 2002). In contrast nature requires no effort as it relies on involuntary attention, whereby certain stimuli naturally attract our attention. Emotion regulation (ER) refers to “the processes by which we influence which emotions we have, when we have them, and how we experience and express them” (Gross, p. 281-289, 2002). Regulating one’s emotions can be effortful (Ortner, Zelazo & Anderson, 2013; Sheppes, et al., 2011). Therefore, spending time in nature may facilitate adaptive ER, because attentional capacity is not devoted to other tasks. In contrast, spending time in urban settings is cognitively demanding, and so may reduce people’s ability to regulate their emotions effectively. In the current study, participants receive a mild stress induction before viewing a video of either a natural or urban setting. Afterwards, they report what emotion regulation strategies that they used during the video. We predicted that people are more likely to report using reappraisal (an effortful ER strategy), when exposed to nature settings rather than urban settings, and as a result, experience greater reductions in negative affect.

Curiosity and Connection: an Undergraduate Perspective on Community Research

Andrews, Debra

Abstract:

As a member of the current Undergraduate Conference Research Group, I am examining student engagement and learner outcomes motivated by undergraduate student research and subsequent participation in undergraduate conferences. As a fourth-year undergraduate student at Thompson Rivers University (TRU), I will explore these aspects of post-secondary education through an analysis of my own experience as an undergraduate student researcher and as a presenter at the two

undergraduate conferences held at TRU. In particular, my inquiry seeks answers to three questions: Does experiential learning provide an enriched forum to engage undergraduate students in meaningful research opportunities? Does the combination of a small university within a small city enhance the possibilities for community and social research at the undergraduate level? Does conference presentation of research results create a connection between the two communities that TRU students work in: the university and the city? In this paper, my experiential analysis will focus primarily on my work in two community oral history projects: collaborative efforts between TRU and local Kamloops community groups: the Kamloops Women's Resource Group Society in 2008, and the Kamloops Heritage Society and Tranquille-on-the-Lake Developments in 2012. Undergraduate conference oral presentation provided a vehicle to share this research in an effort to connect the academia at TRU with its local community history, thus providing students and faculty at TRU with insight into its roots on the Thompson Rivers, and offering Kamloops residents insight into the value of research at their local university to their own community. Presentation and publication of my work established an indelible connection between research work conducted at the university and its significance to the community of Kamloops. The singularity of my research engaged my innate curiosity about social interaction within and between the two communities of TRU and Kamloops, and these two projects engendered lasting memories of people and places in our small city – significant knowledge realized through personal learning experience.

Urban Poverty: a Spatial Comparison between Canada and the US

Gunnlaugson, Michelle

Abstract:

Urban poverty exists in various forms in all urban centers. Poverty can be tied to economics, race, gender, and social policy. This paper will look at the evolution of urban poverty studies from the early twentieth century, and then after the 1960s, when poverty studies re-emerged after thirty year's hiatus. Research into urban poverty has received the attention of urban geographers (who were some of the first scholars to shed light on the widespread poverty which was a by-product of early twentieth century industrialization), and other urban social scientists; thus those perspectives will influence this paper. Urban poverty will be compared spatially between the United States and Canada, closely looking at comparable centers within each—such as Chicago and Toronto. The purpose of the spatial comparison is to dissect similarities and differences between compared cities, and determine if there is a distinct difference between US and Canadian urban poverty patterns.

Session C2: 1:15 – 2:15 IB 1010 Global Solutions

Canadian Construction Companies in Japan: Challenges and Rewards

Wilson, Mike

Hanna, Derek

Rivette, Tiffany

Tardiff, Rene

Abstract:

Canada and Japan share important cultural, economic and historic ties. The Canadian construction industry has provided technical expertise in wood-frame construction to the Japanese, and Canadian

companies have exported complete home packages to Japan. In general, Japan has been an important export customer for the Canadian lumber industry. This project focuses on Canadian contributions to the residential construction sector in Japan. The main objective is to investigate the scope and size of Canada's contribution to the Japanese residential construction sector. Another objective is to define challenges, opportunities and rewards for Canadian companies wishing to do business in Japan. Methods for the project include a literature review related to Canadian companies that have undertaken, or are currently undertaking, building projects in Japan. The research also involves informal interviews with companies that have completed construction projects in Japan and a short questionnaire that probes the knowledge of Canadian university students with regards to Canada-Japan trade. Our preliminary findings show the Canadian construction industry has contributed to reconstruction efforts in the aftermath of the 2011 Great Eastern earthquake/tsunami. Canadian companies are also involved in helping Japan with home energy efficiency, a factor that has gained additional priority following the shutdown of most of Japan's nuclear power plants. Nevertheless, many Canadians are unaware of the accomplishments of Canadian firms in Japan. The research highlights the prominence and effect Canadian firms have on Japan's construction industry. It also outlines the benefits of doing business in the Japanese market, as well as difficulties, such as the language barrier, cultural challenges, and lack of awareness among the Canadian population.

The effects of rotenone on zooplankton and benthic invertebrates

Michaelsen, Sophie

Abstract:

This study investigates the effects of rotenone on small ponds and in particular, on the dietary habits of perch when there is an absence of large prey species. Rotenone is produced from the root of a legume that is native to southeast Asia and South America (Robertson and Smith-Vaniz 2008). The chemical blocks oxygen uptake in the gills of fish and other aquatic species. The target species of this rotenone treatment is Yellow Perch. The objective of this study is to determine the effect of rotenone on non-target species such as zooplankton and benthic invertebrates. The sample location is Larch Pond in the Salmon Arm region. The pond was sampled to determine the abundance and diversity of benthic fauna and zooplankton before and after rotenone treatment. This gave baseline data on the pond as well as showing the effects of rotenone on these invertebrates. Perch are not native to BC and disturb ecosystem balance by preying on native fish species. Perch, which are killed by rotenone, were collected as the rotenone treatment was being applied. The stomach contents of the collected fish will be sorted and the length-weight measurements recorded to determine the productivity of the lake as well as the dietary habits of the fish. We wish to investigate if the larger perch will become cannibalistic when there are no other prey species or if the benthic invertebrates are plentiful enough to sustain them.

Travelation: How Travel Contributes to Learning

Liang, Kai

Abstract:

It has been proposed that all travel is educational because it broadens the perspectives of tourists and they learn from their experiences (Casella, 1997; LaTorre, 2011; Steves, 2009). This has become an area of interest in recent years, as there has been an observed shift from hedonistic escapism to intellectual and cultural growth through travel (Falk, Ballantyne, Packer & Benckendorff, 2011). Tourism organizations in Canada have also identified a specific market segment of the "Learning Tourists" that

are seeking to stimulate the mind and be intellectually challenged through pleasure travel (Research Resolutions & Consulting Ltd, 2007).

However, the learning effects of travel and tourism have been under-researched (Falk et al., 2011; van't Klooster et al., 2008). This study examines how travel experiences contribute to learning, and specifically the conditions of travel experiences that give rise to learning and the learning outcomes as a result. Using an interdisciplinary lens of tourism research and learning research, as well as employing a mixed methodology, this study will better your understanding of the phenomenon of travel and learning. From a tourist's point of view, it provides information to enhance your learning potential while travelling.

Session C3: 1:15 – 2:15 IB 1015 Feminist Perspectives

The Promotion of a Feminine Culture in Business: Examining The Body Shop and its Core Values

Berard, Ashley

Abstract:

Culture operates within our lives on all levels. Within the past century, culture within businesses and organizations has continued to change and develop. Previous research as well as dominant business models have contributed to a societal trend following the model of a "male dominant" business approach. Many researchers believe that this ethos translates into the culture of an organization. This paper and presentation will analyze the organization The Body Shop, to understand what its founder, Anita Roddick calls a "more feminine model of business". The research largely draws on Morgan's (2006) work on organizations of metaphors and the metaphor of culture. Finally, it will analyze major criticisms of this organization to question if the way The Body Shop promotes itself and its products aligns with these core "feminine" values.

When Was Thin, In?: Examining the Thin Ideal and How It Coincides with the Rise of Feminism

Spooner, Kendall

Abstract:

This presentation examines feminism from the 1950s to the 1990s as it coincides with the emergence of the thin ideal. It discusses the traditional image of women as child bearers and investigates possible factors that lead it to change so dramatically. Furthermore, it outlines that as women rejected their conventional gender roles, the thin trend took root and grew remarkably. This study outlines that this skinny craze is a recent phenomenon, in the hope that it will evolve into a healthy acceptance of all body types.

Feminist Urban Geography: Intersections of Feminism and Sustainable Urban Design

Kallhood, Kathleen

Abstract:

This research will examine the evolution of feminism in urban geography, with an emphasis on connections between feminist perspectives and sustainable urban design. Critical aspects of feminist theoretical framework since the early 1970's will be discussed with an emphasis on the intriguing relationship that exists between feminism, environmentalism and urban structure. It seems although

feminists and advocates of sustainable urban design have separate causes, the two ideologies both envision and strive for similar features within the built environment. Mobility and the fragmentation of land use are particularly contested topics for both groups.

The report will be limited primarily to a North American focus on social, cultural, and political forces, which have transformed urban landscapes and have led us to the current feminist concerns with urban development. Understanding this evolution and the connections made between feminist discourse and sustainable urban development are valuable to the creation of a more holistic and equitable city. This body of research may also be beneficial to planning practices or policy design.

Session C4: 1:15 – 2:15 IB 1020 Solving Real World Problems

Barriers to Community and Social Reintegration for Criminal Offenders

Khungay, Ryan

Abstract:

Social and community reintegration for offenders is a pressing issue in today's society, and as social workers we are often expected to solve these issues at a very late stage in the process. In particular, accessing housing, gaining employment, and maintaining family relationships seem to be three major aspects in having more successful reintegration; however, in many instances our overarching ideologies and limited services inhibit offenders reaching these goals. Therefore, when developing a question to guide my research, I wanted to go beyond 'what' the barriers of social reintegration are and move towards 'why' the barriers exist and 'how' social workers can address them. Hence, my research question is to look at why do the barriers of accessing housing, gaining employment, and maintaining social relationships hinder the social reintegration into community for offenders, and what can social workers do to lessen these barriers. My research was completed through a directed studies course and is supported by an extensive literature review supervised by Jennifer Murphy, who completed her doctoral work on a similar topic. I have completed a research paper that focuses on the barriers listed above, the theories that support/hinder these issues, and the role of social work in this field.

Fate mapping resident glial progenitor cells in the central nervous system following spinal cord injury

Michaels, Nathan

Abstract:

Following spinal cord contusion injury, the central tissue is often completely destroyed, forming a cavity devoid of axons surrounded by a spared rim of preserved neural tissue. Between these two areas lie intact axons that have lost their ability to conduct signals to and from the brain due to myelin loss resulting from oligodendrocyte death. (Oligodendrocytes are the myelinating cells of the central nervous system). In experimental models of spinal cord injury, spontaneous recovery has been observed, and remyelination of axons surrounding the lesion site by resident progenitor cells is posited as a potential source for this remyelination. In this study, we wanted to illuminate the behavior of these progenitor cells following contusion spinal cord injury to better understand their involvement in remyelination. We did this by genetically labeling progenitor cells in mice using the Cre-lox fate mapping system, subjecting animals to injury, and extracting tissue for analysis at the time of injury, one week following injury, and 3 weeks following injury. We then labeled the sectioned spinal cord with antibodies specific to different

stages of the oligodendrocyte lineage (i.e., platelet derived growth factor α (PDGFR α), for labeling progenitor cells; Olig2, which labels all cells in the oligodendrocyte lineage; CC1, which labels mature oligodendrocytes; and YFP, which enhances the signal created from the Cre-lox system). The data derived from this analysis will provide information on the recombination frequency attained using the Cre-lox system in this model of injury as well as information on the cell types generated following injury.

Effects of personal, social and environmental factors on physical activity among Canadian prime working age population

Khanbhai, Aliakber

Lack of physical activity and poor dietary habits have led to a pandemic of lifestyle diseases -- including diabetes, cancer, and cardiovascular and respiratory diseases. In Canada, 66% of deaths are due to these diseases, which cost the Canadian healthcare system \$80 billion annually. Also, according to the World Health Organization (WHO) physical inactivity is the fourth leading cause of deaths due to non-communicable diseases worldwide. Physical inactivity is one of the major factors that lead to obesity. A substantial part of the Canadian population of prime working age (age 25-54) faces greater time constraints for physical activity compared to children or retired people. This study examines the physical activity of this age group, asking the question, "What factors influence physical activity levels of prime working age population?" This study aims to understand the factors that lead to an inactive lifestyle so that we can develop policies that target working age Canadian population at overweight and obesity risk. The aim is to improve their quality of life and save the Canadian economy lost productive days and healthcare costs. The study will use public micro data from the Canadian Community Health Survey (2009-2010), a cross-sectional survey run by Statistics Canada to collect information related to health status, health care utilization and health determinants for the Canadian population. The Canadian Community Health Survey (2009-2010) contains information from 124,870 respondents. The sample for this study will be restricted to people belonging to prime age working category. For the two models with dependent variables 'Physical Activity Index' and 'Frequency of all Physical Activity', the study will use the Ordered Probit Approach. This econometric approach is needed to deal with dependent variables that have ordinal categories. For the model with the dependent variable 'Monthly Frequency of Physical Activity of more than 15 Minutes', the study will use a simple OLS method. As a robustness check, the study will also use count data method for this model. To focus on the impact of the presence of physical activity facilities in the work place, the study will run the regressions for a sample with only working individuals. Finally, the study will run regression separately for male and female samples to see whether the impact of determinants on physical activity differs between these two groups. The results of this study may help policy makers promote physical activity among working age population.

A Mosaic of Marxist Thought: An Examination and Review of David Harvey's Career

Wooldridge, Hardy

Abstract:

David Harvey is currently a Distinguished Professor of Anthropology and Geography at the City University of New York's Graduate Center. He has been an influential figure in the field of geography since the publication of his 1969 book, *Explanation in Geography*, which offered a new look at the philosophy and methodology of geography. Named as one of the most cited intellectuals within the humanities and social sciences in 2007, Harvey's contributions to thought in geography as well as in other disciplines are of great importance. Among other contributions, Harvey has been a key figure in the adoption of Marxist thought and postmodernism in geography. The purpose of this study is to examine David Harvey's career and to review his major achievements and contributions to the fields of urban geography and understanding the city.

Student Motivations to Volunteer

Girouard, Felicia

Abstract:

This study will try to determine what main factors motivate a university student to engage in volunteer activities. Volunteering can offer the individual numerous benefits, such as networking opportunities (personal and non-personal), new skills, leadership opportunities, resume references, better job offers, confidence, chances to make new friends and self-satisfaction. On the TRU campus, many students volunteer; some are very dedicated volunteers who spend most of their weekends working hard for no payment. Although university campuses have always been good places to find volunteers, students have little extra time for extracurricular activities, after juggling their work, study, and family responsibilities. I will be collecting data from 300 TRU students who have participated in volunteer activities in the past year. The students will have the option of filling out either an online or a paper survey. After collecting the data, I will be able to determine if there is any correlation between motivations of volunteers and numerous other demographic criteria.

For instance, in my sample:

- What percentage of volunteering activities were done by people in the Bachelor of Business program?
- Were females (in my sample) more likely than males to volunteer?
- Are business students more motivated to volunteer for career related purposes?

Volunteering promotes cohesion, unity, and leadership within the society. By discovering the characteristics of the student volunteer, we may be able to support them and encourage more students to participate in volunteerism. If we discover that volunteering is based on a certain motivation, we may be able to reduce barriers and support the volunteers, thereby sustaining them and encouraging others to provide assistance as volunteers.

Levels of Atorvastatin and Fenofibrate in vitreous fluid from diabetic patients

Main, Taran

Abstract:

Diabetes mellitus (DM) is an endocrine disorder caused by the insufficient secretion or action of the hormone insulin. Diabetic retinopathy (DR) is commonly found in patients diagnosed with DM and DR is the leading cause of blindness in those patients in developed countries. DR can be prevented by controlling blood pressure and blood glucose. Researchers have begun testing statins, used as anti-inflammatory anti-cholesterol medications to reduce inflammation in several key areas that affect DR. In particular, Atorvastatin (AT) significantly reduces the inflammatory agents and could potentially decrease DR. Therefore, the anti-inflammatory and anti-atherogenic effects in vivo for the drugs AT and fenofibrate (FB) are being looked at. A local retinal surgeon (Dr. Kevin Ramsey) and third year medical student (Colten Wendel), have orally given patients who have been diagnosed with DM the drug AT or FB. The study proposes to examine the amount of AT and FB that successfully reach the retina to determine if it is in large enough concentration to act as an anti-inflammatory molecule and decrease the chances of getting DR, or even prevent DR all together. After the drug was administered, some of the vitreous humor was removed from the patients and analyzed to determine the concentration of AT and FB. By comparing the amount of the drug administered to the amount found in the vitreous fluid, one can determine the amount of drug that has been able to pass through the retinal membrane and reach the vitreous fluid. If the drug can enter the vitreous fluid of the eye in large enough concentrations, the drug can reduce the inflammation found in the eye. Further research into studying AT and FB and their influence on DR should be pursued.

The Societal Harms of Mainstream Pornography

Dean, Miranda

Abstract:

Pornography is a form of entertainment somewhat comparable to films, and television, but the element of arousal and physical body reaction to viewing pornography could lead it to be seen as more real than other forms of entertainment. If participation in pornography creates hyper realism then it could result in difficulties making the transition from viewing pornography to experiencing a real sex life.

Pornography depicts many sorts of violence and crimes, but it seems that by sexualizing them it deems the crimes less “bad” or almost invisible. When people use this sort of aggressive pornographic sex as a template for real sex, it can affect what people consider sex to be, and they can unthinkingly put these expectations on partners, who are in turn affected and behave differently because of that pressure.

Evidence suggests that the porn that young men view affects their perception of sex. The use of pornography becomes a form of sexual education that can put ‘normal’ or non-porn like sex so far removed from some sexual experiences that people can lose sense of what should or should not be considered ‘real’ sex. If they cannot determine whether sexual behavior is acceptable or not, it can be damaging to both men and women’s sex lives. It can be very difficult for viewers to smoothly transition from physically reacting and enjoying pornography, to experiencing their own sex lives without any overlap. This can be particularly harmful because of the increase in pornography in our society, and because of increasing violence and aggression in pornography, both of which can influence viewers’ sex lives and create unrealistic expectations, and potential harm. I will argue that due to the increasing

trend of aggression, the wider audience it holds, and the issue of overlap from viewing pornography into reality that mainstream pornography is harmful to society.

The Strengths and Weaknesses of the 1998 Good Friday (Belfast) Agreement

Gentry, Shelley

Abstract:

After 30 years of conflict and “war” the governments of Northern and Southern Ireland were eager to reach a peaceful agreement that would establish a united Irish people -- although not necessarily a united country. This agreement would be interdependent, meaning that the political parties must accept the agreement in full rather than certain fragments. The Belfast Agreement, more commonly referred to as the Good Friday Agreement, was signed on the 10 April, 1998. The Agreement consisted of Three Stands: the first dealt with government within Northern Ireland; the second dealt with relations between Northern and Southern Ireland; and the third dealt with relations between Ireland and Great Britain. The Articles laid out by the new Constitution were generally accepted across the whole of Ireland. My presentation examines the Agreement in detail, highlighting both its strengths and weaknesses. Within the Agreement were several strengths which anticipated the likelihood of reaching a peace agreement: the Agreement would have multi-party approval(strands of political bodies coinciding with one another); a new British-Irish Agreement (the amendments of Articles 2 and 3 of the 1973 Constitution, completed the aims of Civil Rights Movement); and reforms in policing were included. There were also weaknesses: the policing reforms (though necessary) were vague, decommissioning was argued against by the Sinn Féin, and political prisoners were to receive an early release (against the wishes of the Unionists) to satisfy the Sinn Féin and other small Unionist parties. Overall, I will argue that the Belfast Agreement was a success because the Good Friday Agreement was widely accepted and won a majority vote in both the South and the West, making it the new Constitution. The Belfast Agreement was able to accomplish the goal which all other previous agreements had failed to accomplish: peace amongst the Irish Nations.

Session D2: 2:30 – 3:30 IB 1010 Young at Heart

Hannah Honeybee and the Marvelous Garden

Shandal, Samantha

Abstract:

This children's story was inspired by a variety of works by Margaret Atwood and Douglas Coupland, two environmentally and politically active Canadian authors. Although it is intended for child audiences, my story has its genesis in academic discussions of the works of these two iconic authors, whose literary voices form a relevant and valuable part of my own Canadian and creative identity. The story, which revolves around a role reversal, centres on accepting responsibility for real, current environmental challenges with co-operation and selfless problem solving; it, therefore, encourages healthy, happy, environmentally reviving habits and attitudes. Hannah Honeybee is a young but brave Queen Bee whose hive is facing certain death because of the environmental impacts of commercial agriculture and modern human civilization. With her hive on the brink of starvation, Hannah must find a way to save her trusting friends and family before it's too late. But what can a teeny-tiny honeybee do to reverse the environmental damages humans have caused with tools and technologies? When things look hopeless,

Hannah leans on the wisdom of her elders to find the courage she needs to save her hive and regain her instincts and connect with nature. Hannah discovers that some humans have instincts to connect with nature too, and if they only decide to, they have the power to use their tools and technologies to protect and nurture the delicate ecosystem they, and all the living creatures like Hannah and all her honeybee friends, depend on. I hope that inspiring environmental consciousness through entertaining education will prepare the future generations for the kind of planet-wise ecological respectfulness many of us wish had been adopted long ago.

Investigating the Effect of a Summer Science Camp on Elementary Children's Content Knowledge and Attitudes Towards Science

Morran, Spencer

Abstract:

Previous research has shown that hands-on learning is a highly effective method for delivering science lessons. The BIG Little Science Centre is a non-profit science centre that provides opportunities for hands-on learning in science through labs, shows, and a room filled with various hands-on activities. Based on my experience and that of others associated with The BIG Little Science Centre, it appears that quality learning is going on at this science centre. However, previously published literature has stated that learning does not occur at such facilities and they are only for fun. The previous literature does state that going to such science centres can influence children's attitudes about science. This research is focused on trying to determine whether science activities at The BIG Little Science Centre foster science learning as well as influence attitudes about science. A summer science camp for children aged nine to eleven was studied to try and make this determination. A questionnaire, video recordings, and audio recordings were used to collect data about the camp participants and track their progress based on attending the camp. Specific camp activities were also looked at to determine engagement level and relate the engagement level to specific questionnaire answers. The results showed that attending the summer science camp did increase the participants' knowledge about science. The attitudes of the campers did not change after attending the camp. It was difficult to determine whether engagement related directly to learning because it is difficult to determine whether a child is learning something based on video recordings. Overall, it appears that learning does occur during a science camp at The BIG Little Science Centre. This research can give insight into how science camps at other facilities can be structured.

Place of Youth in Urban Geography

Fell, Kary

Abstract:

The purpose of this research is to review the emergence of an important new area of interest in urban studies, that is, the significant but forgotten role of youth and young adults as agents of urban change. It is argued that their particular patterns of mobility and sense of place, their use of public spaces, their creativity, the challenges they often pose to authorities and their demographic weight – especially in developing counties, make them worthy of greater attention from urban academics. In my presentation, I will briefly review the evolution of the place of youth and young adults in urban studies since the 1980s as well as some of the methodological issues related to their inclusion in urban research.

2- and 4(5)-Methylimidazole in Food Products by Capillary Electrophoresis

Guo, Zhi Chao

Abstract:

Products formed during the manufacture of caramel colour include 2- and 4(5)-methylimidazole. Since they have possible carcinogenic effects, analysis of these compounds has attracted considerable attention. Factors such as the UV detection wavelength, the pH of the buffer and the concentrations of each component of the buffer were investigated using capillary electrophoresis in order to determine the optimum conditions. Using a background electrolyte containing 3 mM β -cyclodextrin and 70 mM sodium phosphate at pH of 7.7, quantitative determination of 2- and 4(5)-methylimidazole was demonstrated by testing several food products including colas, sauces and alcoholic beverage.

An Agent-Based Modeling and Simulation of Residential Burglary in the Urban Environment

Buckley, Alex

Abstract:

Residential burglary is common in the urban environment. It causes not only financial damage but also psychological and emotional damage. In order to prevent this kind of crime, it is important to understand residential burglars' behaviors. We developed a model of residential burglars based on criminology theories. Using three dimensional [3D] game technologies, we developed a simulation system that shows residential burglars' behaviors and their target selections in the urban environment. The system considers factors such as the burglars' mind, preferred time of burglary, their evaluation of space, and their spatial search strategies. The system visualizes a residential burglar's behavior using a 3D character animation technique in the realistic virtual environment. This system can be used for predictive target analysis and threat assessment in residential burglary.

Questioning Perceptions of Crime and Crime Causation: Observations from Undergraduate Research Assistants

Colman, Jessica

Dawson, Krysta

Teichroeb, Courtney

Abstract:

To be a research assistant as an undergraduate student is an incredible opportunity. Not many students are awarded the chance to work closely with their professors and participate in an academic study. We are currently working as research assistants for Dr. Camilla Sears on her project entitled, "Perceptions of Crime and Crime Causation: An Exploratory and Descriptive Analysis." We are conducting 45 semi-structured qualitative interviews to understand how news media influences public perceptions of crime. Initially, the thought of working with a professor was intimidating. As we participated in training and skill development, the task became less daunting. Training for this position has allowed us to develop research skills and to take what we learned in the classroom and apply it to real life situations. Being part of a research study encourages us to understand ethics and research methods while ultimately being accountable for our share of the work. The diversity of our participants (staff, faculty and

students) requires us to learn and adapt to each individual's experience within the interview setting. Further, the ability to be an undergraduate research assistant is valuable not only for graduate school applications or future jobs, but more importantly because it provides several skills that are invaluable for life. In this presentation we will discuss what being a research assistant entails, more specifically the training and the process of interviewing and transcribing. We will also review the initial findings of the research and the future plans for the project.

Session D4: 2:30 -3:30 IB 1020 Propelled From the Past

"I've got a bigger rocket" The Soviet Space Race in the Cold War

Gonzales, Lachlan

Abstract:

This presentation will focus on the Space Race of the 1950's and 60's from a broad Russian/Soviet point of view. It will highlight Russian/Soviet achievements and the response from the United States and its allies. Furthermore, it will address Soviet dwindling success during the late half of the Space Race. It will examine how their dwindling success has affected their current presence in space, and their contributions to space exploration. Another area of examination is the recent reorganization of Roscosmos and its potential impact. Lastly this presentation will discuss in detail four major Russian achievements/failures-Sputnik, Vostok 3KA-3(Yuri Gagarin), Buran (Soviet Space Shuttle) and the N-1 and how they succeeded or failed not only because of technological, but also social and political ventures.

New Urbanism: Can the built environment change social attitudes?

Legault, Reece

Abstract:

The rise of the mass-produced automobile in the 50s and 60s allowed for the rapid expansion of cities outward from the city centre. A house in the suburbs with the ownership of a private automobile was portrayed as part of the American dream. Half a century later our society is more physically and socially disconnected than ever. New Urbanism is a planning movement that promotes a change in the way we build our cities. It looks to revive sense of community through the built environment with the creation of compact, walk able, mixed use neighborhoods. This presentation looks to analyze the theory of the new urbanism approach to urban geography and the success and failure of its real world examples.

"Trust me, I'm the Doctor"

Fry, Taylor

Abstract:

This presentation takes a look at John Stuart Mill's essay "On Liberty of Thought and Discussion" and how examples of his ideas are portrayed in the BBC television show *Doctor Who*. We will focus on Mill's ideas on the fallibility of opinion and how the lack of discussion leads to the loss of truth and how this is explored through character interactions and plots in the show. Episodes are examined to determine which plotlines and events could have been changed had Mill's ideas of a censorship-free society been adhered to and how this affects the canon universe as a whole.

Examining the Creation of an Online Discourse while Negotiating Chronic Illness

Berard, Ashley

Abstract:

This presentation will be based on a small study of an online community that focuses on life with the chronic syndrome, Fibromyalgia. This research seeks to understand the creation of an online discourse by individuals negotiating daily life with the condition. Fibromyalgia is characterized by widespread pain, abnormal sleep, fatigue and cognitive dysfunction, as well as many related symptoms. In the medical field, the validity and source of the symptoms and condition have been questioned. The research focuses on how individuals with a diagnosis of fibromyalgia cope with this uncertainty by relying on online spaces where they can discuss and draw on supportive interactions and resources. A qualitative discourse analysis is being performed to examine the illness experiences and use of technology. The goal of the research is to understand the importance of individual experiences and social constructions in an area that is frequently studied through a medical model.

All Aboard the Karma Train! Internet Forum Culture

McFarlane, Martin

Abstract:

People are spending more time on the internet than ever before. What started with multi-user domains, chatrooms, and Usenet groups at the turn of the century, has evolved into Facebook, Twitter, Tumblr, and other communication services. Such services host messages that we send and receive over the internet, and are playing a major role in the life of the always-connected generation. Reddit and 4chan, both popular forums on the web, are the birthplace of many cultural entities found on the internet. Both of these forums are examined in detail and are compared and contrasted to one another. Each forum is involved in certain real life events and organizations, whether it be collaborating with the hackers of Anonymous or creating one of the largest Secret Santas that the world has ever seen. The collective culture of virtual internet forums manages to rock the concrete walls of capitals as users rally on the internet to promote issues such as net neutrality, government surveillance, and removal of anonymity. However, just like a real community, these forums also have their own social issues, such as the misogynists in a predominantly male user base as well as cyberbullies. These problems, along with many others, illustrate a struggle between the victims and disadvantaged users of these forums against the stereotypical 'hive mind' of the communities in which they are members. In this presentation, Reddit and 4chan's community structure will be analyzed, and the impact of its cultural entities in the real world will be addressed. Furthermore, the issues occurring on these forums will be brought to light, illustrating how a system as democratic as the internet is not free from prejudice. Although community unites them as much as it divides them, internet forums are an important component in understanding modern society through its culture and behaviour.

Social Media Presentation

Zdunich, Nic
Price, Kayla
Janicki, Katie

Abstract:

With today's tech-savvy generation, it is crucial to successfully connect with your audience to help establish your brand and eventually become more than just a brand, to become a "lovemark". Saatchi & Saatchi is one of the world's leading marketing firms and by using their model on how to create a lovemark we will demonstrate how we would take a successful brand and turn it into a lovemark. We will be presenting on Bell Media's MuchMusic and comparing its social media outlets to various other platforms around the world. We are using social media insights to collect data and highlight where the campaigns are weak, where the campaigns are strong, and use the Saatchi guidelines and personal research to tailor a campaign for MuchMusic, and showcase where adjustments can be made. Our outcome is to demonstrate to attendees the importance of making an emotional connection with your audience.

Session E2: 4:00 – 5:00 IB 1010 Boosts and Highs

Determination and Quantification of Taurine in Energy Drinks through Capillary Electrophoresis

Milne, Tallon

Abstract:

A procedure using capillary electrophoresis (CE) with UV absorption detection was developed to determine taurine concentrations in Red Bull, Monster, and Rockstar energy drinks. The popularity of energy drinks containing taurine has been on a steady rise, since this ingredient is described as an energy-booster, and has been linked to increased athletic performance. Taurine is a non-essential, sulphur-containing amino acid that is present at high concentrations in humans. It is not incorporated into proteins and is the most abundant free amino acid in the heart, brain, and retina, as well as in skeletal muscle and leukocytes. The goal of this research is to establish optimal CE conditions for taurine detection and the determination of taurine concentrations in three different brands of energy drinks. The current literature describes taurine detection using high performance liquid chromatography (HPLC), a technique that lacks precision, requires a greater amount of sample for analysis, and is not as cost effective. By comparison, CE is a much more efficient detection and quantification method. In future, this research could lead to analysis of taurine metabolism in biological systems, to examine the potential of this molecule as a possible biomarker for disease.

Optimism Boost: The Benefits of Optimism on Depression

Hodgson, Lisa

Abstract:

In the past few decades the emergence of positive psychology has garnered the interest of many scientists. Positive psychology aims to improve the quality of life for people through enhancing happiness and well-being. Studies have shown that higher levels of subjective well-being and happiness can decrease the likelihood of developing psychological disorders, such as depression. This presentation

will summarize the findings on the effects of optimism on depression and specifically on how optimism training can immunize people vulnerable to depression. First, I will define optimism, both as an explanatory style and a dispositional style. Secondly, I will summarize the benefits of optimism and how these benefits work to protect individuals against depression. And lastly, I will summarize types of optimism training currently being researched and their successes and limitations. I will also present concepts for future research and how such tools could be specifically beneficial to Canadian youth.

Outward Bound to Inward Bound: Youth Identity Formation Through Outdoor Education

Currer-Briggs, Josiane

Abstract:

In this paper, I explore how outdoor education programs, such as Outward Bound, help youth form their identity. Erik Erikson (1967) described identity as "involving a subjective feeling of self-sameness and continuity in time. In different places and in different social situations, one still has the sense of being the same person". It has been agreed that establishing a positive identity during the teenage years is crucial for success later in life. If we believe in Sartre's philosophical theory that identity is created from an unlimited number of possibilities and that human beings need to be pushed in order to commit to their identity, Outdoor Education is then an obvious tool for helping adolescents establish their identity. It has been proven that Outdoor Education programs, more specifically Outward Bound programs, help establish a positive identity. Through challenging group activities in the wilderness, participants in such programs notice a growth in independence, self-confidence, self-efficiency, and self-understanding. All of which contribute to a healthy identity development and formation. The unfamiliarity of the surroundings and the degree of challenge push participants through the stages of identity formation at a faster pace than the urban environment can. It is argued that gyms, swimming pools, and other urban exercise areas improve our synthetic living, but do not allow us to find ourselves like the natural environment does.

Session E3: 4:00 – 5:00 IB 1015 Bridging the Arts and Sciences

Moult conditions influence plumage colouration and breeding dynamics in Bullock's orioles (*Icterus bullockii*)

Greaves, Orri

Abstract:

Feather replacement (moult) is an energetically expensive process for migratory birds. Bullock's orioles (*Icterus bullockii*) employ a unique strategy to reduce this cost, pausing during their migration from the breeding grounds to their tropical wintering grounds to moult in southwest America during monsoon season when resources are abundant. During this time, they produce carotenoid-rich feathers in brilliant orange and yellow. Carotenoids are pigments that cannot be synthesized by animals but must be ingested and incorporated into the plumage of birds. Carotenoid-based colouration is condition-dependent and often used by females for mate choice. Birds in good condition that have ingested abundant carotenoids, which can be integrated into their feathers, are more colourful, providing females with honest signals of male quality. In this study I used stable carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotopes to examine the influence of moult conditions on yellow/orange plumage colouration and breeding dynamics of Bullock's orioles in Kamloops, BC. I hypothesized that birds with more

negative $\delta^{13}\text{C}$, indicating wetter habitat, and those with higher $\delta^{15}\text{N}$, indicating the consumption of foods items from higher trophic levels, would have orange tails. Older males' tail feathers were more colourful, and birds with orange tails arrived earlier on the breeding grounds than those with yellow tails, which often results in increased reproductive success. Birds with orange tail feathers had lower $\delta^{15}\text{N}$, suggesting they are obtaining carotenoids from foods on a lower trophic level, potentially from fruit. This study is the first to demonstrate the relationship between moult conditions, feather colouration, and breeding dynamics in Bullock's orioles.

Reflective journaling, natural history and creative writing as tools for growth of an ecological identity

Shortt, Steve

Abstract:

My research project is an exploration into reflective journaling. Practicing natural history and creative writing have been effective tools in fostering the growth of a personal ecological identity. I have researched the fields of experiential education and reflection in the academic world, as I believe these practices form the foundation of my research topic. Researching reflective journaling has helped in refining my journaling practices, and in finding an appropriate assessment tool for gauging the efficacy of my writing. My research into the practice of natural history, as well as the concepts of biophilia and ecological identities, has confirmed my belief that these practices and their outcomes are inherently connected. Their methodologies require meaningful thought and learning. My project consists mainly of an in depth literature review of experiential learning, reflection and reflective journaling, natural history, and ecological identity, followed by a study and evaluation of my own journaling practices. Ideally, my project will conclude with the suggestion that these practices (reflective journaling, natural history) not only lead to the growth of an ecological identity, but inevitably, to the practice of creative writing as a means to become an active participant in knowledge production and meaning making. This research project is a personal and academic venture into my own reflective practice and understanding of learning.

One Day: a One-Act Play

Cooper, Andrew

Abstract:

Two teenagers meet for the first time outside a supposedly haunted house late one Halloween night and dare to venture into the unknown. Together they discover not only the ghosts of their pasts, but what it means to be alive. This is the premise for the one-act play One Day. This oral presentation explores the creative writing process and discusses how to convert a script from the page to the stage. A short scene from One Day, performed by actors, will conclude the presentation.

The Effect of Alcohol Consumption on GPA

Opperman, Cameron

Abstract:

With the overwhelming prevalence of collegiate drinking, knowing what effect, if any, it has on overall grades is important. The purpose of this study will be to research the effects of alcohol consumption on the academic performance of students as measured by their term GPA; however, a greater focus will be put on excessive alcohol consumption. The data used for this study will include frequency of excessive alcoholic consumption, alcoholic consumption pattern, gender, year of study, international status, average study hours, cumulative GPA, and residence status. This data will be collected through an online survey tool as well as personal classroom visits, where physical copies of the survey will be distributed.

The results of this study will have important policy implications. If the results point to a negative effect of alcohol consumption on academic grade, then there will be a case for raising awareness levels about the negative impact of alcohol consumption. Further, if the study identifies vulnerable groups, then the campaign may target these groups to make them more aware about the consequence of alcohol consumption.

Kinetics of flavanoids and polyphenols in green tea

Borden, Scott

Abstract:

Many of the key health benefits of drinking tea have been ascribed to polyphenols and flavanoids, as they are known to be effective scavengers of reactive oxygen species. Tea extracts containing flavanoids and polyphenols have entered the market in full force within recent years. The complete quantitative separation of closely related polyphenols and flavonoids, using micellar electrokinetic chromatography, has been reported in the literature, with some issues. This project aims to investigate how the concentrations of key polyphenols in a variety of green teas vary with respect to both varying brewing times and brewing temperatures. Tea was brewed at varying temperatures and samples were taken at different time intervals and then analyzed using micellar electrokinetic chromatography to achieve complete resolution of the analytes and to determine the concentration of these flavanoids and polyphenols in tea samples.

The East Gable Room: The Theme of Compromise, not Conformity in Anne of Green Gables

Little, Ariel

Abstract:

Anne of Green Gables by Lucy Maud Montgomery is one of the most well-known novels in Canadian children's literature. The story of Anne is a fairly typical example of an "orphan tale" in which an individual joins a community and then finds her place in the new society. Although it is broadly assumed that Anne transforms the society of Avonlea with her imagination, it is a point of scholarly contention whether or not Anne conforms to Avonlea. Some critics suggest that in Anne of Green Gables a compromise between the individual and society occurs and that neither dominates the other. Support for this theory can be found by examining Anne's personal space, the east gable room. The physical

alteration of Anne's bedroom over the course of the novel shows how it is transformed by Anne's presence, implying that Anne does alter Avonlea, yet her bedroom is not decorated like a royal chamber as Anne once imagined. While Anne's adoption of Avonlea's taste may at first appear to create a mixed message, seeing it as a compromise reconciles potentially conflicting messages. The theory that Anne of Green Gables portrays compromise between the individual and society is verified by the transformation of Anne's bedroom and suggests the mutually beneficial adjustment it reflects between Anne and Avonlea. This presentation will explore the transformation of Anne's personal space and her relationship to it in order to advance the argument for Anne of Green Gables being a novel about compromise, and not conformity.

Session E5: 4:00 – 5:00 IB 1014 Human and Environmental Factors in Community

The Invasion and Succession of the Human Ecological Influence in Urban Geography

Lawrence, Carly

Abstract:

In the 20th century, the human ecological approach developed in the sociology department at the University of Chicago has had and is still having a significant impact in the geographical community. Through a diversity of explanations, human ecology remains a valuable perspective to innovative urban geographical ideas. This project aims to outline how the traditional human ecological framework has influenced the work of generations of geographers. Through a review of the literature, I will examine the progression of human ecological research in urban geography.

Canada's Role In The Diffusion Of Ice Hockey In Japan

Thorsteinsson, Russell

Oliver, Simon

Raschke, Brittany

Abstract:

The diffusion of culture between Japan and western countries goes back hundreds of years. The introduction of sports to Japan, such as baseball or more recently, downhill skiing, are notable examples. One aspect of the diffusion of sports to Japan that has received little attention is the growth of ice hockey. Organized ice hockey has been present in Japan since the 1920's, through several different leagues. Japan initially had its own professional league – the Japanese Ice Hockey League (JIHL) – but Japan's most talented players now play in a combined Asian league called the Asia Hockey League (AHL).

This study in cultural geography examines the history of hockey culture in Japan, describes how Canada has influenced the sport in the past, and how it is influencing it in the present. We also examine the diffusion of hockey throughout Japan after its introduction to the country. The methods we employ include reviewing literature, relevant websites, interviews, and surveying Canadian university students on their knowledge of Japan and its hockey culture. Our preliminary results show that Canada has had a large influence on Japan's ice hockey culture. However, there also seems to be a strong Japanese hockey culture which is not influenced by outside countries or has been adapted and modified from Canada and other western countries. In conclusion, Canada has definitely influenced Japan's hockey culture; however, there are certain cultural traits that are examples of cultural hybridization or syncretism – all contributing to a fascinating cultural geography of Japan.

Ajax and International Students

Cote-Valiquette, Gabriel

Abstract:

KGHM Ajax is currently in the process of obtaining the approval for an open-pit copper-gold mine located partly within the City's boundaries. The AJAX mine project developers promise great economic benefits and minimal social and environmental impacts to the community. However, studies have shown that mining development (particularly open-pit mining) can cause severe environmental and socioeconomic damage, as well as adversely impact a region's tourism industry in a way that surpasses benefits it would generate. Furthermore, it was recently raised during a presentation from two TRU Adventure, Culinary Arts and Tourism Management Faculty members that the mine could collide with international students' interests in Kamloops. It is within this context that my research seeks to investigate if or how the mine would affect Kamloops' tourism industry, more specifically international students' decision to come to Kamloops. Since international students are major contributors to TRU and the Kamloops economy, the results of this research may inform how best to prepare for concerns and interests of these temporary Kamloops visitors. In order to speculate on international students' behaviour should the Kamloops Ajax mine get approved, we must first understand their views on the topic of mining in general and the Ajax project itself. The goal of this research is to investigate the extent of their awareness of the general environmental and socioeconomic impacts of mining, their attitudes and beliefs towards mining, their knowledge on the proposed Ajax mine, and their perception on how the mine would affect their lives in Kamloops. The data for this study is collected using primary research methods including two focus groups and a survey.
