Jamie Cassels Undergraduate Research Awards, 2011-2012 – Student Abstracts

Melanie Callas, Anthropology "I will work with Dr. Eric Roth on the analysis of two national HIV surveillance surveys, conducted by the Public Health Association of Canada (PHAC) and Vancouver Island Health Authority (VIHA). The first is called I-Track and contains behavioural data for People Who Use Injection Drugs, while the second is called M-Track and has data for Men Who Have Sex with Men. While intended for different target populations, both contain data on people who sell sex for drugs and/or money. We will delineate, compare and contrast socio-economic and behavioural data for both Victoria surveys, focusing on aspects of commercial sex work linked to substance use. For I-Track we hypothesize that commercial sex work is linked to length of time injecting and drug of choice; while for the M-Track respondents, we believe sex for drugs/money will be linked to lack of education and young age. Results of analysis will be presented to VIHA, which has a contract with Dr. Roth for advanced analysis of these data, as well as to AIDS Vancouver Island’s Street Outreach Services and Gay Men’s Wellness programs. In undertaking this analysis I will learn how to enter and analyze quantitative data in the Statistical Analysis System (SAS©) and write a paper and poster describing the data, analysis, and results."

Claire Rawlinson, Anthropology "During the Dark Ages the Vikings asserted a network of influence over the cultural landscape of Northern Europe. Using the oceans as a highway to the coastal regions of the British Isles and France, the Vikings strengthened their control through raids, conquest, and eventually settlement. The coast bordering the Irish Sea has been well investigated as a region that was subjected to the influence and control of the Vikings from Norway and Sweden. However, little investigation has been conducted into the presence and authority of the Danes upon the coastlines bordering the English Channel. Although there have been many archaeological investigation along the coasts of England and France, the network of interconnectedness between these sites has never been established or evaluated. In this project, I will investigate the effects of the Vikings influence upon the English Channel in comparison to the Irish Sea. Evidence will be drawn from an examination of burial sites along the coastlines of these regions, including the burials found at Île de Groix, Donnybrook, Camp de Péran, and Repton. Research will include a comparison of the different burial practices, and an evaluation of the assemblages, including shields and games pieces. These artifacts will be used to determine the impact of Viking influence upon identity and the cultural landscape of the different coastlines. The material entanglements will also identify the connections and divisions between unique sites. This research will establish a new understanding of the Viking conquest of the coastlines surrounding the English Channel."
**Shannon Brown, Biochemistry and Microbiology** "Defining the molecular mechanism of the ISP proteins The inner membrane complex (IMC) of Apicomplexan parasites play an integral role in the invasion of cells and formation of daughter cells. Recent studies have identified a family of IMC containing proteins, termed the IMC Sub-compartment Proteins (ISP1, 2 and 3), that are required for replication of the Apicomplexan pathogen Toxoplasma gondii. The mechanism through which the ISP proteins exert their effects, however, is poorly understood. The goal of this project is to define the molecular mechanism of the ISP proteins through structural and biochemical analysis. Pursuant to this goal, Shannon will initially clone ISP2 (ISP1 and 3 are already cloned) into the E. coli expression vector pET28a and develop/optimize expression protocols for each ISP. I will then attempt to crystallize each purified ISP protein using commercial screens. If diffraction quality crystals are obtained, I will participate in attempting to solve and refine the structures."

**Danelle Chan, Biochemistry and Microbiology** "Antibodies are indispensible reagents for cellular and molecular biology and their preparation and testing are a critical part of modern research. The objective of this research project is to use bacterial cells to express a protein that will be used to make antibodies. The project will involve design and preparation (PCR, cloning, and subcloning) of specific domains, or combinations of domains for expression. I will use conventional bacterial expression and purification of sufficient protein for use as an antigen and testing of sera. The project will give me experience with the methods employed to prepare reagent grade antibodies and their evaluation as reagents for research."

**Lauren Braun, Biology** "Proper functioning of the homeobox gene 6 (PAX6), which is essential for retinal and pancreas α and β cell development, is dependent on strict regulation of its expression levels during development. We hypothesize that one mechanism for its regulation is by base pairing of microRNAs to complimentary mRNA target sites to repress translation. MicroRNA’s are small non-coding RNA molecules that regulate gene expression. There are several putative, conserved microRNAs target sites in the 3’ untranslated region (UTR). Previous studies have indicated that the mouse Pax6 3’ UTR is 1006 base pairs but this sequence is thought to be incomplete. For this reason, and to uncover additional microRNA target sites, characterization of the Pax6 3’UTR from mouse eye RNA will be performed to experimentally validate bioinformatic predictions. This will be conducted utilizing 3’ rapid amplification of cDNA ends (RACE) to clone the unknown 3’ mRNA sequence. Additionally, a microRNA target site bioinformatic search within the 3’ UTR and the Pax6 coding sequence will be completed. Furthermore, using the 3’ RACE technique, a comparison of the Pax6 3’UTR can be conducted for samples of the developing and mature retina, lens, cornea, pancreas and forebrain. If different mRNA lengths are found between areas, it
may be suggestive of potential tissue specific target sites for microRNA and developmental regulation. These are the initial steps in a project that proposes that microRNA-mediated regulation of Pax6 is important in regulatory developmental mechanisms and thereby has practical applications in PAX6-associated pathologies."

**Elizabeth Hoffman, Biology** "Fossil conifer stomata are preserved in lake sediments and can be used to confirm the presence and estimate the abundance of conifer trees over thousands of years. As a paleoecological tool, fossil stomata analysis is in early development; it has been used only once previously on the Pacific coast of Canada and without the aid of an identification key. My research will focus on developing this tool for application on the coast of BC. First, I will create a modern reference collection of stomata for conifers native to BC. Then, using this reference collection, I will develop an identification key for conifer stomata by determining their key morphological differences. I will then use this identification key to identify fossil conifer stomata preserved in lake sediments previously collected from Haida Gwaii (Queen Charlotte Islands, BC) and northern Vancouver Island. Fossil stomata analysis of these sediments, that span the last 15,000 years, will verify when and in what order different conifers established at these sites following the last glaciation. These results will be compared to 1) pollen data to estimate conifer abundance through time; and, 2) independent climate data to understand the association between conifer establishment and climate change since the last glaciation. This research is important for understanding how individual conifer species and forest communities respond to climate change over long timescales."

**Geoffrey Morris, Biology** "Gaucher disease is the most prevalent lysosomal lipid storage disease and it results from deficient glucocerebrosidase activity. Presently, it is not well understood why deficient glucocerebrosidase leads to brain disease and death in neurological Gaucher disease. In 2007, Yamanaka et al reported that the four transcription factors, MKOS, successfully reprogrammed a differentiated somatic cell to become an induced pluripotent stem cell for differentiation to other cell types. Very recently (Cell Stem Cell 8:376-388, 2011), it was reported that similar pluripotency can be attained, by replacing MKOS with the miRNA302/367 cluster, with an overall increase of 100-fold in reprogramming efficiency. We plan to transfect normal cultured skin fibroblasts using the piggyBac transposon system with the miRNA302/367 construct under the control of tetO2 tetracycline/doxycycline inducible promoter. Cell culture will be maintained in doxycycline-containing medium and observed for ES-cell like colony formation. Positive clones will be tested for SSEA1 cell surface marker and nuclear-localized Nanog protein, and by RT-PCR indicated expression of several pluripotency markers. If successful, we will attempt to reprogram skin fibroblasts from Gaucher disease patients for differentiation to neuronal and hematopoietic cells in order to establish in vitro
models for disease delineation and therapy."

**Rebecca Dixon, Chemistry** "The first phase of the proposed project involves the design, construction, and calibration of an infrared-based polarization modulation spectrometer for the study of molecular structure at the solid-liquid interface. Upon completion of the hardware aspect, the second phase of the project will use the instrument to characterize the orientation distribution of chemical bonds when the amino acid leucine is adsorbed on a polystyrene surface."

**Manuel Ma, Chemistry** "My Chem 499 honours project involves the misregulation of histone methylation pathways that are a target of interest for cancer therapies. Enhancer of Zeste Homologue-2 (EZH2) catalyzes the trimethylation of lysine residue 27 on histone 3 which then becomes a marked target for the binding of multiprotein complex Polycomb Repressive Complex-1 (PRC-1), which in turn silences the expression of tumor suppressors and causes prostate cancer. The proposed research project is the synthesis and characterization of calixarene based PRC-1 inhibitors and subsequent binding studies of these inhibitors to trimethylated lysine substrates. Functionalizations of these calixarene compounds will be done in the hopes of improving cell-permeability and binding."

**Tsuki Naka, Chemistry** "The proposed project entails the study of face-wise amphipathic LK alpha-helical peptides adsorbed onto hydrophobic and hydrophilic substrates. The goals are to characterize the conformation (change in secondary structure) upon adsorption, and identify spectroscopic markers for experiments."

**Julia-Anne Cameron, Child and Youth Care** "I am helping an MCFD child welfare team develop an evaluation plan for a program called "youth transitions conferencing," a process of helping youth in care develop a post-care plan for education, employment, and independent living.

At age 19 youth who have been in foster care are emancipated, and their early adulthood outcomes, as a group, include high rates of involvement with the justice system, low rates of post-secondary education participation, and high rates of street-involvement.

For several years a child welfare team in Burnaby has been operating a program to help youth prepare for emancipation by conducting planning meetings with interested adults in their lives, helping youth develop a support system and plans for independent living. A consumer evaluation was conducted several years ago, and the team has asked for help designing a new, comprehensive evaluation plan.

The project products will include a literature review, a review of evaluation
Danielle Jimeno, Child and Youth Care "Interested NGOs and program providers are partnering with the city of Surrey to develop tools for a) forecasting the demand for early and middle-childhood care, and b) tools for tracking availability and types of care and types of developmental activities in these programs. I will be helping to develop and pilot the metrics for these tools."

Naomi Harrington, Computer Science "The topic of this project will be Web accessibility for people with visual impairments. This project will involve a survey of assistive technologies that are currently being used, what accessibility standards exist and what research is currently being done to increase the accessibility of the Web for visually impaired users. Based on this survey, we will attempt to create a software application that will further increase the accessibility of the Web to allow visually impaired users to access more information than what is currently available to them.

We have been able to get good feedback on this work so far, as we recently had a position paper accepted at the ACM SIGPLAN International Workshop on Programming Language And Systems Technologies for Internet Clients?(PLASTIC 2011).”

Matt Christie, Curriculum and Instruction "My project will focus on completing an inquiry into the origins and purposes of the current incarnations of the alternative schools, and the unschooling movement. The popular discussion and increasing popularity of these approaches to schooling have been noted in dominant corporate media, in recent Globe and Mail (June 2011), and Toronto Star, (September, 2011), which note the growing popularity and interest in these approaches to elementary and secondary education. The purpose of my research will be to develop a detailed annotated bibliography and review of scholarly and public documents related to alternative and unschooling approaches to learning in Canada, in aid of analysing the theoretical and ideological nature of the movements and the theories informing them.”

David Fainstein, Curriculum and Instruction "This research project will involve the implementation and evaluation of multi-access learning environments using quantitative and qualitative methodologies, including learning analytics. These learning environments will include live stream and recorded audio-visual content from education classes using a new $150,000 media management portal in the TIE Lab. These classes may include graduate or undergraduate level course work from both the department of curriculum and instruction as well as across campus. The research will provide further insight to the effectiveness of specific multi-access learning environments used at the University of Victoria.”
**Jordan Clark, Earth and Ocean Sciences** "The proposed research project is titled “Estimation of groundwater recharge in the Andean High Cordillera”. The study area, spanning northeastern Chile as well as parts of Bolivia, Peru and Argentina, is water-starved due to arid climate and high demand from mining. Although rainfall is low, infiltration is favoured by coarse volcanic soils. Recent acknowledgement of in-situ recharge has lead to a need for its quantification, the goal of this project.

The method is based on a water and energy budget for the upper soil layer. Taken into account are runoff, infiltration, evaporation and percolation. Meteorological data available for the area are daily temperature, precipitation, humidity, wind speed and solar radiation. Topography and soil data are also available. Equations will be developed to approximate condition-dependent evaporation rates; these, along with the precipitation, topography and soil data, will serve as input to a hydrogeological model.

The modelling program will be chosen so as to account for special conditions in arid, mountainous systems. A case study will be performed using the Collahuasi mining area in northeastern Chile. It is a closed basin at ~4000 m with peaks up to 5600 m, and is characterized by typical High Cordilleran rainfall patterns. The recharge values obtained from the model will first be compared to measured piezometric levels, and the model calibrated accordingly. Afterwards, a chloride mass balance (more conventional but less versatile method) will be performed to get an entirely different recharge estimate, and the two methods will be compared."

**Rohanna Gibson, Earth and Ocean Sciences** "My B.Sc. Honour's thesis consists of structural analysis of geological and structural data collected during 3 months of geological field work conducted in and adjacent to the Ruby Range region of SW Yukon. Data include geological maps showing the distribution of geological map units, and structural orientation data constraining the 3-D geometry of the map units. Analysis will consist of compilation of strikes and dips (for planar structures) and trends and plunges (for linear structures), followed by quantitative geometric analysis of orientation data for planar and linear structures employing the use of stereonets. Data will be used to define crustal domains characterized by cylindrical structures. Quantitative down plunge projections will then be developed for each of the cylindrical domains, showing the full geometry of units within each domain. Finally, a composite down-plunge projection will be constructed, constraining the crustal architecture of the study area. Discussion will focus on the implications of the composite down plunge projection for the geological evolution of SW Yukon, and for the processes responsible for crustal growth of the northern Cordilleran mountain system."

**Matthew Agbay, Economics** "Canada ranks in the top 20 globally for total
crimes committed per capita. Canada also ranks in the top 20 globally for expected duration of education attained. However, the rates for both statistics differ across provinces and territories. Of special interest is the higher rate of crime per capita and lower enrolment rate in education seen in the Canadian territories. This poses the question: Does education act as a deterrent to crime?

The significance of researching this topic is due to the fact that aboriginal Canadians make up a small portion of our population but also account for a high proportion of the population jailed due to crimes. What is the cause of this? There could be many answers but I am interested to see if the lack of access to education is a contributing factor to this phenomenon.

This will be an empirical study as I hope to collect data and then proceed by conducting statistical analysis. I will first look at evidence from Manitoba and Saskatchewan – provinces with a significantly large population of aboriginals – then compare them to the Canadian territories and see whether a relationship does exist between crime and education.

If there is evidence of correlation between the lack of educational access and crime rates, one can only hope that this study will grab the attention of governments to help implement ways for Canadian aboriginals to better access educational resources.”

**Alisha Chicoine, Economics** "The Financial Crisis of 2008 continues to impact macroeconomic policy decisions made by central banks at an international level. Will the crisis result in long term recessionary impacts that policy cannot abate? I intend to compare America's approach to policy with that of Eurozone countries, and investigate the reasons why countries like Greece, Portugal, Italy, Ireland and Spain are facing potentially extreme economic consequences despite their inclusion in the European Union. Through the use of financial econometrics, I aim to separate short term financial market shocks from long term permanent shocks on the macroeconomy. Furthermore, with the aid of previous periods of financial turmoil, I hope to shed light on the potentially persistent recession the world faces given the magnitude and scope of our recent credit crisis.”

**Brad Hackinen, Economics** "Cost-Benefit Analysis has become a popular tool for decision making, but it may have undesirable side effects. Last spring I built a simple a simulation of social decision making and experimented with a variety of decision rules. My results suggested that choosing Cost-Benefit Analysis as a general approach to policymaking could lead to an extremely unequal distribution of wealth. I intend to examine this effect more carefully in order to determine what exactly is causing the increase in inequality, what conditions are required for it to occur, and whether those conditions are common in real policymaking situations. I suspect the effect is robust,
substantial, and likely to occur in real-world situations. If my analysis supports this hypothesis, then I hope to consider what alternatives or improvements to Cost-Benefit Analysis might reduce this bias towards inequality."

**Samantha Taylor, Economics** "I would like to research the effect of micro-credit received by women on the use of contraception, and thus the fertility rate, in developing countries. Furthermore, I would like to look at intra-household relationships, specifically between husband and wife, and how this affects who controls how the loan is used, and the effects associated with male-dominated control versus female-dominated control.

Micro-credit given to women in developing countries are meant to give women economic opportunities outside of the household, and could possibly result in giving them more power within the household by giving them control over monetary funds. I am interested in how this increase in decision-making power for women can lead to an increase in living standards, not only as a result of the increase in economic activity, but as a result of lower fertility rates which allow the family’s funds to be spread less thinly. This can lead to better nutrition, increased health, and greater investment in human capital."

**Renee Jordan, Educational Psychology and Leadership Studies** "During the 2011-2012 academic year, I will be assisting Dr. McGhie-Richmond in her investigation of teacher-educator integration of technology into their instructional practices. This research project will identify and demonstrate effective professional learning and support for teacher educators, as well as explore instructional strategies that contribute to improved adoption and implementation of technology. I will be working with Dr. McGhie-Richmond as she collaborates and explores with interested faculty members the role of technology in transforming instructional practices."

**Stephanie Fulcher, Electrical and Computer Engineering** "Computer-based Multimedia instructional systems are ideal for e-Learning in many domains. For applications such as sport instruction, the central issue is to capture motions accurately and correctly for further processing. Many gesture capturing techniques, including light, video and motion tracking, are employed in commercial products, research systems, and the game industry. A tennis e-learning system is under study and being designed. To capture the motion of a tennis swing, the Nintendo Wii Remote, or Wiimote, is used as the input device. The Wiimote uses accelerometers and infrared detectors (together with the LED sensor bar) to sense the controller in the 3D space. The add-on MotionPlus attachment is capable of supplying three axes of orientation change (or angular velocity) through its built-in inertial sensing gyroscopes. The Wiimote provides a low-cost yet reasonably accurate means to capture motion or gesture data. The proposed research project examines the various issues associated with motion-sensing input data using the Wiimote: capturing,
cleansing, classification and clustering. Results from the classification and clustering of some basic tennis swings, and the subsequent swing matching and identification are investigated.”

**Mark Johnson, Electrical and Computer Engineering** "To implement important MATLAB modules in hardware using FPGAs. MATLAB is a high level language, so a hardware implementation of frequently used modules would produce significant speed improvements. Since MATLAB is used for both large problems and real-time processing, this speed-up has much utility, increasing the amount that can be done in real-time and decreasing the execution time for larger problems. Using FPGAs for the hardware side has many benefits, including flexibility, ease of testing and portability.”

**Cameron Butt, English** "The work that I have started in Dr. Ellerbeck’s “Shakespeare on Screen” class will lay the foundation for a research-intensive project on the tension between popular culture and Shakespeare’s language. I plan to research theories of film adaptation, with a particular focus on the consequences of altering or abandoning Shakespeare’s language.

In an effort to legitimize the cinema – initially considered a “low” form of entertainment – early film directors adapted Shakespeare to the screen, thereby ensuring that his works were accessible to the masses. His plays were box office hits as silent films, but the first Shakespeare “talkies” generally flopped, suggesting that audiences preferred Shakespeare without language. Apparently, the early modern tongue jarred the public ear, its diction and iambic rhythms archaic and out-of-style. Today, film directors still borrow Shakespeare’s themes, plots, and characters, but in re-writing or “translating” them for the audience, they rarely allow his original language to persist.

In a case study of these language transformations, my research will concentrate on film productions of *Henry V*. By analyzing films that maintain (Oliver, Branagh, Welles), alter (van Sant), or abandon (Atkinson/Curtis) Shakespeare’s words, I will investigate the interactions between text, language, and culture. The McPherson Library’s extensive collection of Shakespeare films and screenplays will provide most of the primary sources necessary for my research, and I will also examine film reviews from trade papers and newspapers.”

**Willow Falconer, English** "I propose to research the interplay between the works of illustrators and authors of children’s fiction during the Victorian and Edwardian periods. I will examine how contemporary illustrators engaged with authors’ material, the criteria by which they selected passages to highlight and complement, and how many of these collaborations produced—through these marriages of text and often historically derivative image—iconic images that have become synonymous with childhood for subsequent generations. I shall begin with the Victorian “Golden Age” of children’s literature by examining
eminent Victorian art critic John Ruskin's championing of illustrator Kate Greenaway, before moving on to research collaborations between such authors as Lewis Carroll and the highly regarded illustrator John Tenniel (the Alice books); my project will consider illustrated children's fiction produced until the period just prior to WWI, which saw Arthur Rackham’s illustrations for both J.M. Barrie (Peter Pan) and Kenneth Graham (The Wind in the Willows). I will explore the particular styles of various illustrators, analyse how vividly such illustrators evoke key passages from the texts, and discuss these images' influence in shaping attitudes towards children, the relatively new notion of “childhood,” and popular taste. Further, I hope to uncover less well-known collaborations and to examine how they fit into the canon of Children’s Literature alongside their more famous contemporaries.”

Megan Welsh, English "In the course of my Honours project for the Department of English and under the supervision of Dr. Richard Pickard, I will be investigating texts of what could be called ecological science fiction in the context of the North American West Coast, some of them set along the West Coast and others set by West Coast writers in alternative and unearthly worlds. With texts ranging in origin from the 1960s up to the early 2000s, I intend to examine the influence of place on both character and author and consider different human positions in different ecological systems, paying particular attention to what regional (West Coast) influences may be identified (or not) in the texts. Secondary sources will provide background in environmental criticism and cultural geography. In the second semester of this year, this project will continue in a study of and preparation of a paper focusing on Frank Herbert's novel of ecological science fiction, Dune.”

Chloe Donatelli, Environmental Studies "For this proposed research project, I would like to combine my interest in history and my experience as a local food activist in Victoria to undertake a study of the historical and contemporary Indigenous food producers and farmers on Southern Vancouver Island. Possible areas of focus for this project include the following: the Old Cowichan Indian Band Co-op, a 500 acre farm that produced food for many of the major grocery stores in the area from 1970-1980; The Heritage Food Co-op; Vancouver Island Campus Research Alliance; and the Vancouver Island Coastal Communities Indigenous Food Network - all organizations that have recently been active on food issues."

Michael Lenaghan, European Studies Program "Boasting many of the world leaders in sustainable development, particularly with regards to renewable energy, the European Union provides a poignant example of how governments can drive the transition towards a more 'Green' economy. I propose a comparative analysis of the primary factors (political, social, economic and geographic) which have enabled certain EU members states to distinguish themselves as regional and global leaders in the renewable energy
industry. In so doing, I aim to provide a developmental guideline for other EU member states and non-member states alike, seeking to transition their own energy systems towards renewable sources. In addition, I hope that this study can contribute to the formation of a new course on European Environmentalism within the University of Victoria’s European Studies Program.”

**Lisette Cheng, Exercise Science, Physical and Health Education** "This is a cross-sectional and longitudinal study of elementary school age children’s physical activity and gross motor development. Our overarching aim is to describe children’s motor skills, perceptions of motor competence, physical activity participation and levels and body mass index, and to subsequently model the relationships between these factors. Of the 267 children recruited in year 1, 12 children have special needs. The data suggests these individuals possess significantly lower gross motor skills and perceptions of motor competence. Therefore, we endeavour to increase each child’s gross motor skills and perception of motor competence by presenting a unique intervention for each child."

**Michelle Cox, Exercise Science, Physical and Health Education** "Youth with special needs, especially those with an intellectual disability, have more severe cardio-metabolic risk factors than those who do not have an intellectual disability. Specifically, they tend to have higher levels of total fat mass, abdominal fat and fasting insulin and lower levels of fat free mass, bone mineral density, cardiovascular fitness, muscular strength and endurance and physical activity. This summer, as a co-operative education student, I will be designing a program with my supervisor to enhance the health and independence of youth with intellectual and developmental disabilities (IDD). The aim of the project is to foster responsible, positive attitudes toward healthy behaviours and to develop tangible skills for physical activity and healthy eating. During the late summer as well as the 2011-12 winter terms, youth with IDD will participate in the program twice per week. My proposed research project is to formatively and summatively evaluate the impact of the program on these youth. In particular, I will examine use of the program materials, physical activity participation of youth with IDD and program satisfaction. These evaluations will identify effective program elements as well as areas in need of adaptation."

**Sarah Monsees, Exercise Science, Physical and Health Education** "Spasticity is a condition that affects approximately 20% of people who have experienced a stroke. If this condition is not well-managed, it can cause pain, negatively affect mobility, physical activity and quality of life, increase dependent behaviour and contribute to secondary health conditions and mortality. Botulinum Toxin A, bracing and physiotherapy have all been used as treatments for spasticity. The current study will be unique in empirically examining the combination of the three treatments. The sample
consists of thirty post-stroke participants who are experiencing spasticity in their lower limbs and were scheduled to receive the three above stated treatments independent of this study. The patients were measured before treatment, are being continuously measured throughout a 12 month period, and will be measured after the treatment is finished. Variables that are measured include active and passive range of motion of knee and ankle, spatiotemporal gait parameters, spasticity, mobility with Timed Get-Up-and-Go, fall recall, physical activity, pain and perceived quality of life. I propose to contribute to this collaborative research by collecting and analysing data."

**Andrew Robb, Exercise Science, Physical and Health Education** "I am conducting a study on concussion diagnosis and management among physicians in Canada. Concussion is a very complex injury affecting in excess of 32 000 Canadians each year. Despite physicians being considered by many to be the experts on concussion management, studies have suggested that available guidelines for return to play are rarely used, and many primary care physicians are unaware of concussion management guidelines. Studies have also shown that when doctors did implement existing guidelines, many did so inappropriately.

My study will use an online survey to study the diagnosis and management tools physicians are using, as well as what protocol they are following and compare this to the most recent recommendations in concussion literature. I will help educate all physicians taking part in the survey by sending them the most recent guidelines on concussion diagnosis and management. No known studies of this nature have taken place in Canada, and the only known study taking place in the United States was in 2006. A similar study has also been conducted on athletic therapists in the United States in 2005."

**Gabrielle Berron-Styan, French** "Since the 1980s, literary works originating from Québec have constantly brought new narratives of identity to the stage. The dramatic texts and productions of Lebanese-Québécois playwright Wajdi Mouawad are no exception. This research project will focus on the notion of identity in the first three instalments of Wajdi Mouadwad’s tetralogy *Le Sang des promesses – Littoral, Incendies and Forêts*. In these plays, Mouawad explores the notion of identity as it is tied to memory, trauma, family roots, history and time. In Mouawad’s dramatic world, the protagonists travel through war, betrayal, suffering and love in order to keep the promises made to their parents. Throughout their journey, the characters struggle to find their origins and to establish a kind of confirmed identity. This study will explore the ways in which identity is displaced, destroyed and re-constructed in a world that is perpetually changing."

**Bernadette Perry, French** "Sing a lay to be remembered: At the beginnings of medieval known literature in French, are many “lais”, some of them
attributed to Marie de France, written probably at the end of the 12th century, in Anglo-Normand England. These short poems read like short stories but the rhyme, the verse, and the mnemonics in the texts lead us to consider them as songs and oral testimonies rather than the written word that they have become in our culture. I propose to study the oral characteristics of these texts (poetic devices, repetitions, links with folk tales) and compare them to contemporary similar narratives, as found in popular songs. What we now know as “literary history” has actually had a different dissemination in the past oral cultures. I intend to bring back into academic reading what has been excluded as “popular” or non-scholarly matter: the memorization of formulas and melodies as a support for a memorization and transmission of narratives. My corpus will be the 12th century so-called “Breton” lais and modern narrative songs of French popular culture. This topic relates also to teaching and I plan to enlarge it into a Master’s project on mnemonics, collective memory and popular poetry.”

Kira Hoffman, Geography  "I hope to describe historical changes in the extent and thickness of Bromley Glacier from historical records, maps and aerial photography as well as describe Holocene behaviour of Bromley Glacier using dendroglaciologic research techniques to date advance and retreat intervals. Some of the earliest quantitative glaciological investigations undertaken in the northern British Columbia Coast Mountains are credited to Richard McConnell and his field assistant A.O. Hayes between 1910 and 1911. As part of their mineral exploration fieldwork, McConnell and Hayes made repeated visits to the Bromley Glacier, a large valley glacier spilling from the Cambria icefield into the Bitter Creek valley just east of Stewart, B.C. They placed four stakes at intervals across the glacier 2 km above the snout in September 1910 and completed resurveys in June and August of 1911, which demonstrated that glacier flow totalled 90 meters per day. The primary goal of my research is to document the 100 years of glaciological change since the last survey in 1911. I also hope to utilize the 100-year climate record from nearby Stewart, B.C to assess the historical behaviour of the Bromley Glacier.”

Kimberly House, Geography  "For my research I will examine the relationships between parks in British Columbia and bird species richness. Previous studies have indicated that species richness is strongly correlated with latitudinal gradient. Coupled with individual bird metrics like occurrence and abundance, and other bird community metrics such as evenness, density, and diversity, species richness can provide significant insight into the value of an area as bird habitat.

I will use data available from the breeding bird atlas of B.C., a source of provisional data collected by volunteers throughout the province. Several hypotheses will be examined, and spatially analyzed using geographic
information systems (GIS).

The following hypotheses are among those which will be verified:

- That smaller, southern parks in populated regions yield a higher bird species richness
- That coastal regions, important stops for migratory birds, have higher species richness
- That parks which are at risk in British Columbia may also support a higher species richness

I will conduct the research for this project by examining the species richness within each individual park, as well as looking at the difference between species richness throughout the entire park system compared with that in unprotected areas. Special attention will be given to bird species which are listed by SARA or COSEWIC. Characteristics of the parks which yielded higher or lower values of species richness will be further examined to identify potential indicators.”

**Malcolm MacLean, Geography** "Under the direction of Cameron Owens (Geography), I am undertaking a research project in an area of personal interest and great importance with respect to governance in BC. I intend to investigate the significance of civic engagement in the creation and implementation of community plans grounded in a comparative study of carefully chosen cases in the province. The project involves an extensive literature review in the fields of urban geography, planning theory and policy studies supporting a participatory/community based research component. Engagement in planning is understood to include both formal mechanisms such as those facilitated by local government and informal mechanisms such as community-based mapping, NGO strategic planning and direct action / protests. The Jamie Cassels Undergraduate Research scholarship will provide the necessary resources to undertake a more significant and intensive approach to community-based research allowing me to consider a larger sample and to potentially host a focus group.”

**Alison Stockwell, Geography** "For my Directed Study in September, I will be researching the role of South American private protected areas in reconciling the needs of indigenous communities with conservation goals in ecologically sensitive areas. During field courses I took in Chile, I learned that private conservation initiatives spearheaded by International NGOs, small conservation organizations, and community groups are becoming more common in South America, especially in light of increasing development of ecotourism in the region.

Using historical data, current literature, and interviews, I will explore how the management and operation of a number of private protected areas interacts with local indigenous livelihoods, resource use, and inclusivity in conservation
initiatives. I will have specific concentration on three Chilean case studies: the Mapu Lahual Network, the Cani Sanctuario, and the Chahuin Venecia Reserve. Each of these protected areas has a local indigenous population that is to some degree involved in the management of the protected area, and each is was established by different means: large NGO, small conservation organization, and community group. The research project may include other case studies as well, depending on the amount of literature available on other areas.

This project is a Directed Study, so affords me the opportunity to broaden my scope, and include study on the nature of private protected areas in the region, and how they are acquired, managed, and regulated in relation to local indigenous communities.

Rebecca Rogers, Germanic and Slavic Studies  "Our research will focus on the intense, though relatively brief, poetic and epistolary correspondence between three major Modernist poets: Rainer Maria Rilke, Marina Tsvetaeva and Boris Pasternak. Though concentrated largely within the summer of 1926, the creative, intellectual and emotional value of this passionate correspondence would continue to influence and inspire much of the poetry produced beyond this brief period. Of particular interest to us is how these three artists were able to overcome, through a transcendental conception of love, the insuperable physical barriers imposed by illness and revolution. With Rilke in Switzerland terminally ill of leukemia, Tsvetaeva in exile in France, and Pasternak remaining staunchly in Moscow, the reality of physical distance demanded that the three define their love in terms of an essentially non-physical intimacy. It is this unique concept of Orphic love within the tripartite Rilke-Tsvetaeva-Pasternak relationship which will be the central focus of our project."

Elizabeth Sharp, Germanic and Slavic Studies  "Professor Pnevmonidou is currently launching a project on the relation between Romantic science and Romantic aesthetics. The project we are proposing is related to both of these ideas: an ecocritical and feminist investigation of the significance of caves, mining and mineralogy in three Romantic texts: Novalis’s Heinrich von Ofterdingen, Tieck’s Runenberg, and E.T.A. Hoffmann’s Die Bergwerke zu Falun. The main thrust of the research would deal with the construction of the male poet’s identity and its connection to passages into mountains and caves, and how these locations are gendered into feminine spaces. The project will focus on the scientific theories that were emerging during the period and how especially modern geological theories influenced the concepts of poetic identity and feminized space. My own research will focus on the text of E.T.A. Hoffmann, and Professor Pnevmonidou’s will focus on the other two authors. In this way, we hope to learn from each other, create an effective dialogue, and co-author an article on a previously sparsely studied topic."
Charlotte Dawe, Greek and Roman Studies "The Quality of Mercy I propose to examine how various rulers of Ancient Rome from the 1st C BC to the 1st C AD used the virtue of clementia (mercy, forgiveness) in imperial propaganda. I will compare how clementia was admired as an abstract idea to how it was used in practice, from Julius Caesar’s styling himself as a leader merciful even to those who wished to kill him, to the famed mercilessness of Nero which prompted his tutor, Seneca the Younger, to write him a lengthy lecture on the subject of clemency and how it should be considered one of the most necessary virtues of a good ruler.

My ultimate goal is to determine whether the idea of clementia was used merely as a propaganda ploy by the Julio-Claudian rulers, or if it was sincerely practiced by some – and if the latter, then were those practitioners generally deemed successful rulers, or was Roman culture such that it could not truly be ruled with clementia?"

Melissa Mann, Greek and Roman Studies "The Minoans (people of Bronze Age Crete) and Mycenaeans (people of the Bronze Age Greek mainland) had different languages, customs, religions, and artistic styles. Some scholars group these cultures together, ignoring or minimizing the cultural differences between these two distinct peoples. My research will focus on the differences between Minoan and Mycenaean material remains, and on the differences in cultural practices that can be determined from this evidence. Changes in material culture over the Bronze Age will also indicate the influence that these two cultures had on one another."

Ana Wagner, Greek and Roman Studies "The purpose of my research will be to examine Bronze Age Aegean chronology by analyzing Minoan, Egyptian, Mycenaean and Cycladic relative chronologies and evaluating how they are interrelated to each other and to absolute dates. I will focus on the eruption of the volcano on Thera, which preserved the Late Bronze Age site of Akrotiri.

The original excavation on Akrotiri in the 1970s placed the date of the eruption circa 1450 B.C.E. In the Minoan relative chronology, based on ceramic sequences mainly from Crete, the eruption was dated to LM IA period due to the distinctive style of the ceramics. When this chronology was compared to the firmly dated chronologies of Egypt and Mesopotamia, the relative and absolute dates were accepted.

In recent years, however, the date has been contested by scientific evidence using dendrochronology and radiocarbon dating. The scientific data provided a new date for the eruption of 1625 B.C.E. Although the absolute date is contested, scholars continue to agree on the LM IA date for the eruption in the relative chronology.

In addition to the prominent Egyptian and Minoan evidence, my project will
also examine Cycladic and Mycenaean evidence. Although much research has been done on this subject, new evidence and data is continuously emerging. My research will include the most recent evidence from both conventional and scientific dating methods in order to establish a link between the relative chronologies of the Aegean, to reconcile the LM IA relative date with an absolute date.”

Emma Gerlach, Hispanic and Italian Studies "My project would seek to analyse the influence of the British writer Virginia Woolf on the literary production of Carmen Martín Gaite, a prolific writer, translator and essayist operating in Spain during and after the Franco regime. In my research, I am particularly interested in her own translation of *To the Lighthouse* in terms of stylistic and syntactic choices. Her work as translator also influences her own literary production creating a rich intertext. The first part of the project will be a detailed analysis of the translation, the second, will employ the ensuing database (created for a general evaluation of the project) to draw significant conclusions on her work.”

Andrea Meyes, Hispanic and Italian Studies "Currently working towards completing a double major in the department of Hispanic and Italian Studies, I am interested in working on a project that would help broaden my knowledge in both fields. This would be possible by exploring the literary representations present in the works of Italian writer Massimo Carlotto of the Argentinean dictatorship. Specifically, I will analyze his novel *Le irriverenti, Buenos Aires Horror Tour*, which explores the history of the “desaparecidos” from the point of view of a visiting Italian in Buenos Aires. His short story “Il giorno in cui Gabriel scopri di chiamarsi Miguel Angel” (The day in which Gabriel discovered he was called Miguel Angel), tells the story of a political prisoner’s son who, in time, confronts his past and that of his adoptive parents. Bibliographical research on Argentinean history, politics, and literature will complement my study of Carlotto’s texts.”

Shiraz Higgins, History "Over the next year, I will be researching and writing a thesis on U.S.-Liberian relations in the 1980s. In doing so, I will also be examining the long relationship between the two countries which began with the founding of Liberia in 1821 by the American Colonization Society. My research will aim to provide an account of the nature of the Reagan Administration’s relationship with Liberia’s military dictator, Samuel K. Doe, who came to power through a coup in April of 1980. Studying this topic is of particular importance given the recent instability in Liberia (the civil war of the 1990s) and complete deterioration of U.S.-Liberian relations. Examining this time of political change in Liberia and the role of the United States may provide a better understanding as to why the country that was once heralded as a successful American colonial venture has descended into war and instability in the past two decades. The Jamie Cassels Undergraduate Research Award will
allow me to spend more time on my research by alleviating financial pressure as well as facilitating a possible research trip to archives in Washington D.C., which might be imperative to the thesis given the little that has been written on the subject."

**Bryan Smith, History** "For the Jamie Cassels Undergraduate Research Project, I intend to expand upon the third year Honours Thesis which I have recently completed. This thesis focused on tactical changes in the eighteenth-century French army. Specifically, I examined the *ordre profond*, a deep order tactical formation inspired by the classical *phalanx*. In my paper, I argued that this *ordre* was neither revolutionary in purpose nor in practice. I examined the development, implementation and shortcomings of the *ordre* in order to demonstrate that, despite its celebrated position in military history, the *ordre profond* was in no way an inherently successful system and contributed very little to the success of revolutionary armies. I now hope to continue this research and probe the historiography of the Revolutionary Wars in order to determine why the *ordre profond* enjoyed the positive reputation and influence which it did throughout the 19th century. This will involve close readings of the works of military theoreticians such as Clausewitz, Jomini and Ardant du Piqc. I intend to test the hypothesis that by relying on *reglements* and theoretical works – instead of oral histories, for example – later tacticians took from the Revolutionary Wars a much different version of the *ordre profond* than what was reality. Through this historiographic examination, I hope to pinpoint how this problem arose and suggest both new ways of approaching the military texts of the eighteenth and nineteenth centuries as well as alternative sources for future military histories."

**David Swanson, History** "The proposed project functions as my Honour’s thesis, which is aimed at researching and understanding aspects of the Habsburg Monarchy from Leopold II to Franz Joseph. In particular, I aim to research changes in Habsburg diplomacy from 1792-1815, in an effort to better understand the foundation of the Metternichian foreign policy discourses which dominated Habsburg diplomacy until its dissolution. At the moment, I am leaning towards analysing the origins of Austria’s primary foreign policy doctrine of the 19th Century – which could be labelled “conservative-legalism”, in the aftermath of Kaunitz and in the experience of the Napoleonic Wars. “Conservative-legalism” was in practice a strict adherence to treaty law, an emphasis on traditional, dynastic diplomacy and a proactive (even interventionist) maintenance of the international status quo. My project may also likely focus especially on Austrian policy and concerns in the Italian peninsula in the late 1790s and/or its final declaration of war in 1813; it will be tailored towards any available primary documents. I would also like to explore the options of travelling to the Wirth Institute in Edmonton – one of the largest collections of Habsburg materials in North America and the largest in Canada - in search of more materials. This project aims to fill a sizable gap in English
literature on Habsburg foreign policy during the Napoleonic Wars, which is key both to understanding 19th c. Austrian policy and the development of European diplomacy until the Great War and the dissolution of Austria-Hungary in 1918.”

**Simon Teague, History** "Between November 1963 and July 1965, senior policymakers in the presidential administration of Lyndon B. Johnson discussed and debated the direction which US policy in Vietnam should take. This process led to the commitment of US troops to a ground war in Southeast Asia, effectively Americanizing that conflict. For the thesis component of the History Honours Program, I intend to examine how the framework and assumptions of Cold War logic and the pressures of domestic politics and ambition culminated in this decision. Long-term US national security definitions and policy and contemporary understandings of liberal consensus politics for senior US policymakers of the period are of central interest to this project. It is concerned with exploring the development and application of a particular worldview to the complexities of the situation in Vietnam. The funds associated with this scholarship will enable me to have access to the documentary record held at the Lyndon Baines Johnson Presidential Library in Austin, Texas. Access to the collections held here would provide an opportunity to engage with the full scope of governmental documents, correspondence and the papers of key policymakers in a manner that would otherwise be impossible."

**Ryan Church, History in Art** "My focus here is to look at medical print objects during the Early Modern period in Italy, while focusing on the theme of profiteering and commercialization. I will look at how frontispieces gave meaning to these books, and helped the commercialization of medicine during this time. Epidemics, and how they drove the production of these books, their quality and value, content and common themes, will be explored. I will also look at the College of Physicians and Surgeons to see what control they had over production, as they did with the licensing of charlatans – as this could be an easy way for the public to bypass the college all together, and their profit stream. I will also look at how these books gave special power to everyday objects – a horses’ hoof is no longer just a horses’ hoof when combined with other objects – it has the ability to cure the plague. This special relationship that objects can bestow on other objects will be explored within the medical realm, and we will see how object, image, and text come together to catalyze the commercialization of medicine during this period."

**Regan Shrumm, History in Art** "As art museums and galleries acquire more artifacts, many items are simply put into storage. This practice results in limiting public access to cultural items since frequently museums choose to display the most popular forms of art, such as oil paintings or sculptures. Unfortunately, this imbalance leads to the lack of recognition and knowledge of other forms of art, which may go unexplored."
In 1990, Bruce and Dorothy Brown donated a set of about twenty Russian icons and other religious artifacts to the University of Victoria’s Maltwood Gallery. These artifacts in the gallery’s collection have very little information on them, and some items lack an accompanying photograph. When Bruce and Dorothy generously bequeathed their icon collection, they hoped to “expose students to documents of historic interest or beauty” (http://library.uvic.ca/spcoll/guides/sc017.html). However, the only way to “expose” the icons is by making the information readily available to the public.

My proposed research project is to catalogue and analyze the Maltwood Gallery’s collection of Russian icons. I will document the general physical appearance of each icon, while also examining the greater context of the significance and function of these icons in Russian society during the 18th and 19th centuries. I will also investigate how these Russian icons continue earlier Byzantine visual traditions. By cataloguing the objects and updating the online information, the public will have the opportunity to learn about these important religious items from pre-revolutionary Russian culture.”

Brittney O’Neill, Linguistics "I plan to conduct an empirical study designed to examine variations in genre between the email communication of English-as-a-first and English-as-an-additional-language speakers. The investigation will involve detailed and comparative textual analysis, with an emphasis on identifying textual features related to various communicative situations.”

Marcel Celaya, Mathematics and Statistics "In his 2004 Master's thesis, Kelly Choo proved that the proper colourings of a given graph that use "enough" colours can be cyclically listed in Gray Code order, meaning that colourings which are consecutive in the listing -- including the last and the first -- differ only in the colour assigned to precisely one vertex. This is equivalent to the existence of a Hamilton cycle in a suitably defined graph whose vertices correspond to the colourings. The precise value of `enough" is known for various classes of graphs including complete graphs, trees, and cycles; otherwise only a good upper bound is known.

This project has three phases: (1) learn more about combinatorial generation algorithms than is taught in Math 322 and CSc 425. This phase is expected to take the first quarter of the time and be revisited as needed through the project; (2) apply these techniques, and undoubtedly some new methods, to find efficient algorithms for producing the listing of the proper colourings of trees and of cycles mentioned above. Efficiency of the algorithms will be established theoretically using techniques learned in CSc 425 and/or phase 1 and also measured practically by testing the programs that will be written in this phase. Phase 2 is expected to take about half of the time; and (3) write up the results in a format suitable for presentation at the Research Fair and for publication."
**Takaaki Ichu, Mathematics and Statistics** "The objective of our research project is to analyze and develop statistical methods for metabolomics mass spectrometry data. Metabolomics is the systematic study of metabolites, intermediates and products of metabolism. Determination of metabolites will allow scientists to search for biomarkers, indicators of disease progression or response to therapeutic interventions. However, the complex nature of metabolomics mass spectrometry data causes such obstacles as missing data, high dimensionality and multiple testing problems. Development of specific methods for treating such complex data will facilitate progress in metabolomics research. We will collaborate with Dr. Caren Helbing and Dr. Christoph Borchers of the Department of Biochemistry and Microbiology to obtain data and to gain interdisciplinary insights into the development of statistical methods for metabolomics mass spectrometry data."

**Jesse Short-Gershman, Mathematics and Statistics** "I propose to continue research on one of three topics that I have worked on during my USRA in Summer 2011, namely existence results for adesigns, nonexistence results for tight designs, and the existence and linear algebraic properties of various classes of hypercubes with integer entries. Peter Dukes and I are the co-authors of a completed paper in the first topic and a nearly completed paper in the second topic, each of which is 12 pages. I may instead find a new topic in the field of Algebraic Combinatorics, possibly related to Association Schemes, or a problem stemming from a topic in the Combinatorial Algorithms course I am taking this Fall (CSC 482A) or the Applied Algebra Course I am taking in January with Peter Dukes (MATH 413). I am hoping to find a new problem whose solution will substantially benefit from the implementation of a novel algorithm in an imperative programming language."

**Alan Magni, Mechanical Engineering** "To develop a trailer based small wind turbine test rig. This project will include a trade analysis between stock and custom trailer options, evaluation of instrumentation requirements, design/ manufacture/ assembly as required, and testing / post processing of data. The goal of this project is a mobile testing rig used to evaluate innovative turbine rotor blade prototypes."

**Stephanie Morrison, Mechanical Engineering** "During my workterm I will be doing research with Professor Stephanie Willerth. I will be investigating the behaviour of induced pluripotent stem (iPS) cells inside 3D biomaterial scaffolds. IPS cells provide an alternative to using embryonic stem cells and they can differentiate into any cell type found in the body, including neural phenotypes. These cells are derived from adult somatic cells via transfection of certain stem-cell associated genes that restore pluripotency. The scaffolds will create a microenvironment in which the cells can grow and replicate in a desired configuration. They will cause the cells to form a more organized structure, similar to the tissue found in the spinal cord."
During the course of my research, I will investigate the effect of various 3D scaffolds on the growth and differentiation of the iPS cells as well as how to manipulate the cells in a 3D environment.”

Maxym Rukosuyev, Mechanical Engineering "The proposed research project will consist of the design, testing, and evaluation of the ultrasonic based nebulizer system for nanoparticle deposition. Such a system should improve the quality and uniformity of the resulting coatings, thus achieving their superior optical, mechanical, and other characteristics.

The field of application of such coatings is quite extensive: from ordinary window glass to high-precision optical components, solar panels, and electronic devices. As it is an ongoing project, some work on the design of the system has already been done in the previous two terms. However, further design improvements, testing, and evaluation of the resulting coating should be performed to conclusively show advantages of the proposed system. In addition, this research will also explore plasma-assisted coating based on the same system.”

Kevin Bushell, Medical Sciences "Brain Derived Neurotrophic factor (BDNF) is an important signaling molecule in the brain that participates in neuronal growth and communication. In a model of fetal alcohol spectrum disorders (FASD) BDNF is known to be downregulated. FASD is also associated with deficits in learning and memory, behavioural impairments and increased oxidative stress. Omega-3 fatty acids are essential fatty acids that also play an important role in the brain, and may have neuroprotective properties in a rodent model of FASD. Omega-3 fatty acids may be neuroprotective due to their ability to increase BDNF. This research project will be carried out too determine whether omega-3 supplementation from birth until adulthood following prenatal ethanol exposure is able to increase BDNF in the hippocampus. The hippocampus has been chosen due to the major role it plays in learning and memory.”

Courtney Burrell, Medieval Studies "Alfar (elves in Old Norse) are mythological beings which, compared to gods and giants, make only a limited appearance in Old Norse literature and poetry. The alfar, however, do appear in several important Old Icelandic texts including the Prose Edda by Snorri Sturluson, the Poetic Edda, as well as in Icelandic sagas. The huldufolk ("hidden people" or elves) in Icelandic folklore originate from Norse mythology and these Old Icelandic sources, as do other elves in folklore traditions in Scandinavia and the United Kingdom. I will analyze specific characteristics of the huldufolk which originate from the Old Norse alfar and discuss the differences between the two which may have been influenced from folklore traditions from other countries in the later Middle Ages and early-modern period. I will specifically discuss the alfar's association with fertility and their
human characteristics in Old Norse sources in relation to the huldufolk. Then I will discuss the "hidden nature" of the huldufolk, their relation to the Icelandic environment, and the Christian influence behind huldufolk folktales. Through discussing these characteristics and themes, I will examine to what extent the modern Icelandic huldufolk are indeed direct representatives of the alfar in Norse mythology. In order to complete this study, the use of primary sources concerning the alfar will be pertinent along with researching the first appearance of the huldufolk within Icelandic folklore and the characteristics of the huldufolk in modern folklore."

**Kelly Ditmars, Medieval Studies** "Medieval Spanish Translators and their Methods Toledo in the Middle Ages became a centre of translation where Muslim, Christian and Jewish scholars worked together. This centre of translation or school went through two differentiated periods. The first was led by Archbishop Raymond of Toledo in the twelfth century, who promoted the translation of philosophical and religious works, mainly from classical Arabic into Latin. The second - and the focus of this study - was overseen by King Alfonso X of Castile (r. 1252-84) during the thirteenth century. Alfonso X began a period of translation that no longer targeted Latin as the final language, but a revised version of Castilian, the early foundation of modern Spanish.

Translation methods evolved under the direction of Alfonso X. Earlier translation methods in the Toledo school involved a native Arabic speaker verbally communicating the contents of the text to a scholar who would then dictate its Latin equivalent to a scribe who in turn wrote down the translated text. The new methodology involved a translator with proven expertise in several languages, and a scribe who wrote down the Spanish version, whose work was later reviewed by one or several editors.

This research project will examine the translation methods practiced by the Toledo translators under Alfonso X. Through an examination of primary texts in Spanish as well as texts in translation, aided by secondary scholarly sources, an attempt at understanding the methods of these scholars will be undertaken."

**Thor Kell, Music** "A three-dimensional control interface and composition, for vibraphone, Microsoft Kinect and Max/MSP. The project will examine percussion techniques and gesture tracking to produce an interface that allows for unique and dramatic audio processing effects to be controlled by gestures that are within the remit of a typical percussion performance. For example, shaking the mallet slightly after striking a note might impart vibrato to the sound, whereas raising both mallets after finishing a phrase might impart a delay to the sound.

The Microsoft Kinect is an infrared computer vision system that creates a
three-dimensional mapping of whatever space it is viewing. This data can be processed to provide a skeletal mapping of an individual, eg. a percussionist, and thus a method for tracking gestures. This allows for research into and rapid prototyping of control systems that do not remove the percussionist from the flow of performance, while allowing them to augment and effect their performance in new ways.

Max/MSP will be used to drive this augmentation. This software provides a flexible system for altering and effecting the audio produced by the vibraphone. The video component of Max/MSP, Jitter, will be used to create an accompanying visualization of the composition, which will under the control of the player during the performance. The final presentation will include a video in addition to a paper / poster.

This piece, and the research around it and the interface, will form an important part of my preparations and portfolio for graduate work.”

**Stefan Maier, Music** "Critical Implications of Spatial considerations in Monteverdi, Ives, Stockhausen, Kurtag and Reich Using Edward Soja’s concept of Thirdspace, Michel Foucault’s concept of Heterotopia and Henri Lefebvre’s spatial trialetics as starting points, I intend on giving an in-depth analysis of different treatments of space in Monteverdi’s Vespers (1610), Ives‘ The Unanswered Question, Stockhausen’s Gruppen, Kurtag’s Quasi una Fantasia, and Riech’s City Life. Rather than focusing on how each of the aforementioned composers use space as a compositional parameter, I will be focusing on the spatial implications of each piece – I am more interested in the spatial model that each composer adopts and what these models communicate to the listener in terms of critique. The research will give foundation for a paper outlining the author’s use of space through sampled sound in the author’s composition East Hastings, and how it attempts to create an Other space engaged in a critical, politically-driven social discourse.”

**Dominique Ryser, Music** "I wish to expose people to the historic Portuguese composer, painter and poet, Alfredo Keil. I propose to create a score and a recording of all or part of Alfredo Keil’s A Serrana, a Portuguese opera written in 1899. This opera is significant to the Portuguese community because it was the first opera ever published in Portuguese. There is one version available online, which is in the public domain, but it is inferior in quality and is insufficient for a musician to play from. I would transcribe this into a digital format, create program notes and a synopsis for this opera as well as a translation into English for easier consumption by a non-Portuguese audience. UVic does not have any material from this composer and, when completed, it would most likely be unique in North America. Any performance, in whole or in part, created at UVic would also be a Canadian premiere and possibly a North American premiere. I believe this opera is important to the Portuguese
community in Victoria and in Canada as a whole. After all, Alfredo Keil composed the Portuguese national anthem which, before it was named a national anthem, was a marching song for the Portuguese republican rebellion of 1891. A hard copy of the score and recording of *A Serrana* will be donated to the UVic McPherson library."

**Melissa Buchanan, Nursing** "I will be working with Dr. Lenora Marcellus (School of Nursing), one other nursing student and a Vancouver Island Health Authority interdisciplinary team on a research project about oral health during pregnancy and the relationship between periodontal disease and prematurity. Our team partners external to VIHA include the First Nations and Inuit Health Branch, Perinatal Services BC, and the UBC Faculty of Dentistry. This will be the second phase of this research project. The research team has already completed a literature review and analysis of perinatal data related to prematurity for Vancouver Island. In our project we will be developing a survey about women’s oral health care practices before and during pregnancy and their access to primary dental health services. We will be administering the survey to women who have recently given birth and are receiving services in the postpartum unit at the Victoria General Hospital. Following analysis we will be sharing our results with perinatal and public health teams within VIHA and the province. As time permits, we will continue to work with the team as they prepare the third phase of the project which will be developing and conducting a survey with obstetrical and dental health professionals about their understanding of best practice for oral health care during pregnancy. The results from these studies will inform development of clinical recommendations for oral health during pregnancy."

**Cherie Geering Curry, Nursing** "I will be working with Dr. Lenora Marcellus (School of Nursing), one other nursing student, and a Vancouver Island Health Authority interdisciplinary team on a research project about oral health during pregnancy and the relationship between periodontal disease and prematurity. Our team partners external to VIHA include the First Nations and Inuit Health Branch, Perinatal Services BC, and the UBC Faculty of Dentistry. This will be the second phase of this research project. The research team has already completed a literature review and analysis of perinatal data related to prematurity for Vancouver Island. In our project we will be developing a survey about women’s oral health care practices before and during pregnancy and their access to primary dental health services. We will be administering the survey to women who have recently given birth and are receiving services in the postpartum unit at the Victoria General Hospital. Following analysis we will be sharing our results with perinatal and public health teams within VIHA and the province. As time permits, we will continue to work with the team as they prepare the third phase of the project which will be developing and conducting a survey with obstetrical and dental health professionals about their understanding of best practice for oral health care during pregnancy. The
results from these studies will inform development of clinical recommendations for oral health during pregnancy."

**Elise May Farand, Pacific and Asian Studies** "Within this research project I will focus on the role of Japanese graphic and animated media as a significant part of Japanese society. Through the artistic phenomena of anime and manga, I will research what they are able to accomplish through their specific narrative style. I plan to examine the themes present in mainstream anime and manga using literary and cultural theories. I will look at the development of anime and manga in modern Japanese history alongside the mentality of people, and the significance of such media in society. I hope to discover how manga represents society while being fiction, and why it is an effective method of storytelling. While investigating common storylines and nuances used by characters in a selection of samples, I will look in depth at implications of characters’ behaviour. Further, by looking at a variety of different genres, I plan to analyze the way the language, culture, and ideals of Japan are portrayed in Japanese anime and manga."

**Shaun Kellett-Lemon, Pacific and Asian Studies** "This project is fundamentally concerned with representations of international relations. It specifically deals with the post-colonial relationships between Japan, Taiwan, China, and Korea, and the ways in which these historical relationships inform and influence contemporary works of narrative art. This project will create a context to facilitate the analysis and interpretation of works of narrative art (i.e., narrative film) from each former Japanese colony, to suggest that these works not only respond to the historical situations of colonialism, but insist on keeping those situations alive in the minds of their audiences for particular, political purposes. In this way, this project will underscore the role of popular/commercial film as a tool for popular, political propaganda."

**Erin Lofting, Pacific and Asian Studies** "Terayama Shuji was a prolific and influential avant-garde Japanese artist whose works included: photography, film, poetry, and theatre. His name remains well-known in Japan today, and he has recently begun to receive considerable attention from English-speaking scholars. However, much of his work remains untranslated and thus inaccessible to a non-Japanese-speaking audience.

Terayama’s works are simultaneously fascinating and challenging; his themes are dark, his texts dense, and his allusions often obscure. Nevertheless, Steven C. Ridgely has identified an important element of Terayama’s work, that he is a pastiche artist who freely borrows images and ideas from a variety of sources. I believe that recognizing this aspect of Terayama’s work is crucial towards gaining a better understanding of it.

Among Terayama’s earliest works are a number of radio plays, none of which, to my knowledge, have been translated into English. However, even a brief
glance at just the titles of these plays strongly suggests that they use images and explore themes which remained important to Terayama throughout his career. Under the supervision of Dr. Cody Poulton, I would like to translate one or several of Terayama’s radio plays, and to analyze them with a focus on how themes and images contained within them reappear and evolve in Terayama’s later works. In other words, I would like to study, and to make it possible to study, how Terayama’s later stage plays might be viewed a pastiche of his earlier radio ones. I believe that this would be a fascinating and rewarding project, an important step towards reaching my career goals, and also of benefit to further study of this important literary figure.”

Jonathan Baron, Philosophy "My research project will focus on a question which comes at the nexus of philosophy and economics, or more precisely at the nexus of ethics and markets. We participate in markets all the time, including every time we buy an apple or pay for a haircut. For this project I am interested in a less benign sort, specifically markets which are controversial for ethical reasons. These include markets for organs, recreational drugs, and reproductive labour.

Such markets raise important, and pressing, ethical questions. Consider, for example, some of the issues surrounding the sale of human kidneys. Given that many people in need of kidney transplants continue to die, the creation of a market for kidneys could save many lives. But would the lives saved justify the practice? What if the supply of kidneys comes mostly from the most desperate and disadvantaged among us, from those who feel compelled to sell their organs in order to pay the bills? Is it responsible to allow people to make such decisions?

My aim is to closely examine a variety of controversial markets, and weigh the arguments both for and against them. I am interested in both the philosophical and economic perspectives, and will therefore consider, and present, a variety of arguments drawn from both disciplines. I hope this project will foster debate and reflection on the ethics of markets, and perhaps more fundamental questions about the kind of society we want to live in."

Megan Hyska, Philosophy "It has been shown that “novel” metaphors, metaphors for which there pre-exists no conventional interpretation, may be subject to vastly divergent interpretations. However, it seems plausible that contextual features within a text or body of utterance play a large role in delimiting the range of credible interpretations of a given novel metaphor, and the goal of my proposed inquiry is to engage with the literature regarding the mechanisms by which this delimitation might occur. I am also interested in the underlying question of how a novel metaphor comes to be comprehended at all, and by the phenomenon of metaphorical understanding itself.”

Bianca Torchia, Philosophy "
My project is centred on situating the Truth and Reconciliation Commission of Canada within the broader context of Truth and Reconciliation Commissions across the globe. I hope to discuss the ways in which the non-transitional use of transitional justice is useful in the Canadian context. Though my primary focus is to address the challenges faced by TRCs. I am particularly interested in the challenges faced by TRC officials in deciding on key narratives to include in their final report. I hope to address how the TRC balances stories of survival with more tragic accounts, and how the Canadian TRC will navigate the portrayal of the indigenous experience outside of an essentialized colonial narrative. The Truth and Reconciliation Commission of Canada is on its second year of a five-year mandate, and has not yet completed its public report. I turn to past TRCs, from South African to Guatemalan, in order to discuss the role of storytelling in TRC reports.”

**Trystyn Berg, Physics and Astronomy** "Damped Lyman alpha (DLA) galaxies can be used to probe the evolution of galaxy populations. Using high resolution spectra obtained for ~10 of these objects, chemical abundance measurements will be gathered. Of the chemical species of interest, several of them are rarely detected elements outside of the Local Group (such as B, Ga, Ge, Sn and Pb). These observations should provide insight into understanding nucleosynthetic processes in the galactic environment by obtaining star formation rates, and the relative number of low, intermediate and high mass stars within the galaxies of interest.

This project would involve using previously developed software to identify and measure the column density of a specified list of carefully chosen absorption lines. This will be repeated for all the objects of interest. Some of these objects may require extra data reduction prior to determining the chemical abundances. Once completed, an analysis of the results will be carried out to study the stellar population within these DLA systems.”

**Brendan Thorn, Physics and Astronomy** "Under the supervision of Dr. Venn, I plan to conduct an analysis of the chemistry and atmospheres of the outer halo globular cluster Palomar 15. Palomar 15 is described as an enigmatic globular cluster, amongst the most distant and least studied GC’s in our galaxy. Determining a detailed chemistry for the cluster, namely [$\alpha$/Fe] and [Fe/H] ratios, is integral to increasing our understanding of the evolution of the Milky Way’s outer halo.1 For example, should the Palomar 15 cluster have an observed [$\alpha$/Fe] ratio lower than comparable inner GC’s, it is likely that the exterior region of the galaxy originated externally from dissolved dwarf galaxies.2

Photometric data was obtained from the Ultraviolet and Visual Echelle Spectograph at the VLT and from the Hubble Space Telescope after observation of four target red giant stars with known radial velocities, by Dr.
Venn and colleagues.1 This data was reduced to one dimensional flux versus wavelength spectra by Anna Delahaye, a former Astr 429B student, and will be my primary source of data. Through derivation of α-element (ie. elements formed by alpha particle fusion – Mg, Si, Ca, Ti), H and Fe abundances, as well as the ratios previously outlined, an in-depth comparison can be conducted relative to similar, well studied inner galaxy objects. Further, atmospheric modelling may be performed on the target stars to provide additional information concerning the evolution and age of the cluster, which carries important and direct implications for the origin and age of the outer halo of our galaxy.


**Emily Barner, Political Science** "I will work with Dr. Aragon on a project related to the American Politics curriculum (313A and 313B) in the Department of Political Science. This award will offer me a mentoring opportunity and a chance to help catalogue new monographs and other instructional matter relevant to teaching the American Politics courses. The project will also allow me to become more familiar with this important sub-field and how American Politics intersects with Canadian Politics.

As a Political Science student, I look forward to this mentoring opportunity and to hone my research and writing skills prior to writing my honor’s thesis.”

**Russell Claus, Political Science** "This project studies BC’s occupational health and safety (OHS) regime as it affects sylvicultural operations in the past decade. It conducts and analyzes elite and worker interviews with those directly involved with BC sylvicultural operations and their regulation by state and trade association organizations. These will be semi-structured qualitative interviews conducted by telephone or face-to-face, with limited guarantees of confidentiality (no names, no identifying elements), within the limits of the small tightly-knit nature of the industry. Interviewees will be recruited by snow-balling techniques based on publicly available contact information for people working in, and regulating, the sector, and by snowballing techniques starting from these information sources and personal networks. It emphasizes, in particular, problems related to implementation and enforcement of provincial OHS regulations in a working environment that is difficult to monitor and is constantly changing. Two kinds of governance technique will be given particular consideration in interviews: media-intensive surveillance audit techniques and worker education schemes. The research project will complement a wider investigation of OHS issues in the forest sector, currently under investigation by Dr. Lawson. I have worked for five seasons in the sector, including four years in various positions as an
occupational first-aid attendant (level three qualifications). I have also served as a OHS committee member for tree planting camps. I was seriously injured myself while on the job, shortly before my return studies to UVIC.”

**Adrian Hartrick, Political Science** "Given that the international intervention in Libya is beginning to be hailed as a success by many governments and media sources, what are the implications for possible future interventions? How ‘successful’ was/is the Libyan intervention? What lessons does it hold for international responses to humanitarian crises in other cases such as Syria?

I will first examine the academic debates around the Responsibility to Protect (R2P), the 2005 Millennium Declaration’s *Protection Clause*, and related UN efforts. This will allow me to examine and define what a successful intervention entails and when intervention is necessary. I will highlight its differences between the R2P and traditional humanitarian intervention, and the affects of the current international order on its effectiveness. I will focus my particular attention on the interaction between factors at the international level (international law, interests of foreign states, the balance of power) and the internal situation of the state or region in which an intervention occurs.

I will then shift to the primary focus of my paper: how these dynamics of international intervention have interacted with the present situation in Libya. I will utilize academic sources to examine the composition of Libyan society (clan, tribe, ethnic, religious, linguistic, political, social, geographic, economic) and its recent history.

Using online primary sources like Libyan written blogs such as the Khadija Teri blog, I will attempt to gauge sentiments on the ground in Libya. I will also use media sources such as Aljazeera, and Reuters, as well as recent academic journal articles to examine the important events and actors in the Libyan intervention. Drawing conclusions based on these factors, I will make comparisons to the situation in other places, like Syria.”

**Geneva List, Political Science** " My project will compliment Dr. Clarke’s research regarding Sub-Saharan Africa’s regional production networks in the apparel industry. I intend to investigate post-Multi-Fiber Arrangement regional and international trade agreements in textiles and clothing. I am specifically interested in how international versus regional trade agreements advance or impede sustainable economic growth and employment shifts in developing countries. Intersecting with Dr. Clarke’s research, I will explore this question using Kenya and Mauritius as case studies. In tandem with this research I hope to learn from Dr. Clarke the essential skills required for a career in international development; this includes designing and developing projects, writing proposals, analysing fieldwork, and then using policy-oriented and other applied research for academic purposes, such as conference presentations and academic articles.”
Emma Fraser, Psychology "I am eager to investigate self-reported versus objectively measured pro-environmental behaviour in an organizational context. This will be accomplished in two studies. In the first study, the green or sustainable face of organizations, as they present themselves in advertisements and other public information, will be compared with their level of green and sustainable activities as measured by objective, independent criteria. In the second study, to understand the psychological dynamics of this, university student participants will take part in a role-playing scenario that puts them in charge of the image of a company. They will be given information about their company (some with environmentally-friendly practices, some with environmentally damaging practices, and some with mixed practices). Then they will respond to questions about their company's practices to learn whether the differences between self-reported versus objectively measured behaviours are affected by how positive or negative their environmental practices are, and which barriers to sustainability are most often cited as reasons for poor sustainability practices."

Lara Oberg, Psychology "Meditation is attracting increasing interest in terms of promoting our knowledge of the extent to which structural and functional neuro-plasticity is possible. Knowing better how meditation affects cognitive and emotional functioning promotes our understanding of healthy brains and the development of clinical interventions assisting people with cognitive and affective disorders. In this multi-dimensional study, I propose to obtain and analyze structural and functional MRI data from participants who are expert practitioners of somatically-based meditation. This data will be correlated with responses from self-report questionnaires as well as behavioural data generated from computerized tasks focusing on attention, executive function and decision-making processes."

Kassandra Plante, Psychology "The proposed research project aims at exploring the relationship between student’s past thought (i.e., nostalgia and rumination), homesickness, loneliness, and wellbeing. Previous research indicates that nostalgia acts as a psychological buffer for lonely individuals by increasing feelings of social connectedness (Sedikides et al.). Past research has also indicated distant past thoughts (nostalgic feelings) are positively related to wellbeing (Rush & Grouzet). In accordance with the past research, the present study aims at establishing a causal relationship between nostalgia/past thoughts and homesickness in university students. It is hypothesized that, like loneliness, homesickness could be mitigated by regularly induced nostalgic reverie, and as a result homesick individuals could experience increased wellbeing. Using a research protocol that combines experimental and longitudinal designs, this research project will be part of a larger research program (directed by Dr. Grouzet) on time perspective and wellbeing. I will be able to work in a research team and gain research experiences. This research will contribute to further understand student’s experiences during their
university years, and to eventually work towards investigating possible clinical intervention strategies for homesick students.”

Tina Quade, Psychology "The Physical Aging, Cognition and Health (P.A.C.H.) study is an ongoing study of lifespan development that assesses physiological capacity, functional status, cognition and health. Using data from P.A.C.H., I propose to examine how key indicators - including perceived stress, allostatic load and chronic health conditions (e.g. diabetes, cardiovascular disease and arthritis) - modify the biological aging process and the cognition and functional capacity with increasing age. My proposed hypotheses posit that an increase in perceived stress will be positively correlated with the presence of chronic health conditions, and that both factors will be linked to higher biological age as well as to impaired cognitive and functional status. My research will also focus on creating multivariate definitions of key risk factors (e.g., allostatic load as indicated by immune, metabolic and cardiovascular indicators). For all analyses, emphasis will be placed on examining between- and within-person differences across the lifespan (aged 18 years and older). Early identification of risk factors for cognitive and functional impairment, both individually and in combination, may facilitate targeted interventions, increase longevity and quality of life, and subsequently reduce the economic burden on the health care system."

Sarah Moselle, Religious Studies "In the wake of 9/11, states around the globe have undergone renewed processes of securitization, whereby comprehensive security policies are introduced that go beyond direct military action. The hegemonic narratives propagated through political and ideological securitization are dialectically related to processes of religious radicalization. This project began with assisting Dr. Paul Bramadat in the compilation of an edited volume on the relationship between religious radicalization and securitization in Canada. In light of the knowledge accrued during my assistantship, I will investigate an under-explored correlation between the counter-narrative promulgated in 9/11 conspiracy theories and religious radicalization."

Johanna McBurnie, Social Justice Studies "The distance between universities and the communities they reside in can be more than just physical. As a student, it is easy to feel as though I understand an issue because I have read countless articles or written a term paper on the subject. Yapa (1999) points out that the Social Sciences tend to neatly separate subjects into two parts: the problem (the issue at hand) and non-problem (the supposedly neutral researcher) (544). Through my studies at UVic, I have come to learn that I am implicated in and explicitly linked to the issues I am studying. For this reason, I would like to complete this research project through my Social Justice practicum. Through this class, I will work with an organization in the community for a semester, learning both experientially and through readings,
discussions and reflections. I plan to work with Lifecycles, a non-profit organization centered on urban sustainability. As an Economics student, my academic focus is sustainability through community organization, especially in regards to food production. This is also a personal issue, as I am a consumer of food grown and sold in Victoria. For this research project I want to look at how university students can become more connected with the topics they study, acknowledging their position within the issue and breaking down the problem-non problem dichotomy.

**Erin Legare, Social Justice Studies** "Is it possible that the conversations and knowledges being produced and discussed on the internet have begun to open up social movements and move them beyond the realm of identity politics? My project focuses on the recent proliferation of political narratives generated out of digital forums and how this discourse broadens social movements based solely in identity. Specifically, I will analyze how political movements that organize at the intersection of fat and queer are shifting their paradigms and struggles to focus on broader issues that work to forge solidarity across multiple differences. My primary source will consist of the personal narratives generated from the social network and blogging website Tumblr. My theoretical approach will be rooted largely in queer, anti-colonial, and feminist theories. The purpose of this study will be to analyze how social networking and blogging have influenced and continue to inform the changing landscape of social movements. In examining how power functions within these movements and digital forums, I will expose both the connections and disconnections this network of discourses and its political and social realities produce. My work will also envision an opening up of new connections in the pursuit of productive social change."

**Adam Finch, Sociology** "As a contribution to the advancement of Public Sociology, my honours thesis will focus on introducing the theoretical basis for a ‘land-based’ Narrative Therapy into the practice of Public Sociology as a community strengthening and social awareness resource. This means that I will investigate the various means of externalizing personal problems as so they become regarded as social issues, as to facilitate meaningful and open discourses, within specific guidelines that demand reflexivity in the researcher.

My research is centered on Epston and White’s Narrative Therapy, and C. Wright Mills’ ‘promise of sociology’, and draws heavily upon the cognitive linguistic theory of George Lakoff, and the Moral Psychology of Jonathan Haidt, as to place Antonio Gramsci’s conception of ‘hegemony’ within the context of intuitive moral matrices. This is an explicit refutation of rational-choice models; accordingly, I will investigate possible techniques of building social awareness at an intuitive level."
This is a theory-based paper that I believe will have practical applications in the pursuit of social justice. I also intend to continue this line of research as a graduate student.”

Alexander Luscombe, Sociology "While many Canadians may have heard about national security intelligence agencies, very few could claim awareness of what such agencies do. In my proposed research, I will empirically investigate the surveillance-related practices of two Canadian security intelligence agencies: Canadian Security Intelligence Services (CSIS) and Communications Security Establishment Canada (CSEC). Both CSIS and CSEC collect and process intelligence for national security purposes. While the former agency is responsible for countering domestic threats to security, the latter’s mandate is restricted to the interception and analysis of foreign communications in the form of signals intelligence. Using a comparative case study research design, my proposed project will draw on three data sources: government documents, newspaper articles, and academic literature. My purpose is to raise pertinent theoretical, conceptual, and methodological questions in relation to the new subfield of “surveillance studies”. Given that intelligence collection is a largely neglected phenomenon in surveillance studies, my proposed project seeks to fill this lacuna. Furthermore, as some scholars in the field have observed, surveillance studies would appear to have reached a point of conceptual and theoretical stasis. Indeed, many surveillance scholars can no longer agree on basic definitions, yielding a plethora of non-cumulative, often incommensurable, meta-theoretical discussions. The proposed project seeks to advance the literature beyond this state of stagnation by returning to the realm of empirical analysis in attempt to clarify some of the ongoing issues and debates, bridging the gap between the security intelligence and surveillance studies literature while further developing definitions of surveillance and related concepts.”

Barbara Merrick, Sociology "I am a fourth year undergraduate honours student in the department of Sociology. My research project aims to analyze initiation rituals within male athletics in order to better understand the social construction of masculine gender identities. I will critically analyse the homosocial relationships between men in athletic groups. In particular, I will examine the persistence of homophobic and heteronormative behaviours in athletics despite the presence of forms of homoeroticism in their bonding and initiation practices. The project will provide an answer to the question of why certain homoerotic behaviours, which would usually be prohibited or considered taboo according to the norms of hegemonic masculinity, exist within the boundaries of traditionally hegemonic male groups. I feel that this research is important because it will focus on a social institution that has historically been central to the definition of hegemonic masculinity in Canadian society. Sports are an important site for our general social understanding of gender norms, particularly normative masculine behaviours. I will conduct
qualitative interviews and ethnographic field research in order to fully explore this area of research for my honours thesis. This is an area that is under-researched and I wish to continue to pursue studies in the field of gender, specifically masculinities, after my final year of my bachelors degree through graduate studies.”

**Randi Edmundson, Theatre** "Dr Warwick Dobson is currently engaged in writing a history of Applied Theatre. He is currently examining the plays of the Elizabethan period in order to explore ways in which Protestant factionalism (and theatre company patronage) is represented in the early plays of Shakespeare, Dekker and Heywood.”

**Sarah Johnson, Theatre** "Dr Warwick Dobson is currently engaged in writing a history of Applied Theatre. He is currently examining the plays of the Jacobean period in order to explore ways in which social energy is circulated in the works of Jonson, Marston, and Middleton.”

**Elyse Portal, Visual Arts** "Social practice is a new art form emerging from a number of contemporary art movements including interactive art, performance art, and environmental art. In concert with social practice, I aim to produce an art project at the University of Victoria, as part of an ongoing series called ‘nature sitting’, to encourage a connection to the unique qualities of the land. With the assistance of historical records, First Nations oral transmission and meditation, ‘nature sitting’ invites participants to use imagination as a medium to visualize sustainability among people, culture and environment. The Quadrangle, due to its proximity to the McPherson Library and First Peoples House, will offer an ideal setting for this exercise. The format will include the following activities: 1. Participants arrive and are introduced to a historical account of the land; 2. An Elder-in-Residence from the First Peoples House will be invited to share a story, song or other traditional assertion about the relationship between people and land; 3. Participants are led through a meditative breathing exercise to foster awareness of the land; 4. Participants disperse to find a place where they feel comfortable to sit and imagine; 5. Participants, after a set amount of time, are invited to share their experiences with each other. To fulfill the project goals further research will be required to explore the University’s history and land use among First Nations groups, to contact the First Peoples House, to coordinate with the Elder-in-Residence Program, and to gain greater knowledge of art as social practice.”

**Danielle Proteau, Visual Arts** "The objective for this research project is to create two sound and video artworks that accompany Prof. Dickie’s large interactive sculptures. The projects will be publically presented through exhibition in Victoria, in January 2012 and in Calgary in the spring of 2012. By participating in this research the student will learn the following:

- gain knowledge of how to conceptualize, produce and present artwork for
- exhibition
- experience how to apply for grants to provide financial support for research
- learn how to interpret a project through a variety of media
- experience the uniqueness of doing research through a studio environment
- learn how to address issues arising from using electronic media to present artwork

The student participating in this research will play an integral role in the completion of the video works. She will assist with taking raw video footage and editing movements in the video to coincide with sound. She will work with the supervisor to develop a system for presenting video on four separate screens. In addition to the above, she will assist with the development of a system that allows gallery viewers to video document their own physical interactions with Prof. Dickie’s large sculptures.

Prof. Dickie will lead this project, and encourage the student to incorporate her own talents and research into the artworks produced. The majority of the work will take place in Prof. Dickie’s studio off campus, exposing the student to creation outside of the academic institution. The process will be such that both the student and the supervisor will gain experience from each other through exchange of technical strengths, through open, honest dialogue and through the experience of publically presenting their research in two exhibitions."

**Jasmine Nielsen, Women’s Studies** "I would like to look at food security and food justice on Southern Vancouver Island posing the question: “When we talk about food justice on Southern Vancouver Island, whose food justice are we talking about?” Specifically, I would like to explore what women are located where within Southern Vancouver Island’s food justice movement, what women are benefitting from the movement and what women are left out and remain in a state of food insecurity.

I intend to apply critical anti-racism studies theory and participatory action research methods to my project. Ideally I will incorporate interviews, photo documentation by the interviewees and potentially a community workshop to explore the research question with the women who are affected/involved or left out of Southern Vancouver Island’s Food Justice and Food Security movement.

I hope that the result of this research project will be a better understanding of what women are involved in Southern Vancouver Islands food justice movement, where they are located in that movement and what women are not being involved in the dialogue and why.”

**Taylor Teal, Women’s Studies** "I will research the medicalization of sexual problems in queer communities. In particular, I will investigate the role of “compulsory sexuality” for those to seek to challenge compulsory heterosexuality."
Following the “sexual revolution” and the acceptance of sex as an enjoyable and “healthy” activity, lack of frequent sexual enjoyment has been subject to an increasing array of “expert” advice and treatment. While most sexual medicine counseling and self-help targets heterosexual individuals, a burgeoning industry aimed at improving queer sex has also emerged, but has for the most part gone un-theorized. This project will examine the rise of the queer sex therapy and self-help industry. It will question whether terms such as “lesbian bed death” still have currency and/or what new labels are given to these anxieties.

For this project, I will use discourse analysis to deconstruct materials aimed at improving queer sex and interview queer identified individuals under the age of 30 about their perceptions of the importance of frequent and satisfying sexual activity. I will disseminate the results of my research through academic channels, as well as in the on-campus zine Thirdspace.”

**Connor Gaston, Writing** "I intend to research and complete a film project capturing the art and language of camera movement that my supervisor, Prof. Maureen Bradley, will be able to use as a teaching tool for first-year film students. I will be researching appropriate articles and books on camera motion in cinema (eg., Michael Ondaatje’s The Conversations) and studying movies famous for specific camera movements (eg., Hitchcock’s Vertigo). I will then replicate the varied and distinctive camera movements by filming short examples of each style. These examples will be incorporated into a short narrative film that I have both written and directed. Under Professor Bradley’s supervision, I will be using the RED camera along with other appropriate and quality equipment to complete the assignment. I will use the CFI High-Def Story Incubator Lab to edit the footage and render the footage into a polished short film."

**Caitlin Bergman Jessen, Writing** "In application for the Jamie Cassels Undergraduate Research Grant, I propose to write a 60 page (60 minute) two or three act stage play based on my own familial past. The play will explore the lives of a father and son, Danish immigrants to Canada following the Second World War. It will investigate the tragic circumstances of their departure, touching on the role of mental illness in a family unit and its repercussions. This project will entail much outside research in order to authentically tell the story, including the use of archival and secondary sources to study Danish immigration and the toll of mental illness on a family. On top of general study of these topics, I will also conduct interviews directly with family members. My hope for the project is that it will be a seamless blend of fiction and fact that is both personally and universally significant.

Development of this project will take place alongside mentor Joan MacLeod and in her Writing 403 workshop, in which peer editing and cold readings of the script aid
to encourage revision towards a polished final draft. I hope to stage a full or partial reading of the script by year's end in the showcase presentation."