Jamie Cassels Undergraduate Research Awards, 2012-2013 – Student Abstracts

Sebastian Irvine, Anthropology “Considered by some as art and by others as vandalism, graffiti is an ever present reality in urban centers. For anthropologists, graffiti can be a vehicle for exploring the relationship between individual and group identities. Drawing on my training in archaeology, visual anthropology and ethnographic mapping, I will explore how individual graffiti artists in Victoria shape and are shaped by the communities of practice to which they belong. To keep the scope of this project manageable I will not conduct individual interviews but will instead base my analysis on the visual and material evidence. First, I will conduct a photographic survey of sites in the greater Victoria region that feature prominently as areas of graffiti activity. Second, I will create a typology of unique ‘tags’. Next, using Google maps I will plot the distribution of these sites and individual ‘tags’ within them. This will allow me to trace individuals within this visual landscape by the marks they leave behind. I will then document the interactions of graffiti artists in Victoria through their tag-identities. This will be done through a visual analysis of the sites where paint is layered over the same surfaces in a constant revision and re-interpretation of the spaces being observed. Fixed observation points will be set up in order to document the sites throughout the length of the study. I will revisit and re-document sites on a monthly basis throughout the length of the study to see how they change. With this research I hope to be able to uncover individual identities present within the painted wall and document how they are simultaneously singular and part of a unified community of practice.”

Sarah Leckie, Anthropology "The use of fire is an important element of traditional land management. This project will focus on the indigenous use of fire to manage productive ethnobotanical plant resources in the southern Gulf Islands. Parks Canada has proposed to undertake, in collaboration with Coast Salish communities, re-invigoration of prescribed burnings and has collaborated to ask research questions related to better understanding the cultural practice and local indigenous knowledge related to fire management. My research will start to address these questions through three methods. First, it will include a literature review of fire use by Coast Salish people with a special focus on the Gulf Islands. Secondly, it will involve on site observation of the burning Parks Canada plans to conduct in the fall of 2012 in the Gulf Islands National Parks Reserve. Finally, it will potentially include a trip to Hul’qumi’num Treaty Group/Tseycum to meet with the members of their Parks Committees to discuss fire use and solicit potential locations for future prescribed burning. I will be compiling the data collected from these areas into a document for Parks Canada."
Emma Weatherley, Anthropology "My primary interest in anthropology is archaeology, although I would like to take my career in a direction that applies archaeology to practical problems and contemporary world issues. I see the JCURA program as an opportunity for me to research an archaeological topic that can connect with my interests in conservation and sustainability.

With my instructor, I have decided to focus on Amazonian Dark Earths, an anthropogenic soil discovered through the archaeological record that is remarkably fertile compared to the naturally formed soil of the Amazon. Produced through slash-and-char by ancient indigenous populations, dark earth sequesters nutrients such as carbon and nitrogen into the soil, rather than releasing them into the air. Current agricultural methods used in the Amazon today destroy the irreplaceable biodiversity, degrade the soil rapidly, require large amounts of fertilizer, and are not sustainable. Research on Amazonian Dark Earths provides an opportunity for sustainable agriculture through the reintroduction of ancient soil management. Amazonian Dark Earths, unlike other soils, do not seem to get depleted after repeated use, and may be capable of transforming surrounding soil from a nutrient-poor substrate to a highly fertile plating medium.

My research will explain, through study of the archaeological record, how the soil was made, and why it works within tropical conditions. I will then focus on how it can be applied today to increase crop yields, reduce environmental pollution by decreasing the amount of fertilizer used, and help reduce the increasing levels of carbon dioxide in the earth’s atmosphere by holding carbon in the soil itself."

Melissa Fowler, Biochemistry & Microbiology “Currently, the most robust and reproducible method for quantitation of proteins in complex mixtures including human plasma is a method called stable isotope standards and capture by anti-peptide antibodies (SISCAPA). SISCAPA is a method of quantifying surrogate proteotypic peptides in protein digests using antibodies coupled to magnetic beads to capture peptides from complex mixtures, thus increasing their concentrations in solution, allowing their detection and measurement by mass spectrometry. This enables the measurement of low abundance proteins while avoiding the complications associated with direct measurement. Although it is being developed in laboratories worldwide, there are several aspects that require improvement before it can be used in diagnostic labs. My work will be focussed on improving the SISCAPA process. First, the trypsin digestion of human plasma will be optimized using an “addition only” protocol and an automated liquid handling platform. The extent of digestion and comparison between samples will be monitored using..."
mass spectrometry. Second, the peptide enrichment will be optimized using monoclonal anti-peptide antibodies. Multiplexed protein enrichment will also be performed using a liquid handling platform, followed by mass spectrometric analysis and quantitation of peptides (and their parent proteins) by establishment of forward and reverse curves in human plasma. Finally, the methods described above will be used to measure prostate cancer biomarkers in the plasma of patients following brachytherapy for monitoring the success of the treatment. The optimization of an automated SISCAPA protocol could play a key role in the development of new methods of disease diagnostics in the future.

Kathleen Kolehmainen, Biochemistry & Microbiology “My research project aims to elucidate the nature of the protein-protein interactions between ZNF133 and PIAS1, and between zfp90 and REST. REST, ZNF133, and zfp90 are transcription factors that contain zinc-finger domains. REST acts as a neuronal-specific transcription repressor and this activity is mediated by zfp90 through interaction of the zinc-finger domains of both proteins. ZNF133 is a member of the KRAB domain family of transcription factors and also acts as a transcriptional repressor, via interaction with PIAS1, a protein inhibitor of activated STAT1. Evidence of such an interaction supports an oncogenic role of ZNF133. Previous research has shown non-specific binding of a variety of zinc-finger proteins to both PIAS1 and REST in vitro. My research will use an Yeast Two Hybrid assay to determine if specific binding is occurring in vivo. The level of protein-protein interaction can be measured using an α-galactosidase assay. The first part of my project entailed cloning the necessary constructs and testing the controls of the Y2H system. Transformation of the yeast with prepared constructs will allow examination of the interactions mentioned above. Further research will explore the specificity of the ZNF133-PIAS1 and zfp90-REST protein-protein interactions via site-directed mutagenesis.”

Daniel Moller, Biochemistry & Microbiology “Congolense epimastigote-specific protein (CESP) is a novel GPI-anchored surface molecule that is highly upregulated in the epimastigote form of Trypanosoma congolense. This mammalian parasite is the causative agent of African Animal Trypanosomiasis and has a large economic impact on many African countries. Further, CESP is believed to facilitate attachment to the parasite’s host, a key stage in the trypanosome life cycle. My research project consists of the expression, purification, and crystallization of a recombinant CESP gene product with the ultimate goal of elucidating the protein’s three-dimensional structure using X-ray crystallography. Specifically, CESP placed within a pAc GP67b vector will be expressed in eukaryotic insect cell culture and purified using
various methods including tangential flow filtration, nickel affinity pull downs, anion exchange and size exclusion chromatography. Once recombinant CESP is obtained with a high degree of purity and homogeneity, crystallization screens will be conducted to identify conditions conducive to crystallization. Finally, any crystals will be analyzed using X-ray diffraction, and the protein’s structure will be determined. Because of the close relationship between a protein’s structure and its function in the cell, the shape of a protein often provides insight into its roles. Our secondary goals are to identify the mechanism through which CESP facilitates adherence to the tsetse fly proboscis, and to identify any potential binding substrates. Elucidating the structure of CESP will further our understanding of *trypanosome* parasite-vector interactions, a key step in the development of rationally-designed vaccines in the future.”

**Jake Gambling, Biology** “Inherited Retinal Degeneration (RD) causes blindness in approximately 1 in 2000 individuals worldwide. One strategy that is being investigated as a potentially curative treatment is retinal progenitor cell (RPC) therapy. However, the efficiency if integration and proper specification of transplanted RPC cells, has been very low (<1%). The Howard lab is investigating a gene, called Ars2 is an RNA binding protein that is required for RPC specification. The group has developed a small 13 amino acid peptide inhibitor of Ars2, called FARB, which causes RPCs to become photoreceptor cells. My project is to characterize the interaction between the FARB inhibitor and Ars2. My first objective is to confirm that peptide interacts with Ars2 using immunoprecipitation. My second objective is to map the interface of the interaction using a site directed mutagenesis approach. The FARB inhibitor is highly acidic and therefore I hypothesize that it will interact with a basic region on Ars2. We have identified a putative binding site on Ars2 function by expressing the mutants along with reporters for Ars2. These objectives are prerequisites for screening and Identifying Ars2 small molecule inhibitors that mimic the FARB inhibitor. These goals represent an important first step towards improving RPC therapy for RD.”

**Barbara Gauthier, Biology** “I am looking into a genetic condition prevalent in a northern Canadian First Nations community called long QT syndrome. This syndrome is characterized by a delayed repolarization of the heart that causes ventricular arrhythmias and sudden death. I will be looking into how this disease develops in early childhood, and presents through adulthood. There are over 400 participants in the study, including >70 KCNQ1 V205M mutation carriers. Of those, there are – 18 children (under age 18) with mutations and at least 80 without. ECG results (the corrected QT
interval) and features such as fainting and seizures will be compared. Statistical analysis will include the student t-test and odds ratios where pertinent.

I will be doing a literature search to determine the limitations of exercise advised for children with LQTS (exercise can promote cardiac events). This is particularly important as diabetes type II is common in Aboriginal populations and so exercise limitations advised because of long QT syndrome could be extremely detrimental in the long term. We will develop a survey to ask the children of school age about their exercise levels, and their parents about their feelings when their children participate in exercise.”

**Esther Wagner, Biology** “Behavioural laterality in motor and sensory tasks such as limb and eye use has now been documented in numerous vertebrate taxa and is generally thought to reflect taxonomically widespread asymmetries in hemispheric dominance. For example, in all canids (wolves, coyotes, dogs), the tail is a primary visual signal in conspecific interactions, and at least in dogs, is lateralized in the directionality of motion. Dogs exhibit right-biased tail wags when approached by familiar individuals including conspecifics but a left-biased wag when an approaching individual is unfamiliar or threatening (Quaranta et al. 2007: Current Biology, 17, R199R201). Recent evidence suggests that the visual detection of the asymmetric wagging behaviour results in modified approach speed by conspecifics suggesting that the directionality of a asymmetric behaviour embeds signal information and by implication, the practice of tail-docking in dogs, which leads loss of any signalling, would further compromise behavioural interactions (Artelle et al. 2010, Laterality: Asymmetries of Body, Brain and Cognition (Jan 19). Emerging from this experimental study, I will be analysing high definition videos previously recorded of 435 different dogs approaching a life-size robotic model dog that exhibits either left or right-biased tail movement and will be quantifying multiple behavioural and morphological traits of approaching dogs including tail size, tail movement and direction of tail movement in an effort to identify the extent to which laterality in tail motion influences canid social interactions. The use of robotic models to study behaviour is relatively novel and I hope the study with such a large data set will allow publication of the results and useful contribution to the literature.”

**Maryann Watson, Biology** “Sharks are the presumed apex predators in oceanic food webs including those of coral reefs. There are few studies on the role of reef sharks in coral reef food webs, and little is known about the consequences of reef shark population declines due to
fishing pressure. Stable isotope analysis is a technique that can be used to determine the role of a species within its food web, by quantifying trophic level and energy sources.

This summer I collected shark tissue from dried shark fins and frozen specimens during visits to the households of local fishermen on Kiritimati atoll in the central Pacific. These samples consist of muscle, connective, and skin tissue. I now propose:

• To process these samples for 15N and 13C stable isotope values, comparing different tissue sample types from the same shark specimens (including fresh shark muscle and fin samples collected in August 2012 by Dr. Baum’s field team) to determine whether different tissues give consistent stable isotope signatures. I will also combine these data with samples from other coral reef fishes collected by Dr. Baum’s field team, to quantify the trophic level and energy sources of reef sharks.
• To combine this information with data from the interviews I conducted this year with shark fishermen, and those conducted by Dr. Baum in 2009 to quantify shark fishing pressure on the atoll. My proposed research would contribute knowledge to the role of sharks in coral reef food webs and help to quantify fishing pressure on Kiritimati atoll.”

Connor Bildfell, Business “As the global business landscape has shifted in response to technological and social innovation, international profit-seeking companies located in China have encountered unprecedented challenges regarding language. Moreover, the notion of a “language strategy” proves central to success for flourishing companies. This paper focuses on the intricacies surrounding English and Chinese language policies; mechanical, cultural, and political theories comprise the foundational analysis. After providing a brief synopsis of China’s cultural and linguistic context, this paper addresses three predominant specific issues: First, what constitutes a language strategy? What theoretical perspectives underpin a language strategy? Lastly, how can the organization build an atmosphere conducive to language strategy success?

Results from my study conducted of international companies located in China will be presented; furthermore, analyses and conclusions will be presented alongside leading studies in language and management. In addition, this paper seeks to provide managers with a foundational framework for developing well-structured language strategies concerning English and Mandarin. I will reflect upon and analyse cultural insights, empirical studies, and primary-source surveys to
construct a theoretical and practical approach to corporate language decision-making. Moreover, I will conduct critical assessment of policy ramifications.”

**Jessica Dakin, Centre on Aging** “Participate in the research project ‘Initiative for a Palliative Approach in Nursing: Evidence and Leadership’ (iPANEL) in a variety of capacities: team meetings, data collection and analysis; dissemination activities (through social media, workshops, presentations, etc.); writing for publication (if appropriate) and other opportunities as available/appropriate.”

**Laura Walzak, Centre on Aging** “It is well known that many older adults voluntarily restrict their driving to limit exposure to dangerous driving situations or stop driving altogether. It is also well known that health concerns that may affect driving increase with age. It is hypothesized that the perceptions of driving and health status may act as mediators in the self-regulation process as reflected in driving outcomes. This research will examine the relations among driving-related psychosocial measures (i.e., attitudes and beliefs toward driving) and measures related to health status administered as part of the Canadian Driving Research Initiative for Vehicular Safety in the Elderly (Candrive) common cohort study. This prospective study involves over 900 drivers 70 years of age and older in seven Canadian cities. Scores on sets of psychosocial measures relevant to driving administered at baseline (e.g., Day and Night Driving Comfort Scale, Decision Balance) will be examined in relation to a variety of driver characteristics including age, gender and perceived health status as well as various driving outcomes (e.g., kilometers driven). Group comparisons (e.g., t-tests, anovas) as well as regression analyses will be used in this research. This research will extend our current understanding of older driver decision-making and provide a solid foundation for future longitudinal investigations within this larger cohort of older drivers.”

**William FitzGerald, Chemistry** “The proposed project involves the design and construction of a unique spectroscopic instrument. It will be a continuous-scan mid-infrared broadband Mueller matrix spectrometer. The Mueller matrix is the fundamental property that describes how the polarization of an electromagnetic field is changed upon interaction with a material. It therefore encodes all chemical and physical properties that manifest themselves in the linear optical response function. With a design based on four photoelastic modulators, this will be the first demonstration of an instrument with this design and capability, enabling rapid measurement of fundamental material optical constants through a chemically-rich region of the
infrared spectrum. The project will involve optical and electronic design, assembly of optical components, and a significant amount of computer programming. The primary challenge will be in the processing of the experimental data to yield the Mueller matrix. It is anticipated that initial results will be obtained for the water–zinc selenide, crystalline quartz, and polystyrene–zinc selenide interfaces. Time permitting, a cell will be constructed that allows for the characterization of any bulk liquid.”

**Colin Hammond, Chemistry** Tumor cells exploit the interaction between two immune-response proteins (called PD1 and PDL1) to evade the body’s natural immune response. It is known from other studies that blocking the interaction between these two proteins can lead to significant benefits for the treatment of several forms of human cancer. The Wulff group has recently identified the first known “stapled” peptide inhibitor of the PD1 / PDL1 interaction, and hypothesizes that variations of this peptide could be used for the treatment of metastatic cancers. The objective of this project is to prepare additional stapled peptides (particularly those using more biologically robust staples) and control peptides, and to initiate in vitro experiments with them.”

**Marie Malone, Chemistry** “Post-translational modification of histones, in particular the methylation of lysine, plays a significant role in gene expression and repression. The selective binding of mono- and di-methylated lysine over unmethylated and trimethylated lysine to the malignant brain tumor (MBT) binding domain induces the compaction of chromatin, repressing gene expression of the h-l(3)mbt gene. The h-l(3)mbt protein, which is found normal adult human tissues and is considered to be a tumor suppressor, is found in reduced levels in cancer cells. This proposed project involves the synthesis and characterization of calixarene-based supramolecular hosts selective for dimethyl lysine.”

**Taylor Quon, Chemistry** “Chromobox homologs (CBXs) are proteins that participate in gene silencing mechanisms by association with polycomb repressive complex 1 (PRC1). Different members of CBX play distinct functional roles in developmental pathways such as stem cell differentiation and tumor growth. Each CBX contains a chromodomain that is hypothesized to guide the PRC1 in gene silencing through interactions with histones bearing post-translationally methylated lysines. The objective of this project is to examine the interactions of the CBX4 chromodomain with histone methylated lysine peptides and non-histone target peptides. The project will involve expression of the
CBX4 chromodomain and synthesis of the target peptides, followed by characterization through binding studies. Characterization of these interactions will be done in conjunction with development of antagonists for CBX in hopes of achieving a method of novel prostate cancer therapeutics.”

**Angela Cooper, Child & Youth Care** “Child and Youth Care is a diverse field of study and practice that often struggles to project a cohesively defined professional identity. I will begin with a review of current literature to analyze existing themes, followed by collecting data through interviews and group discussions with students, faculty, alumni and practicing professionals within the CYC community. This research will address questions such as what does “making a difference” (the CYC motto) look like in practice? I will explore themes including what it means to be a CYC practitioner, the connection between self and practice, and the SCYC mission statement principles of “inclusion, social justice, and ethical practice”. Finally, I will use a collaborative creative process to explore how the School of Child and Youth Care can encourage students to become engaged in developing professional identities and to be active in defining professional association of the field. My work will culminate in a short video production that will be disseminated amongst the CYC community as well as the general public to illustrate the various facets of the field of Child and Youth Care in relation to social justice and diversity.”

**Jessica Renfrew, Child & Youth Care** “How do youth serving agencies create strong youth-adult partnerships to advance youth engagement? Youth-adult partnerships are best sustained in agencies where organizational pathways exist to support and sustain youth leadership development within the organization. Yet somewhat surprisingly, developing youth-adult partnerships and creating additional roles for youth as decision-makers and planners have been challenging for youth organizations, with many expressing a desire for guidance in navigating this shift. By exploring this area, I hope to inform youth serving organizations of characteristics in creating successful youth-adult partnerships to support their youth engagement initiatives.”

**Mattie Walker, Child & Youth Care** “How does the availability of language shape identity formation? By specifically examining gender identity formation, I would like to explore how access to terminology and specific language informs and/or shapes an individual’s formation of their gender identity. I would like to look at whether language is a limiting factor in describing a gender identity experience or if it is a determining guide to finding an identity fit.
By exploring this area, I hope to discover how Child and Youth Care practitioners can support children and youth in negotiating the identity formation process without labelling or limiting the youth’s exploration of their own identities.”

**Monique Du Plessis, Computer Science** “This project is focused on human performance on computationally hard visual problems. Computationally hard problems cannot likely be solved using a polynomial time algorithm. Studies of human performance on one such problem, namely the Euclidian Traveling Salesperson problem (E-TSP) that is set out to find a shortest tour through a Euclidean point set, have claimed that people can find nearly optimal solutions to this problem in close to linear time. This project studies human performance on another computationally hard, but non-Euclidian, problem: the Minimum Vertex Cover problem (MVC). Here, when considering a graph, a smallest set of vertices has to be selected such that every edge is adjacent to at least one of the selected vertices. Since the literature suggests that some human performance on E-TSP is attributable to visual processing, the MVC problem is an interesting topic to study, as it is likely immune to such types of processing. I will be aiding interdisciplinary Ph.D. student Sarah Carruthers, who has recently been published in the Journal of Problem Solving pertaining to the results of a preliminary human study on this topic, in taking the next step in her research investigating human performance on MVC. We will look into what techniques participants use in attempt to solve MVC on different graphs, and what factors affect participant performance on these problems. My role in this study includes assisting in coding and analyzing participant data, and assisting in designing a new study to gather additional human performance data.”

**Jordan Ell, Computer Science** “I will be researching in the realm of socio-technical congruence inside of large software projects. I will be studying the relationships between developers in a large scale project, linking them based on commonly changed pairings of files, while at the same time gathering developer communication information. With these technical and social aspects of data gathered, and given a specific time span inside of the project, I will be able to build socio-technical networks of developers and be able to further analyse these networks to determine the level of congruence along with other empirical and qualitative metrics. From this research I hope to learn the consequences, positive or negative, of socio-technical congruence inside of large software projects and go into the future with a recommender system intended for developers in order to avoid any possible pitfalls I may find in this congruence.”
**Trevor Maryka, Computer Science** “The goal of the project is to empirically evaluate the usefulness of the Software Package Data Exchange specification (SPDX, see spdx.org) when used to describe the licensing of open source systems.

SPDX (currently in version 1.1) is a format that allows organizations to indicate the licensing constraints of software. This standard has been defined through a consortium of software and hardware organizations, such as the HP, Canonical, Cisco, Black Duck software, and the Linux Foundation.

To this date, the standard has not been empirically validated. Furthermore, one of the features that is required in the future SPDX standards is to describe licenses that permit variability (primarily for licenses that allow customization from the user's point of view).

This research project will consist of an empirical study that evaluates the usefulness of SPDX v1.1 to describe the licenses of open source software (such as the software included in Linux distributions such as RedHat or Ubuntu). This study will allow to explore the variability of licenses and how they can be specified in future versions of SPDX.”

**Aaron Bailey, Curriculum & Instruction** “The student will help to conduct research into technology innovation in education with Dr. Valerie Irvine. Specifically, this research project will document educational stakeholders’ experience with adoption of new technologies for teaching and learning in education. Focusing on exploring the variables that influence educational stakeholders’ acceptance and use of technologies in education. The student will collect research data and analyze results via the Technology Integration and Evaluation (TIE) Research Lab in the Faculty of Education. In addition to the JCU RA fair, the student will be expected to present findings at the EdMedia conference and an Edcamp in June of 2013 in Victoria.”

**Jamie Elbert, Curriculum & Instruction** “This research project will be a design-based research study on the development and implementation of an English curriculum that utilizes iPads a middle school classroom. The case study will include perspectives of the mentor teacher, pre-service teacher, and students who participate in the design experiment. The Student Applicant will be involved in the collection and presentation of a case study about the effectiveness of the design and the utilization of the iPad technology in middle school English curriculum. Results of this work will be presented as a Case Study at the World Conference of Educational Media and Technology, Canadian Society for the Study of Education, and at EdCamp Victoria. The Proposed Supervisor will provide funding for the Student Applicant
to attend these conferences.”

Lucas Kavanagh, Earth & Ocean Science “The evolution of atmospheric surface pressure through Earth’s geologic history is poorly quantified and difficult to measure. This has important implications for understanding conditions on the Earth during the Archean (2.5 to 4.0 billion years ago), when life first arose. At this time, the sun did not emit enough heat to maintain liquid water on the Earth with an atmosphere similar to the current one. Since there is considerable geologic evidence for liquid water at this time, the Archean atmosphere must have provided an enhanced warming mechanism. In addition to long-term global climate change, the study of historical atmospheric pressure also has applications in the search for planets with habitable atmospheres.

Recently, Som et al. (2012) calculated Archean surface pressure from raindrop imprints preserved in 2.7 billion year old volcanic ash. This calculation relies on an empirical transfer function that allows for the terminal velocity of the raindrops to be found from the area of the imprints, through a dimensionless momentum term.

This honours thesis aims to determine if raindrop imprints can accurately constrain atmospheric surface pressure at the time of their formation by evaluating this transfer function. This will be done by experimentally creating imprints from water droplets of known size, falling at terminal velocity, as sediment and fluid properties are varied. Imprints of natural rainfall will then be collected to determine if the transfer functions can produce a reasonable value for modern atmospheric surface pressure.”

Pearce Luck, Earth & Ocean Sciences “My research will focus on the geochemistry of a piece of 90 million year old oceanic crust that has been exposed, above sea level, in Cyprus. The composition of volcanic rocks from the top of the oceanic crust will be determined by laser ablation inductively coupled plasma mass spectrometry on glass fragments. This will allow the abundance of >60 different elements to be determined. I will use a variety of difference geochemical modeling approaches to determine: (i) how many different magma suites were involved in the formation of this piece of oceanic crust; (ii) how these different magma suites relate to one another; and (iii) the most likely geological setting for the formation of this piece of oceanic crust.”

Kei Quinn, Earth & Ocean Sciences “Central British Columbia is host to numerous intrusion-related mineral deposits. The goal of this research project is determine the nature of anomalous, mineralized zones that characterize the North Brenda zone (NBZ). The NBZ
property, owned by Bitterroot Resources Ltd. straddles the Okanagan-Coquihalla Connector (Hwy 97C) just west of the granite-related, Brenda Cu-Mo porphyry deposit and east of the sedimentary and volcanic rock hosted, Elk gold deposit. Assessing the nature of the mineralization and determining if it represents additional intrusion-related mineralization, will involve detailed geological mapping of the NBZ. Specifically, I will assess the NBZ to determine its potential for Cu-Mo deposits, and to determine if the same Jurassic intrusive unit that hosts mineralization at Brenda mine underlies the NBZ. There is also potential for vein-gold mineralization in Nicola Group sedimentary and volcanic rocks similar to vein deposits documented at the nearby Elk deposit.

The project will involve compilation of existing data, and new mapping and sample collection and petrographic studies. Data stemming from previous mapping, airborne geophysical surveys, including a 2010 aeromagnetic survey, and soil geochemical sampling and a drilling trenching program completed in 2009 will be compiled. These data will inform new mapping and aid in the interpretation of the geology of the region. A detailed geological map of this area has never been created. Mapping will facilitate the collection of representative samples of the main lithologies, and of anomalous rock bodies of significant importance (eg. felsic veins, alteration zones). Petrographic descriptions of each main rock type will be aided by etching and chemical staining of select samples, allowing for visual differentiation of potassium-rich feldspar and plagioclase. The goal is to develop an understanding of the relationships between anomalous mineralized zones and the underlying rock units. A model of mineralization will be developed which can be used to focus further exploration efforts.”

**Dania Clarke, Economics** “In terms of its share of GDP contribution, British Columbia’s tourism industry has outperformed all other BC industries since 2004. The BC Government has taken an active roll in marketing British Columbia’s natural beauty and commodifying rurality. But what are the impacts to local wages and housing prices in the presence of government intervention in the form of proactive tourism promotion and are these impacts social welfare enhancing to residents?

I will seek to find natural experiments to compare the welfare outcomes in BC towns with similar characteristics but different treatments from the government. I will also examine what causes BC cities to grow, with and without government intervention.”

**Man Wan Lai, Economics** “The fierce competition among high technology firms often draws public attention. Important battles include
IBM-versus-Microsoft in the 80’s, Internet Explorer-versus-Netscape in the 90’s, Sony-versus-Microsoft in the 00’s, and Apple-versus-Samsung more recently. But firms do not always compete. There is a tendency for firms to create co-operative partnerships at the early development stage or a new product - when the attribute base is not yet defined. Once further into the product lifecycle, firms often change tactics, and compete with each other using the knowledge gained early on.

Although there has been much research on technology competition, the results are narrow and difficult to generalize because the focus has been on specific products, or at best, industry studies. There is no general study of how technology companies firms interact during the early stages of the product life cycle. Unlike past studies, I will collect systematic data from multiple firms' history covering a wide range of technologies (e.g. computer, video game, mobile phone). The aim of my research project is to provide a broader understanding of the evolution in firms' competition and co-operation in high technology industries.”

Monica Mow, Economics “There is an ongoing dialogue amongst government organizations, corporations, and economic research institutions about whether or not Canada will experience Dutch Disease due to the Enbridge Northern Gateway Pipelines Project. Dutch Disease is a term coined by The Economist to describe the decrease in manufacturing activity in the Netherlands after the discovery of a large natural gas field in 1959. This discovery increased natural resource production in the country in the late 1960s to the late 1970s. The theoretical onset of Dutch Disease occurs when an increase in revenues – an inflow of foreign investment – from natural resources causes an appreciation of the domestic country’s currency (exchange rate). The appreciation of the domestic country’s currency makes all other exports (specifically manufactured goods) relatively more expensive compared to those of foreign countries. This relative price difference makes the domestic country’s manufacturing sector less competitive.

Canada’s export of manufactured goods has declined over the last century, but the trade of manufactured goods has also declined around the world. This is due to services becoming a larger portion of international trade. Technological and communications advancements have accelerated the trade of services internationally (e.g. call centre operations or financial services). Using trade models, my research will compare the effects of increased domestic natural resource production and increased internationally traded services on the manufacturing sector, while adding to the literature from a Canadian perspective.”

Derrick Persson, Economics “To evaluate the resource management
and development strategies currently in place by the Canadian government. This will be accomplished by establishing a theoretical framework based on the work of David Albouy comparing the efficiency and equity of the distribution that results from resource extraction. David Albouy's article "Evaluating the efficiency and equity of federal fiscal equalization" in the Journal of Public Economics will serve as a primary resource in developing the model used to evaluate and compare the Canadian government's decisions with their Norwegian counterparts. The model that has been developed for Norway consists of developments which are mainly state owned enterprises. By contrast the Canadian model of development has primarily foreign corporations developing their resource. The main benefits of the resource are all absorbed by the provinces in which the resource lies. Albouy suggests that this will lead to a inefficient long term outcome. The policy which is an effective way to mitigate the effects of inequitable distribution is suggested to be redistributing regional tax disparities. This research project will focus on the benefits and drawbacks of the Norwegian system versus the Canadian system.”

Adrianna Haffey, Educational Psychology & Leadership Studies

“The goal of this research is to examine the effectiveness of goal setting interventions across 5 consecutive years in which ED-D 101 has been offered. Participants include 645 undergraduate students who have consented to participate in the research study (approx. 100 students per year). Specifically, this study will compare weekly goals set by students in five different iterations of ED-D101. Findings from this study will become central component of a published research paper that presents findings from a designed-based research methodology for improving self-regulated learning.”

Jeffrey Horncastle, Educational Psychology & Leadership Studies

“One of the most recent additions to the range of Immersive Virtual Environments has been the digital fulldome. However, not much empirical research has been conducted to explore its potential and benefits over other types of presentation formats. For this project, the student will review psychological frameworks within which to examine the properties of fulldome environments and compare them to those of other existing immersive digital environments. The student will review the state-of-the-art of virtual reality technology, and then survey core areas of psychology relevant to experiences in the fulldome, including visual perception, attention, memory, social factors and individual differences. Results of this work will be presented at the World Conference of Educational Media and Technology, Canadian Society for the Study of Education, and at EdCamp Victoria. The Proposed Supervisor will provide funding for the Student Applicant to attend
these conferences."

**David Rusk, Electrical & Computer Engineering** “The ultimate goal of this project is to identify factors that affect student dropout and failure. First-year student records will be examined with data mining and machine learning techniques to extract early warning indicators. These indicators can be used to formulate corrective action plans to improve the attrition rate. This project focuses on the user specification and interface parts of the performance predictor project.”

**Elaine Yan, Electrical & Computer Engineering** “In recent years, advances in motion detection, tracking, and classification have made applications in telerehabilitation possible. Monitoring of the elderlies and physically impaired, sports medicine, and physical therapy, are some of the active research areas in telerehabilitation. Furthermore, the gaming industry has provided some low-cost devices to track motion with reasonable accuracy; thus, making telerehabilitation a reality for most people. This project investigates the feasibility of using the Nintindo Wii Remote Controller as a handheld device that patients can use to perform repetitive motions in physical therapy sessions in a telerehabilitation setting. Patients can use such an instructional (or e-learning) system at home without the cost, effort, and time associated with visiting a medical office. At the same time, the public health care system also benefits from the deployment of these telerehabilitation systems.”

**Jayme Collins, English** “I would like to expand on the material covered in Dr Cobley’s contemporary critical theory courses to undertake a research project that will inspect how pedophilia functions within society. I will take as my problem the tension between the simultaneous prevalence of the infantile sexual subject within society—the popularized sexual attractiveness of the extremely youthful subject—and the severe societal taboo of overt sexual relations with children. As pedophilia is thus at once dispersed among the structures of society while being simultaneously prohibited, I plan to investigate the mechanisms that allow this tension to exist and any possible effects it may have. I will consult texts regarding various subjects, including ideology (Althusser), the Lacanian ‘male gaze’ (Laura Mulvey), consumerism (Benjamin Barber’s “Consumed”), “The History of Sexuality” (Foucault), and pornography (Butler/Zizek) to explore how pedophilia comes to be dispersed among society, and how such a dispersal acts within and upon society. A JCURA grant would help me to complete this project by allowing me to quit my part-time job and devote more time to my studies.”
Taylor “Amy” Coté, English “For this research project and my honours graduating essay, I intend to examine the high Victorian “social novel” as a catalyst for social change. Also sometimes identified as “realist fiction” or “social problem novels”, the Victorian social novel sought to represent in fiction the real societal problems of England in the 1830s-1860s through the circumstances and struggles of their protagonists. Although these novels reached readers at various levels of society, their primarily middle-class readership complimented their goal of inspiring social change. While these novels rarely offered all-encompassing solutions for the problems addressed, authors including Charles Dickens, Elizabeth Gaskell, and Benjamin Disraeli often employed these novels as a vehicle to campaign on behalf of the disenfranchised, disabled, or otherwise marginalized. I hope to investigate how authors of the social novel chose to represent the disadvantaged of their society in the nineteenth-century novel versus Victorian representations in media other than fiction (i.e., the periodical press, legislation, etc.).”

Megan Halford, English “I propose to research the history of the detective novel and especially the figure of the detective, starting with early examples from the works of Wilkie Collins and Arthur Conan Doyle. Although many famous fictional detectives are men (Sherlock Holmes, Hercule Poirot), I am particularly interested in the figure of the female detective. I intend to trace the genesis of this figure, from early Victorian examples (e.g. Marian Halcombe in Wilkie Collins's The Woman in White [1859-60]) to popular contemporary ones (Christie's Miss Marple, James’s Cordelia Gray), alongside the rise of detective fiction by female authors. I would like to analyse the connections between women’s status in the moments when these different characters originally appeared in print and how detective fiction reflects (or does not reflect) the evolution of their position in society. For example, I hope to examine the lives of elderly spinsters in the mid 20th century in relation to Christie’s portrayal of Miss Marple.”

Rebecca Segal, Environmental Studies “My project concerns environmental change in the Northwest Territories. Retrogressive thaw slumps are disturbances that “develop due to [the] thawing of ice-rich permafrost on slopes. Thawing turns exposed ice-rich permafrost into a mud slurry which falls to the base of the exposure and flows downslope” (Environmental and Natural Resources, 2011). Slumps alter the hydrology of tundra lakes and streams and can severely impact ecosystems. In my project, I will analyse slump growth rates in several regions including the Peel Plateau and the Inuvik-Tuktoyaktuk uplands area. To compare slump growth rates, I will use historical and modern air photos and satellite imagery to map the areas impacted by slumping..."
in multiple time periods.


**Tanya Taggart-Hodge, Environmental Studies** “I will investigate the fact of and potential management implications for novel ecosystems in mountain regions. Novel ecosystems arise as a consequence of rapid environmental and ecological change as a result of human action and bear little resemblance to historically continuous ecosystems. Traditional management techniques for addressing unwanted disturbance (e.g., ecological restoration) might not be most effective in dealing with these emerging ecosystems. Mountain ecosystems are harbingers of global change, and have long been studied as sites of rapid change. However, in the rapidly increasing literature on novel ecosystems, there is almost no connection made to mountains. Thus, the purpose of my investigation, based largely on reviews of interdisciplinary literatures in ecology and mountain studies, will be to explore and assess these connections.”

**Yang You, European Studies Program** “Competition between firms is usually the most effective way to deliver economic efficiency; however, there is a balance to be struck – and the regulation of competition policies are the principal means of doing so. My project aims to examine the role of competition (anti-trust) policies in the European Union, and its effects on market power and macro-economic imbalances. It seeks to offer insight regarding the following objectives:

- What is the purpose of competition policy and how is it carried out;
- Compare/contrast competition between Europe and other Federal states (US);
- To what extent does competition policy facilitate or contribute towards the European integration process;
- To what extent does competition policy influence macro-economic imbalances; e.g. what is the relationship between competition policy and market power;
- Outline different types of mergers (e.g. horizontal, vertical), and other abusive practices, and its affect on the market;
- Competition case study: Microsoft. In doing so, I will participate in the EU Study Tour – a three-week intensive field study of the European political and institutional landscape – where I will receive exposure to over 70 politicians and civil servants across the Euroarea and beyond. Additionally, over the summer, I will be interning for Bruegel – a prestigious Brussels-based economics
think tank – where I will be assisting Georg Zachman with projects concerning energy and climate change issues, while learning from esteemed scholars on topics of competition policy and macro-economics. Furthermore, I will be undertaking EUS 390 – a directed studies course to facilitate my research objectives.”

**Drew Commandeur, Exercise Science, Physical and Health Education** “Aging results in overt changes in an individuals ability to walk related to the mechanics of the movement. For example there are noticeable changes in the timing of muscle activity and the magnitude of forces across anatomical joints during walking in older individuals. Additionally, in older adults, there is also a decreased sensitivity to an induced disturbance during activities of daily living such as during standing or walking. In healthy young adults a disruption to normal walking results in a mechanical response that serves a beneficial functional response. For example, these responses provide valuable corrections to walking such as movement of a limb to avoid an expected obstacle or changes that assist forward progression. In older adults there is little research quantifying the mechanical responses to an electrically induced disturbance during walking. The study of mechanical responses, especially when compared to a young population, may be useful to establish mechanisms of age related mechanical changes and present potential markers for deterioration in functional ability. Therefore we intend to quantify three-dimensional mechanical changes to a disturbance in walking in a young and older (>70) adult group. We hypothesize that mechanical outcomes will be largest in the young adults and diminished in the older adults.”

**Christina McLean, Exercise Science, Physical and Health Education** “As part of the larger Health Promoting Secondary Schools (HPSS) research study, funded by the Canadian Cancer Society - Prevention Initiative, I am interested in investigating the relationship between grade 10 students’ physical activity levels and whether they attended elementary and middle schools that were registered as part of the Action Schools! BC (AS!BC) provincial program. AS!BC is a whole school initiative intended to foster a culture of physical activity through curricula, school and community supports. Although AS!BC has been operating over the past ten years, its evaluation has not tracked students attending these schools prospectively, and so the primary outcome – physical activity levels - of students as they progress through the educational system, remains unknown. HPSS is a high school version of the elementary and middle school model, and has been implemented during the September 2011-June 2012 school year.
The physical activity levels of students participating in the HPSS have been objectively (through accelerometers) and subjectively (through self-report) measured, and their elementary and middle school attendance self-reported as part of the suite of measures taken for the larger study (for which I assisted with data collection). The AS!BC provincial office has a database of all registered schools and the date of registration from which I will be able to identify if HPSS grade 10 students attended a registered AS!BC school two to five years earlier. I propose to explore what, if any, relationship might exist between students’ experiences at elementary, middle and high schools, and their physical activity levels.”

**Nikita Pardiwala, Exercise Science, Physical and Health Education** “Evidence suggests that actual motor skill competence, as well as children’s perceptions of their competence, is at the heart of a developmental model that can explain engagement or disengagement in physical activity. These perceptions of competence change from early to middle childhood. Young children tend to have inflated perceptions of their competence whereas older children (~7 to 12 years) have more accurate perceptions of competence. This study will examine change in the relationship between perceptions of physical competence and motor skill proficiency from kindergarten to grade 2. Building on data collected in the 2010-11 school year on children in kindergarten, the aims of this project are to:

1. Describe the fundamental motor skill competence and perceptions of physical competence of children in grade 2.
2. Examine the change in fundamental motor skill proficiency, perceptions of competence, and relationship between these variables from kindergarten to grade 2.

The project will involve assessing fundamental motor skills of grade 2 students from eight schools during physical education lessons. In addition, a ‘perceptions of competence’ questionnaire will be administered with each child. All recruited grade two children will be included in the cross-sectional analyses for aim A), but only children assessed in kindergarten will be included in the longitudinal analysis to address aim B).”

**Michael Slater, Exercise Science, Physical and Health Education** “The research project on which I will be involved is an initial stage of a larger study on the effectiveness of a multiple item visual tracking task (NeuroTracker TM) to aid in the diagnosis and recovery from concussions. The primary goal of this initial project is to identify and document the developmental performance levels on the NeuroTracker TM of children, ages 7 to 15 years and to identify any
developmental and/or perceptual-learning changes over a nine month period. Two groups of participants (N=~500) will be involved in the project: children who are involved in minor hockey or other dynamic, open skill sports such as soccer or field hockey and children who are active but not participating in an open skill sport on a regular basis. The results of this study will provide a developmental context for the use of the NeuroTracker TM as a diagnostic tool for concussion and return to play.”

**Dylan Trerice, French** “French prepositions à and de (both translated as to in English) have often been viewed as meaningless in some infinitival environments; for instance, à and de in Jean commence à/de parler ‘John begins to talk’ are considered to have no semantic value. However, Fraczak (2008) argues that à and de serve to express two opposed versions of a fact. For example, Jean s’est décidé à partir ‘John decided to leave’ indicates that two options are considered, one positive and one negative, that is one to leave and the other not to leave, while de in Jean a décidé de partir ‘John decided to leave’ doesn’t express this double view. This project will focus on determining whether the use of à and de is systematic amongst verbs exhibiting a pronominal and non pronominal form (se risquer à/risquer de ‘to risk’, s’obliger à/obliger de ‘to obligate’)—thus examining a larger range of data than previously analyzed—since there seems to be verbs that do not follow this pattern (se charger de ‘to see to’: a pronominal verb with de, commencer à ‘to begin’: a non pronominal verb with à). A list of verbs followed by an infinitive introduced by à or de will be gathered from Le Grand Robert. Occurrences of these verbs in their context will be verified using data from the ARTFL database (from 1960-1990) to validate or refute Fraczak’s proposal. This research could help French learners use these difficult prepositions appropriately.”

**Emily Walker, French** “Lucifer Rising: The Emergence of a “New Devil” in 19th-Century France The devil is a multifaceted, fluid character that has changed and developed since his emergence in pre-Christian religion. There are many stereotypes, images and stories attributed to this character, who can be considered a concrete manifestation of the abstract concept of evil.

One of the lesser-known portrayals can be found in French Romantic literature, where a sympathetic and psychologically convincing portrait of the devil and his fall from grace emerges. This research project will focus on Victor Hugo’s posthumous work La fin de Satan and Alfred de Vigny’s poem Eloa, as both present a new angle on the Christian mythos of the devil’s rebellion against God. The project will also seek to connect this new representation with pro-revolutionary sentiment in
France following the social and political upheaval of the late 18th century and continuing well into the 19th. In studying this “new devil of the 19th century,” I hope to gain further insight into the changing perspectives and rationalization of the presence and role of evil in the world.”

Kayla Cheeke, Geography “Under the supervision of Dr. Cameron Owens, I will undertake Honours research investigating political conflict around development in the Northern area of Langford, British Columbia. My intention is to provide valuable reflections on the political context of urban development grounded in detailed studies of three contentious projects: Bear Mountain Resort, South Skirt Mountain Village, and Leigh/Spencer Road Interchange. The research will involve a detailed document analysis furnished by in-depth interviews with disputants (local politicians, developers, community activists and indigenous peoples) exploring how different actors seek to assert the validity of their arguments vis-à-vis their adversaries. In particular, I will explore how disputants align their positions with some notion of the common good, how they legitimately denounce adversaries’ claims, the forms of evidence mobilized to support claims and the institutional, legal, discursive, and material arrangements that support and constrain arguments. Ultimately, I am interested in evaluating how decisions about development are legitimized in a context of pluralism and competing claims to legitimacy. My Honours thesis will function as an original case study advancing knowledge of the political context of urban development and decision-making. It is also my intention that this research proves useful for the community/communities I am researching contributing to social, economic, cultural, and ecological well-being. The JCURA scholarship would greatly increase my research capacity, providing me time to undertake a more extensive interview program and to attend relevant conferences.”

Kalyani Child, Geography “Examination of the human dimensions of hunting using online forum data.

Researchers are increasingly aware of the importance of human dimensions in fish and wildlife management. Although abundant information from the natural sciences can inform management about the ecology and resilience of exploited animals, it cannot provide information about the human behaviour that underlies the exploitation. I propose to employ qualitative research methods to examine the human dimensions of trophy hunting. This specific form of hunting diverges from the far more common subsistence or recreational hunting for food. Consequently, this peculiar behaviour, which has significant conservation implications, remains poorly understood. I seek an
understanding into the values and motivations of individuals, as well as the culture of groups that engage in, or lobby for, trophy hunting. Using qualitative research methods or software, such as NVivo, I will explore these human dimensions by examining online discussion group data on hunting forums. My particular focus will be a grizzly bear (Ursus arctos) trophy hunt in British Columbia, an ideal case study because online data are abundant and this species is the only large mammal in British Columbia that hunters are not legally required to remove edible portions of the carcass. Knowledge gleaned from this research can help inform conservation management in this system and others.”

**Georgia Clyde, Geography** “In my Honours thesis I plan to critically evaluate BC’s energy policy direction with respect to run of river or micro-hydroelectric projects and the processes by which the social and ecological impacts of such projects are assessed. While these projects have been hailed as constituting a key element of BC’s “clean energy” future, critics have rejected claims that they represent social and ecological sustainability. Particularly problematic are the facts that many such projects escape formal environmental assessment and that no province-wide strategic level assessment on the cumulative impacts of multiple projects has been undertaken. With the retrenchment of the federal government in the field of environmental assessment, investigating how the province evaluates potentially harmful projects is even more pressing.

Respecting multiple perspectives, this research will involve both in-depth document analysis (including government regulations) and interviews with both supporters and critics of this policy direction including government officials, developers, activists and First Nations. Specific case studies of projects (including the Ashlu Creek project near Squamish) will be incorporated. The main objectives of the study are to: 1) determine the adequacy of existing assessment frameworks especially with respect to cumulative effects and 2) speculate on how a larger scale, long term strategic-level assessment framework could better address the concerns. This latter objective represents a practical, beneficial outcome of my research.

This award would allow me to expand the coverage of my study, traveling to different parts of the province investigating projects and reaching more potential interview subjects.”

**Lauren Ka-Po Law, Geography** “There is now widespread recognition that ecosystems extend beyond boundaries of parks and other kinds of protected areas (PAs). Environmental management
approaches are beginning to look beyond the PA level to larger landscapes for conservation and sustainability planning. However, governance at the landscape-level can involve more stakeholder groups, several communities, PAs of various types, and varying levels of governments. As a result, landscape-level ecosystem-based management (LLEBM) is more challenging and complex than it is for individual PAs. Until now, LLEBM has received relatively little attention from researchers.

Using current literature and interviews, I will explore governance at the landscape-level in the Muskwa-Kechika Management Area (M-KMA) in northern British Columbia. I will apply a draft assessment framework comprised of a set of 24 questions and indicators to evaluate LLEBM. The framework will guide mix-method research and can hopefully be used to assess similar large-scale environmental governance arrangements. This project is conducted in collaboration with Lance Robinson, post-doctoral fellow at VIU and UVIC, and Phil Dearden, head of the Geography Department at UVIC. We hope the research provides insight and reflection on the governance system in place for the M-K and can contribute to helping local communities and stakeholders strategize on possible changes or improvements for the M-KMA.

The Jamie Cassels Undergraduate Research Award will provide further resources to help broaden the scope of the research and undertake a more intensive approach to ecosystem-based research at the landscape-level. The scholarship will also alleviate financial strain by supporting additional trips up to northeast British Columbia where interviews are conducted with M-K Advisory Board members, First Nations communities, and other individuals involved in natural resource issues in the area.”

**Taylor Antoniazzi, Germanic & Slavic Studies** “My research project will examine changing representations of the female vampire slayer and will trace the development of the female slayer from Ellen Hutter in the 1922 film Nosferatu to the hard-as-nails heroines of modern popular culture. A comparison of Ellen to the title characters of the TV series Buffy the Vampire Slayer and the novel series Anita Blake Vampire Hunter will demonstrate how heroines of the horror genre have been transformed from sacrifices to executioners by contemporary feminist theory. Finally, I will argue that both Buffy Summers and Anita Blake are positive gender role models for female audiences rather than eroticized characters constructed to excite male fantasies.”

**Carley Campbell, Germanic & Slavic Studies** “For my research project I would like to examine the role of female Russian
revolutionaries from the early revolutionary period (1860’s) through to the Revolution of 1917. In an era where women worldwide were not involved to any great extent in radical movements, Russia possessed a number of female revolutionaries who were not only involved in conspiracy but perpetrated a good number of terrorist acts such as assassinations by gunshot and bombing as well as agitation and the constructing of bombs. Firstly, I would like to examine the social and cultural influences which would have encouraged these women to commit such acts. I would endeavour to explore the idea that not only their limited freedom in society but also cultural factors, such as the Russian attitude towards suffering and sacrifice as an inevitable and noble circumstance, provided a validation for the price of leaving their families and losing their lives in the revolutionary cause. Secondly, I would like to address the resulting reverence these women received, not only from fellow revolutionaries but from all levels of Russian society. These women would become legendary heroines and martyrs not simply for their daring acts but also for their acceptance of imprisonment and in many cases death. I would like to examine in depth why it was that women who defied social convention and committed violent acts became legends who won the hearts of the Russian public not only in their own time but for generations to come."

**Elise Polkinghorne, Germanic & Slavic Studies** “This research project would explore the concept of ‘post-memory’, as it pertains to the Holocaust. Post-memory is often expressed and dealt with through a creative lens. The research will focus on Rafael Goldchain’s series of photographs, in which he creates portraits of his family, using himself as the model. In creating the portraits, he is able to process the memories, or rather non-memories, that he has been haunted with.”

**Glenn Beauvais, Greek & Roman Studies** “As it emerged from its long Dark Age, Greece entered the Archaic Age with rapid changes which separated it radically from its past. Once overshadowed by the celebrated Classical period, the Archaic period is now appreciated as the vital source of those later achievements.

Great leaps of innovation and experimentation were made in literature as creative energies shifted from traditional epic to the shorter and more personal lyric poems in a plethora of genres and meters. Greeks began to redefine themselves and lyric poetry was ‘the primary vehicle for the contest of paradigms’.

The aim of my research will be to identify various ways archaic poets challenge and transgress early Homeric traditions on such topics as love, war, and death. I propose to include the poetry of Archilochus,
who was said to have been banned in Sparta for his flippant disregard for standards of excellence, as well as Sappho who provided a valuable female perspective on the nature of eros, relationship and longing. In addition, I will examine fragments from Mimnermus, Simonides, Anacreon and Hipponax as some of the voices of this very dynamic period in Greek history.”

Susana Reyes, Greek & Roman Studies “This research project focuses on the production and distribution of gold technology in the Bronze Age Aegean, separated into three sections. The first section will discuss raw materials and its acquisition by looking at locations of known gold mines as well as trade routes.

The second section will examine the gold artefacts from various sites to determine similarities and/or differences in styles, patterns, symbols and methods of production. This section will also contain a study of the role of the goldsmith and the tools that were used.

The third section, which will rely on findings from section two, will attempt to answer the question of whether gold technology began as an indigenous, Greek development that spread outwards or if it was knowledge brought into the Aegean along with the raw materials. This will require some analysis of gold items from sites outside of the Aegean, such Egypt or Asia Minor.

While priority will be given to gold jewellery, other artefacts such as knives, gold sheets and foils, cups, signet rings and other inlaid items will also be included.”

Cory Kreger, Hispanic & Italian Studies “My project consists in researching bibliographical sources in the fields of Latin American literature, media studies, technology and culture. I will focus on Mexican, Argentina and Cuban literature from the end of the nineteenth to mid-twentieth century. Among the authors I will study are Mexican Alfonso Reyes and Carlos Fuentes, Argentines Jorge Luis Borges, Adolfo Bioy Casares and Julio Cortazar, and Cuban Guillermo Cabrera Infante. In particular, I am interested in assessing the impact that the introduction of electrical light and related technologies such as cinema had on the works of these authors.

Among my tasks, I foresee conducting bibliographic research and edit and update bibliographical lists. With the guidance of my supervisor, I hope to gain experience in bibliographical research as well as expand my knowledge of Latin American literature, culture and the history of media and technology. I expect to get acquainted with current methods of academic research and generally from the expertise of my supervisor
Dex McNally, Hispanic & Italian Studies “Theoretical descriptions of the consonants of Spanish have made certain assumptions about 1) their distribution and 2) their pronunciation in different contexts. Recent phonetic studies have indicated that the reality of how these sounds are pronounced is much more complex than the theoretical descriptions have led us to believe.

The proposed project is an instrumental phonetic investigation of consonants in Spanish, focusing on the different manners of articulation (stops like <d> vs. fricatives like <th> vs. approximants like <y>). The project will include the use of ultrasound technology to investigate the articulation of Spanish consonants, to determine how the degree of constriction differs according to the underlying nature of the consonants as well as the context in which the sound occurs (word-peripherally vs. medially).

The project will provide direct articulatory data on the consonants of Spanish, something that is not yet available. As such, the project will contribute greatly to the growing body of literature on Spanish pronunciation, a very rich and controversial area of current phonetic research.”

Andrea Meyes, Hispanic & Italian Studies “This undergraduate research project “Food: Torment and Delight” is a comparative study of the literary and media representations of eating disorders among contemporary Spanish and Italian writers. As a double major in Spanish and Italian, I am combining my fields of study in research that allows me to analyze the obscure side of food as a source of sorrow as well as of pleasure. In countries with strict aesthetic criteria such as Italy and Spain, eating disorders constitute a growing problem. In their narratives, writers Almudena Grandes, Espido Freire, Alessandra Arachi and philosopher Michela Marzano reflect women’s obsessions with food and thinness. A comparative study of their writings will complement my honours thesis in contemporary Spanish cultural studies and will be an excellent way to tie my two areas of study into one.”

Hannah Anderson, History “My fourth year honours thesis concerns women’s ideas of body and weight in America during the early republic. I hope to look beyond the period’s standards of absolute beauty and body shape as they were extolled in a variety of prescriptive sources. My goal is to find out if and how middle class women thought about beauty and their bodies in ways that reflected what food and the performance of their domestic and procreative work meant to them. To accomplish this, I will be engaging with women’s diaries and letters, as
well as other contemporary sources.”

Morgan Balderson, History “Last spring I completed a project in which I argued for the intellectual merit of sport history, taking into consideration the broad range of scholarship in the sub-discipline over the past 40 years. For my thesis, I intend on continuing in the field of sport history, with a focus on professional ice hockey in North America. On September 15, 2012, the National Hockey League’s (NHL) collective bargaining agreement with the National Hockey League Players’ Association (NHLPA) expired and the league’s third work-stoppage in 17 years began. In light of this current labour dispute, I have decided to focus my thesis on the history of labour relations in the NHL prior to and including the successful formation of the NHLPA in 1967. It is apparent that NHL players did not consider unionization until the 1950s, although discontent over issues such as pensions, wage increases, and benefits were present from the league’s formation in 1917. In February 1957 the first attempt to form the NHLPA was met with harsh resistance from NHL owners and uncertainty and confusion among its own members. Ultimately, pressure from ownership led to the unraveling of the players’ union. But the failure of 1957 demonstrated clearly that NHL players were suddenly aware of the exploitative power relations that had characterized business in the NHL for decades. An increase in player activism had emerged in other professional sports in the 1950s, and unionization in the wider North American economy had peaked just prior to 1957. These factors as well as others, such as the arrival of television contract revenues, will be examined for their impact upon the timing of the NHL players’ attempt to unionize. My thesis will also examine the reasons behind the league’s steadfast resistance to the union’s formation and the factors that led to the downfall of the first NHLPA.”

Montanna Rose Mills, History “My research project will be examining the Actors' Equity Strike that occurred in New York City in 1919. Through my research, I hope to examine the intersection of gender politics and labour relations as they relate to the chorus girls, who, although involved in the strike, were barred from membership to Actors' Equity until the 1950s. I also have interest in how members of the Actors' Equity Association reconciled the seemingly opposing views of actors as labour supply and actors as artists. The award would be used to facilitate a research trip to the Actors’ Equity Association collection at the Robert F. Wagner Archives at New York University.”

Andrew Wong, History “The emergence of the California School historians, who emphasize the need of de-Eurocentrism in the study of economic history, is becoming one of the dominating approaches to
historical research in the last two decades. In the context of Chinese history, this school of historians seeks to provide a renewing longue durée perspective to understand the transformative developments in late imperial China, therefore attempting to overcome the issue of Eurocentricism in the conceptualization of world history. In this project, I will explore if the California School attempt is leading to the global victory or a complete defeat of Eurocentrism, particularly in relation to the global capitalist paradigm that mainly created by and for Euro-American modernity. I will also investigate to what extent the rise of the California School is an artifice of the current political and economic shift of global balance of power. By focusing the research on the issues of historical imagination and the order of power, I hope to obtain a better understanding of this renewing perspective of the Great Divergence in respect to the coming economic reconvergence of our time.”

*Sara Fruchtman, History in Art* “Cross-Cultural Representations of Plants in the *Vienna Dioscurides* and the *Kitab al-diryaq* in Paris

The *Vienna Dioscurides* and the *Kitab al-diryaq* in Paris contain numerous illustrations of plants that were used for medicinal purposes throughout the medieval period. The *Dioscurides*, the earliest illustrated Byzantine medicinal manuscript, was written in the 6th century and based on *De Materia Medica*, an encyclopedia of herbal medicine from the 1st century CE. The *Kitab al-diryaq* (*The Book of Theriac*) is one of the earliest illustrated Arabic medicinal texts, written in the 12th century and based on ancient Greek herbal medicine. Building on recent scholarship, such as, Minta Collins’ *Medieval Herbals* (2000) and Anna Contadini’s *Arab Painting* (2010), the proposed research project will undertake a comparative visual analysis of plants that are represented in both manuscripts by examining high-quality facsimiles from the Special Collections of the McPherson Library.

Some of the plant illustrations are very simplified and highly schematic; others are more naturalistic and recognizable. By comparing these medieval plant illustrations to modern botanical illustrations, I will analyze the significance of the visual information the medieval painters conveyed and consider the extent to which realism was important to the illustrations. In addition, using available translations of each manuscript’s text, I will examine the relationship between image and text. This research will recognize first, how the plants function in the overall pictorial program of each manuscript and second, contribute to the understanding of cultural exchange between Islam and Byzantium during the medieval period.”
Alexandra Macdonald, History in Art “My proposed research will examine the portraits of Queen Anne, wife of James I, as a case study of self-fashioning in early Stuart England. Through examination of Queen Anne’s portraits I will explore fabric choice as one of the ways in which royal self-image was manufactured. This self-construction was particularly significant for Anne who, as princess of Denmark, queen of Scotland, and queen of England, needed to create multiple personal identities, and also had to link herself to Queen Elizabeth to facilitate dynastic succession. I will investigate formal and iconographic elements of the portraits within the context of historical and economic concerns, to determine the mechanisms of her self-fashioning. Fabric and garment choice are only one aspect used to construct self-image, but they are integral to the process, particularly in a pre-industrial society. Looking at the conscious choice of particular textiles, the origins of the fabric and the workmanship and appearance of the finished garment, I will demonstrate the ways in which Stuart royals considered both national and international audiences for their self-constructed personas.”

Christine Oldridge, History in Art “I am interested in researching an ivory box in the Legacy Art Gallery Collection here at the University of Victoria, and comparing it to similar pieces of the same time period in the Renaissance/early Modern period. This ivory box was probably created for a domestic market, and I intend to situate its production within a more precise socio-cultural context that spans (possibly) Africa, India, and Western Europe. After understanding the Legacy box in terms of its function, potential owners, and its iconography, I would like to extend my study to compare it to other domestic ivory containers of the Renaissance and early Modern period visible in media such as paintings.

I believe that a complex understanding of the ivory box in terms of its original conditions of production and reception would be valuable for the Legacy Art Gallery Collection and also for History in Art Students here at the University of Victoria as a tangible example of Renaissance domestic objects; my research would be a useful teaching tool on campus, especially in a course like HA 200, Materials and Methods. My proposed project would benefit from the supervision of Dr. Catherine Harding, and departmental expertise of Dr. Baboula who teaches art historical materials and methods; my research will be included in the Legacy Art Gallery’s database.”

Ryan Nicolson, Indigenous Studies Minor “The proposed research project addresses the historical narrative of the socio-political
framework of the Kwakwa_ka_’wakw nation. The traditional governance system is the base, foundation, and heart of the Kwakwa_ka_’wakw potlatch system. However, by the mid-twentieth century, the traditional governance system had slowly been replaced by the Department of Indian Affairs (DIA) band and council system, which has created ongoing political factionalism in our communities. Despite oppressive anti-potlatching laws and assimilative polices, which were strictly reinforced by the Canadian federal government between 1884 and 1951, the Kwakwa_ka_’wakw astutely discovered a way to preserve the traditional governance system by incorporating literacy into cultural knowledge systems. This project seeks to explore how Kwakwa_ka_’wakw potlatch traditions were systematically documented through western practices and, more importantly, how my ancestors preemptively adopted and appropriated such practices in order to leave my generation, and the future generations, with the tools and information necessary to fully revitalize our traditional governance system. Researching the traditional governance system is central to the post-colonial discourse and has therefore become essential since our people are forgetting the old ways. Governance is the foundation of a nation, and without it the Kwakwa_ka_’wakw nations cannot function or exist. It is my belief that unless we reinstate our traditional governance system, the Kwakwa_ka_’wakw people will not move forward and progress as nations.”

**Kazuya Bamba, Linguistics** “In my research project, I would like to study the historical development of anaphors in Romance languages. While some languages have only a reflexive clitic (e.g. French), others make use of an independent form in addition to the clitic (e.g. Italian). Since the same clitics can be used to create multiple types of clauses in the language family, and the distribution of such clitics greatly varies across languages, it would be very informative to look to the diachronic change in the use of the reflexive clitics. In my study, I will also like to investigate whether such development reflects the genetic relation among the languages based on their history and geography.”

**Dylan Barkowsky, Linguistics** “This proposed study aims to investigate the effects of instructor-facilitated vs. computer-mediated study methods on second-language learners’ retention of vocabulary. The guiding questions to be answered are: (1) Which study method will allow the greatest immediate acquisition of the targeted vocabulary items? (2) Which study method will lead to longer term retention of the targeted vocabulary items? The findings aim to improve the understanding and use of computer-assisted language-learning methods in English-as-a-second-language education.”
Matthew Windsor, Linguistics “This project will look at developing a generative framework for syntactic movement in Classical Greek, a so-called free word order language that displays many idiosyncrasies in this area, including movement of non-constituents. Specifically, I will be looking at correlations between prosody, information structure and movement within a framework of the Copy Theory of Movement. Research will involve data mining using the database Thesaurus Linguae Grecae and extensive review of relevant literature.”

Dean Koch, Mathematics & Statistics “Through an NSERC undergraduate research award I have developed a generalized additive spline model to describe the differences in chick growth rates of Cassin’s Auklets on Triangle and Frederick Islands, BC. We found that Frederick Island has a fairly stable average growth rate whereas Triangle Island is affected by El Nino events and fluctuates a lot. Our collaborating seabird researchers want to describe the difference in the mean growth (as we have done with the spline model) but also the interannual variation in the average annual growth rates. In other words we want to compare the "wiggliness" of the spline lines. There is no clear quantitative way to compare wiggliness in the literature. However, one part of the spline regression line that describes wiggliness is the integral of the squared second derivative of the basis function. We will develop a bootstrapping test to compare wiggliness quantities of two spline models. We will have to be careful in how we define the resampling algorithm and will run simulation studies to confirm the algorithm and bootstrapping test is correct. As an alternative to this method, we would also like to develop a Bayesian model where the smoothing parameter (a hyper-parameter) is different for each island. A second model can be developed where the smoothing parameter is the same and these two models can then be compared using a model selection technique such as DIC.”

Rylan Miszkiel, Mathematics & Statistics “In the first phase of the project I will learn about and then implement the general “solver” for discrete-time pursuit games which has just been found by Bonato and MacGillivray. In the second phase of the project I will use the solver to gather information about a particular pursuit game for which a structural characterization of the games won by the pursuer is not known, in the hope for finding such a characterization. A good candidate is “distance-k Cops and Robbers”. In phase three I will write up my results, prepare a poster for the Research Fair, and hopefully a paper for the Arbutus Review or another journal.”

Jacqueline Warren, Mathematics & Statistics
"In the paper "Independent perfect domination sets in Cayley graphs", [Journal of Graph Theory 37 (2001), 213-291], Jaeun Lee described a connection between efficient dominating sets and covers of the complete graph. The goal of the project will be to see if a similar connection exists between efficient total dominating sets and covers of some other graph, perhaps the reflexive complete graph.”

**Stephanie Yurchak, Mathematics & Statistics** “The problem of classifying finite groups up to isomorphism has interested mathematicians since the creation of the Holder Program. While a priori all the tools to complete the classification for any finite order already exist, in practice some cases can be challenging or tedious.

This project has three purposes: (1) learn some results and methods often used in group theory, (2) use them, together with some creativity, to classify groups of certain difficult orders (such as 24, 36, or 54) up to isomorphism, and (3) write up the results in the form of a paper and a poster for the Research Fair.”

**Pranav Shrestha, Mechanical Engineering** “Haptic virtual prototyping is the virtual prototyping of the feel of a product. Because the feel can play a significant role in the commercial success of a product, the importance of haptic virtual prototyping as a design tool is increasing. However, to date, haptic virtual prototyping has been investigated only on product-specific haptic interaction systems. In this project, I will explore the haptic virtual prototyping of sliders and buttons on a low cost, general purpose haptic interaction platform. The investigation will comprise three steps. First, a literature survey will identify what dynamics (stiffness, damping, friction, hysteresis, detents, etc.) have been rendered in existing work. Second, those dynamics will be implemented on a haptic interaction platform that permits the manipulation of virtual sliders and buttons through a Novint Falcon haptic device. This haptic platform is available in Dr. Constantinescu’s research lab. Third, a preliminary study will determine if users can distinguish the various virtual dynamics when rendered through the Novint Falcon interface. Depending on outcome, this preliminary study may be the first step towards using inexpensive haptic systems to prototype the feel of products.”

**Pranay Shrestha, Mechanical Engineering** “Low temperature solar storage using Phase Change Materials

The lack of an effective solar energy storage system has been a major concern in the field of renewable energy. Phase Change Materials (PCMs) can greatly increase the energy storage capacity of the conventional (sensible energy) storage systems because of the high-
energy transfer during their phase transition. With the help of PCMs, higher energy can be stored in lesser volume and at lower temperatures (meaning lower insulation costs). For the proposed research project, a novel PCM (Myristic acid) has been selected and a model apparatus designed to measure its thermal properties and behaviour. The research project will now deal with carrying forth the experiments for measuring the enhanced thermal capacity and the thermal conductivity of the PCM working fluid.”

Reed Teyber, Mechanical Engineering "My proposed JCURA project was to design and implement a rotary flow control for Dr. Rowe’s permanent magnet refrigeration system. The goal of the flow control was to increase the operating efficiency and simplify the footprint of the system. However, a major performance concerns arise with the three counter rotating Halbach magnet arrays in the existing prototype. An unexpected high operating torque to overcome the inter-array magnetic attraction likely due to fringe fields only allows the magnets to be rotated in the same direction rather than counter-rotated, as originally planned. Co-rotating does not permit a sinusoidal magnetic waveform, with a compressed demagnetized phase. Since the goal of active magnetic refrigeration is develop a more efficient alternative to vapor compression refrigeration cycles, these issues reduce the operating efficiency; making the prototype unsuccessful as a vapor compression alternative. The device will be altered to address these issues, and because of this my rotary flow device, originally proposed for my JCURA topic, would become obsolete as the prototype changes. As such, I require changing my topic to address these issues as follows.

The new research topic will investigate the effects of fringe fields on the triple Halbach magnet array by replacing the inmost magnet with a non-magnetic placeholder. This should allow a torque reduction, at the cost of a lower maximum attainable field, hopefully permitting counter-rotating operation. Removing the magnet will require an increase in rotational frequency to accommodate the decreased magnetic field strength in order to maintain the output cooling power. The increased frequency requires research into the systems regenerator and coolant phasing, as well as a higher frequency drive motor. This implementation will be accomplished on a new refrigerator which needs significant machining and assembly before the new magnet placeholder can be implemented. The result of this research will confirm if fringe fields are in fact the cause of the higher torques and if the new simplified configuration based on two Halbach cylinders can be successfully implemented. This will also facilitate re-design of the Halbach array in future prototypes.”
**Brett Hryciw, Medical Sciences** "Fragile X syndrome (FXS) is the most common form of inherited intellectual disability (Bagni & Greenough, 2005), affecting 1 in every 4000 males and 1 in every 8000 females (Turner et al., 1996). Moreover, it is reported by the National Fragile X Foundation that approximately one-third of all children with FXS have some degree of autism. FXS is caused by the loss of expression of the Fmr1 gene, which leads to loss of the FMR protein (FMRP) (Fu et al., 1991; Verkerk et al., 1991). FMRP is required for normal brain function as the lack of it results in clinical manifestations in children with FXS having impaired learning, hyperactivity, and heightened anxiety and stress response to novel social situations (Oostra and Willemsen, 2003). Synaptic plasticity is the current leading model of learning and memory (Malenka, 2002), and stress has been shown to negatively impact synaptic plasticity in animal models (Kim and Diamond, 2002). The research project will use an animal model of FXS to investigate how stress affects synaptic plasticity in the hippocampus, a brain area known to have a central role in learning and memory."

**Eric McGinnis, Medical Sciences** “This project will determine whether Huntington’s disease (HD) results in an increase in oxidative stress (as measured by lipid peroxidation and protein carbonylation indices) and changes in the levels of neurotrophic factors [named brain-derived neurotrophic factor (BDNF)] in different brain regions (hippocampus, striatum, cortex, prefrontal cortex, and cerebellum) of YAC 128 mice (transgenic mouse model of HD). The main goal is to evaluate the oxidative stress and BDNF profile in the YAC 128 mice using different age groups (pre-symptomatic, early symptomatic, and symptomatic animals). Through comparison of early- and late-stage HD models we hope to characterize underlying mechanisms of HD, and determine the value of these biomarkers as targets for later therapeutic developments.”

**Elisabeth Hill, Medieval Studies** “My proposed project is to examine the Barholomeus Anglicus manuscript in Special Collections in order to create a complete codicological description of it. This manuscript is one of very few complete Medieval manuscripts at UVic so having a complete and thorough description of it will make it more useful and accessible to students and researchers. In particular, such a description will greatly enhance its usefulness as a teaching tool. The description can also be used to expand the already existing website which offers little information about the digital facsimile of the manuscript beyond a basic introduction. For me working with the manuscript and putting together this description would be a great opportunity to use what I have learned in the past about manuscript studies, and to build on that
knowledge.”

**Sarah White, Medieval Studies** “A study of English canon law, with a focus on some of the major secondary studies on English canon law, and primary sources from Canterbury c. 1200-1301. The core of the essay will be a close analysis from this jurisdiction in order to explore the application of canon law through ecclesiastical administration. This is a formative period of canon law and allows the researcher an understanding of the early development of the application of law through administration over a range of issues, including marriage, testament, benefices and titles.”

**Sophia Gardezy, Nursing** “I will be engaged in research activities associated with the Canadian Longitudinal Study on Aging (CLSA). The CLSA is a large, national, long-term study that will follow approximately 50,000 men and women between the ages of 45 and 85 for at least 20 years. The study will collect information on the changing biological, medical, psychological, social, lifestyle and economic aspects of people’s lives. UVic is one of 11 Universities involved in data collection and one of four sites collecting clinical data. I will assisting in a variety of research activities the Data Collection Site (DCS) at the Gorge Hospital where participants come to complete a comprehensive assessment that includes dexascan (i.e. bone density), EKG, echocardiogram, vision and hearing testing, cognitive testing, performance measures (e.g. gait, balance), etc. I will be learning about clinical data collection for a national study involving older adults.”

**Suzy Prowse, Nursing** “I will be working with Dr. Lenora Marcellus (School of Nursing) 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, developed the women’s survey, and received ethical approval through VIHA and UVic. The survey explores women’s oral health care practices before, during and after pregnancy and their access to primary dental health services. This fall we will be in the data collection and analysis phase. We will be administering the survey to women who have given birth in the previous 12 months. Following analysis we will be sharing our results with perinatal and public health teams within VIHA and the province. As time permits, I 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.”

**Brittany Reed, Nursing** “I would be conducting research on the effects of therapeutic clowning in a residential care facility. Therapeutic clowns focus on the imaginative and the creative to engage seniors living in residential care in playful interactions with the goal of improving quality of life. Research activities will include conducting literature reviews, assisting in focus groups, data collection, data input and cleaning to identify themes and participating in analyzing and summarizing findings.

The Sunshine Clown Society ([http://www.thesunshineclownband.com/](http://www.thesunshineclownband.com/)) has been volunteering every other week at Beacon Hill Villa in James Bay for the past 6 months. Anecdotal evidence suggests that their interactions with residents are improving mood and engagement with others. However, an evaluation is needed to systematically gather evidence regarding the impact of this therapeutic activity.

This pilot study will focus on evaluating a therapeutic clown program in one residential care facility and findings will be used to inform future research as well as recreational programs in long-term care settings.”

**Hugh Davis, Pacific & Asian Studies** “I intend to research the presence and role of fictional characters in Japanese society, with my thesis being that such characters are often treated as members of the Japanese community in a fuller sense than similar characters in America or Canada. To make this argument, I will be focusing on Japan’s animation and comics industry, which produces many of the characters embraced by the Japanese public. I will also be taking a look at the presence of fictional performers in the Japanese music industry, e.g. Vocaloid.”

**Brendan Downey, Philosophy** “In her book *States Without Nations*, Jacqueline Stevens imagines a world in which the concepts of “nation” and “state” are bifurcated. The focus of her *gedanken* nation is the family unit and the ensuing birthright of citizens viewed as holdovers from conservative eras incompatible with the structure of today's international community. Stevens' argument is interesting in its own terms, but becomes even more so when inverted as the concept of nations without states is applicable to the position Indigneous North American groups find themselves in. In my project I will investigate the proposal that North American Indigenous groups constitute peoples for
purposes of international law and that, as per the terms of international treaty law, should be recognized and treated as such. In order to do this it will be necessary to define the sort of group Indigenous North American groups constitute and the sorts of rights they are entitled to as that type of group. In this research, I will discuss Austro-Marxist conceptions of the nation as a paradigm for disjoining nations from territory and instead defining nations according to non-territorial personal associations such as shared cultural ancestry. I will concentrate my investigation on the Mohawk people of Akwesasne and refer to the work of John Borrows, Otto Bauer and Karl Renner, as well as Avery Kolers, Peter Jones, Antonio Cassese, and, of course, Jacqueline Stevens.”

**Jamaal Hyder, Philosophy** “My proposed research will focus on the intersection of philosophy of language and epistemology. Particularly, I am interested in justification insofar as it regulates claims to knowledge in the context of human communities, and the role of language therein. In a spring 2012 paper for Dr. Patrick Rysiew I focused on the implications of Ludwig Wittgenstein’s discussions of rule following, and the impossibility of private language (*Philosophical Investigations*) to argue for the impossibility of private justification.

I propose to expand on this paper by developing a contrasting view based on a distinction Thomas Reid makes between natural and artificial language (*An Inquiry into the Human Mind on the Principles of Common Sense*) where natural language consists in those signs that human beings have an inborn capacity to understand, and artificial language consists in those signs whose use is established by convention. My preliminary research indicates that Reid’s distinction between natural and artificial language could be used to make a similar distinction between natural and artificial justification which, contrary to Wittgenstein, would hold that natural justification is an inborn capacity, while artificial justification is a matter of conforming to conventions.

Further, the view I developed from Wittgenstein’s account of language and the contrasting view I propose to develop from Reid’s account of language both have implications for the modern debate between internalist and externalist theories of justification. I propose to frame the contrasting views drawn from the work of Wittgenstein and Reid in the context of that debate.”

**Zoey Ockenden, Philosophy** “The aim of my project will be to explore both sides of the debate regarding the ethical ramifications of permitting Physician Assisted Suicide. More specifically, I will focus on the question of whether, or to what extent, the positive right to
healthcare ought to entail that assisted suicide be included in one’s rights to receive aid in achieving one’s autonomous goals when these goals cannot be achieved alone. In other words, ought the right to health care generate a societal moral responsibility to aid individuals unable to commit the act of suicide independently? On the other side of the debate, I will explore whether or not individuals ought to be held morally culpable for providing assistance in another’s suicide. In this research I will unpack and examine the underlying ethical intuitions that influence both sides of this debate; I will critically analyze the logical pathway between these intuitions and the conclusions they lead to. Thus, I will investigate the following types of questions. What are the ethical implications of Physician Assisted Suicide for a physician? What defines autonomy, generally speaking, and how does this definition inform our understanding of patients’ rights to receive and/or refuse health care? Finally, at what point ought a patient’s autonomous decision-making rights be taken from them?”

Alice Koning, Physics & Astronomy “The universal star formation rate density (SFRD) relation describes the rate at which new stars form in the universe considered over its 13.7 billion year lifetime. Astronomers have recognized for some time that the rate at which stars form in the universe increase slowly as the universe aged, reaching a broad crescendo some 10 billion years ago. The universal star formation rate in the present day universe is some 10 times smaller than at the peak. The project will use sensitive narrow band images taken with the Canada France Hawaii Telescope (CFHT) to identify a sample of some 600 [OII] line emitting galaxies at a redshift $z=1.8$ (corresponding to the peak in the universal SFRD relation). The project will be developed in two phases: 1) the multi-wavelength brightness of each emission line galaxy will be analyzed employing a photometric redshift analysis to sift the $z=1.8$ [OII] galaxies from interloping emission line galaxies along the line of sight, 2) having identified the $z=1.8$ [OII] emitting galaxies, the sample will be processed to learn about the population as a whole via statistics such as the luminosity function, the emission line equivalent width distribution and the colour distribution of galaxies. This project – which will generate one of the largest samples of $z=1.8$ [OII] emitting galaxies – will begin to reveal in what type of galaxies star formation occurs and under what physical conditions. In a sense it will provide us with a ringside seat at the peak period of universal star formation.”

Ryan Porter, Physics & Astronomy “I propose to test the Hanbury Brown and Twiss effect using photons in a bench top experiment. This is a quantum phenomenon where photons (particles of light) tend to 'bunch' together. The effect has been used to measure the size of stars
and the size of particle interactions at high energy colliders. To accomplish this I will need to build a device sensitive enough to detect single photons, but capable of detecting millions of them per second. This can be done using a recently invented device called an avalanche photodiode.

The physics department is interested in developing expertise in this area because being able to detect single photons opens up the possibility to do a large number of quantum optics experiments, including spooky entanglement measurements.”

**George Benson, Political Science** “I am interested in studying the similarities and differences between Canadian and European Union identity construction mechanisms, specifically cultural programmes. Given the similarities of the two entities, both in terms of their construction and the issues that they face (particularly their intense diversity), they are two objects suitable for comparison. The research question I have proposed is:

“What are the similarities and differences in which the federal government of Canada and the supranational government of the European Union have worked to construct a unified identity, specifically through the use of cultural programmes and policies?”

The study proposed will look into particular cultural programmes run by the two entities, for example: the Canadian National Film board is ripe for comparison with the EU Media Fund. The similarities in terms of policy will be identifiable upon close inspection, but beyond the institutional mechanics of policy, this study is also interested in the reasoning behind said policies, and the reactions to them. What reasoning or understanding of the world informs the creation of these policies? What do sub-unit and non-institutional actors ‘beneath’ these larger governments (Canadian federal and European supranational) think of these attempts to build identity? Have they done anything in response? The answers to these questions not only works towards closing a gap in comparative work on Canada and the European Union, but in fact also reaches towards a broader, deeply pertinent question: how do democratic, pluralistic entities work towards creating united societies, without resorting to authoritarian measures, with the presence of so much diversity?”

**Alannah James, Political Science** “Research will be conducted to bring attention to and problematize the high incidences of rape within the US military, performing a critical discourse analysis of media and governmental policy representations of the issue for the year 2011. It will situate the epidemic within broader, systemic issues within the US
military, and seek to determine how hegemonic masculinity and rape culture encourage the rape of female soldiers. Contemporary issues of sexual violence directed at female military personnel are just a few threads in the broader tapestry of ongoing socio-political issues institutionally embedded within the US military. This student researcher seeks to shine a spotlight on ongoing, fundamentally unequal systems of hegemonic masculinity and rape culture that permit and normalize the silencing and victimization of women both at home and abroad.”

Adrienne Sanders, Political Science “This research project will be a political examination of food waste in Victoria. In an era of increasing concern for environmental protection and sustainability, the question of 'why does food waste occur and what are the implications?' is something that needs to be asked at the local level. The mass disposal of consumable goods is a reality that is often corporately silenced and publicly overlooked. Today, up to 40% of edible produce is rejected or thrown out within grocery stores throughout the Global North because such products are not 'aesthetically acceptable'. I am concerned that there currently exists little research and dialogue in the area of food waste. Thus, the goal of this paper is to further investigate the reality of food waste as a means to further investigate and discuss the injustices this practice has on citizens within Victoria. Questioning how a city such as Victoria wastes food, and why, is an imperative step in reconstructing the problem from the bottom up - by first introducing the problem to the public as a means to increase awareness and then secondly mobilizing civic dialogue and engagement surrounding the topic. Ultimately, this project will consider the mass disposal of food to be an injustice to both citizens in need as well as to the environment. I will seek to engage in a holistic, inclusive and public political dialogue surrounding food waste, drawing from the ideas of contemporary political theorists such James Tully and Charles Taylor while also utilizing ecologically minded readings such as Waste: Uncovering the Global Food Scandal by Tristan Stuart. To assure the research provides not only a scholarly perspective, I will also engage with both the consumers and providers of food within Victoria as a means to address the contemporary public attitudes and concerns offood waste.”

David Jewett, Psychology “Athletes with single or multiple concussions experience adverse emotional and cognitive outcomes long after retiring from play, leading researchers to explore the immediate and cumulative effects of concussions among younger athletes. In turn, the concussion literature has inadequately assessed a notable cognitive ability called executive functioning, an elusive neuropsychological construct involving higher-order abilities (e.g., problem-solving, planning). Executive functioning appears sensitive to both physical
fitness and brain-related atrophy (e.g., dementia, head injury) and executive-related performance may vary based on athletic and concussive history. Athletic participation leads to positive (e.g., fitness-based neuroplasticity) and potentially negative (e.g., concussions) brain-related outcomes, each important when exploring athletic populations.

The proposed study applies a developing model of executive functioning recently validated within our lab, CORTEX. The assessment battery is comprised of 5 computerized tasks. Performance on these tasks will be compared across two groups: nonconcussed athletes and concussed athletes, all varsity members of our Vikes community at the University of Victoria, given an existence alliance between their directives and Drs. Brian Christie and Mauricio Garcia-Barrera. It is hypothesized that concussion history will rescind the cognitive gains of exercise. All participants will complete an extensive history questionnaire, providing information on concussion history, sport affiliation, and physical activity levels. Anticipating a heterogeneous concussed athletes group with respect to numbers of previous concussions, times since last concussion, and sport affiliations, exploratory analyses will examine the relationship between these variables and executive functioning to foster hypothesis generation and guide follow-up research in our lab.”

**Meghan Richey, Psychology** “My research project is an honours thesis investigating the role of spirituality in sport. Specifically I will be examining the experiences of men and women varsity rugby players at UVic who are currently dealing with and recovering from injury and who feel that spirituality has played a role in their injury experience. My study will employ a phenomenological approach to collect and analyze data. Athletes will participate in an interview and a follow-up meeting to confirm intended meaning of ideas expressed during the interview. The aim of this study is to increase understanding of the role of spirituality in sport as a potential recovery and performance aid to be more effectively utilized by athletes, coaches and sport psychologists.”

**Dylan Collins, Public Health & Social Policy** “British Columbia has an established, provincially funded, harm reduction program coordinated by the British Columbia Centre for Disease Control-- an agency of the Provincial Health Services Authority. Harm reduction seeks to prevent illness, injury, and death associated with high risk behaviour and is most notably associated with substance misuse. Harm reduction programs include a breadth of strategies and services ranging from educational tools, distribution of supplies (eg needles, condoms, stem mouthpieces) to minimize risk and disease transmission, to
providing opportunities of contact with healthcare. It is imperative that harm reduction strategies and services be delivered in concert with avenues for abstinence and recovery in order to ensure the health, safety, and livelihood of all people and their communities. Harm reduction programs are highly successful globally, in Canada, and in British Columbia; Vancouver is home to North America’s only supervised injection facility. Despite monumental achievements and successes of harm reduction programs in British Columbia, unique approaches are needed for First Nations communities that are culturally competent. Haida Gwaii, home of the Haida, is an isolated archipelago of over 150 islands located off the Northwest Coast of British Columbia with an approximate population of 4,000 people. This project aims to explore, by engaging directly with community stakeholders, the context in which harm reduction strategies and services can be successfully and sustainably implemented in the communities of Haida Gwaii.”

**Kelly Lindsay, Religious Studies** “This paper will seek to analyze the western adoption of Hindu yogic practices. This under-studied modern phenomenon presents an interesting secular commodification of a sacred religious practice, and presents a series of questions about its cultural, social, and religious significance. For example, does the way yoga is secularized in a modern studio pervert or disrespect the practice, and, does it cause an erosion of religious dignity and identity? Is there religious significance for an individual who is simultaneously unaware or ignorant of the religious components of yoga practice? Can adherents of other faiths practice yoga without compromising their own religious integrity, due to the implicit metaphysical assumptions of yogic philosophy? Is there an aspect of Orientalism at play when western practitioners look to the exoticism of a yoga practice to cure their physical and spiritual ills? Or, similarly, is there an aspect of cultural colonialism at play, when practitioners in the west assume that historically Hindu practices are suddenly public property in a globalized world? Against the backdrop of new-age spirituality, what is the significance of removing a specific aspect of a religious practice from its contextual basis, and adopting it for oneself?

A variety of sources will be invoked to answer these questions, from the original “Yoga Sutras” of Patanjali, to theoretical analyses between the sacred and the profane, as well as contemporary studies of modern, western, yoga practice. This research will seek to grasp a better understanding of this modern phenomenon, and to better assess its cultural, social, and religious significance.”

**Rosa Lea McBee, Religious Studies** “Recent religious debates on the ethics of abortion and contraception have once again become a
focal issue in North American political and religious arenas. The practice of abortion and contraception, however, is in no manner a contemporary one. Religious groups everywhere have addressed the practice in a myriad of ways. By examining the dynamic attitudes toward contraception and abortion of various religious groups at varying times in history, this comparative analysis aims to give perspective and context to the arguments occurring today.

Questions:

• What are the different attitudes toward abortion and contraception and have they changed among religious followers over time?
• In cases of discouragement, how have women of faith reconciled doctrine with unwanted pregnancies?
• How can a cross-cultural look at the understanding of sanctity of life inform our own?

Significance: By examining the different approaches to abortion and contraception this research will reveal the diverse definitions religious groups have on the meaning of life, when it begins, and when or if it can be ended. In demonstrating the spectrum of sentiment towards abortion and contraception in many societies, past and present, I hope to challenge the over-simplified framework “pro-life vs pro-choice” that exists in Western society. Delivering a broader understanding of abortion in contrasting religious cultures is especially relevant to educate young people and those in academic environments likely to engage in such debates.”

Tanya Cooper, Social Justice Studies “Current research indicates that the creation of more housing options are needed to specifically address the unique and diverse needs of the growing population of homeless youth in Canada. To this extent, the student’s research aims to capture the specific needs of the homeless youth in the Greater Victoria region.

Given the developmental needs of the youth who are unhoused, it is critical that research be conducted to understand how the diverse needs of youth can be addressed through diverse housing and service environments to foster healthy development.

The student’s focus on youth homelessness is timely and relevant given many agencies and organizations in the Greater Victoria region are currently working towards ending youth homelessness and secondly, that the rates of youth homelessness are on the rise.

The student will collect, verify, and synthesize secondary literature-based evidence in combination with a small original ethnographic
component to explore if, and how, the sheltering industry can provide an environment to meet the needs of the homeless youth in the Greater Victoria region.”

Jessamyn Polson, Social Justice Studies  “The proposed research will investigate the challenges and opportunities that emerge from internet use by social movements. It will explore this by focusing on the Zapatista movement in Chiapas, and the use – by the Zapatistas themselves and by groups supporting them – of the internet during the uprising in 1994, and in the year immediately following. The Zapatista movement provides an interesting case study because it was a rural, indigenous movement (in contrast to the urban-base of most social movements over the last decades) and also because of the worldwide support it quickly received, largely through the internet. However, while the Zapatistas relied on national and transnational NGOs for the dissemination of their message via information and communication technologies, the Zapatistas themselves were not a wired army. This project will investigate how the extensive use of information and communication technologies, mainly the internet, affected the structure, goals and activities of the Zapatista movement. Research will be conducted through carrying out a comparative discourse analysis of Zapatista speeches and declarations from before and after international involvement. Given the student’s knowledge of Spanish, original speeches and documents will be analysed. The aim of the proposed research is to move towards a critical analysis of the use of internet by resistance movements. Additionally this project will allow me to develop primary research skills under the mentorship of Dr. Clarke that integrates my interest in Latin America politics, knowledge of Spanish, and future goals of pursuing graduate work in the field of critical digital studies.”

Jonas Breuhan, Social Work  “My proposed research project is the collaborative construction of an Indigenist framework. Through a series of group discussions and individual interviews, I hope to create a multi-stage, dynamic, living document. This document will go through multiple revisions with further input given by past participants. The research seeks to form an Indigenist framework through the very principles inherent in such a process itself.”

Jenna Simonds, Social Work  “Research Project: Transforming Indigenous Education into Professional Practice

As a fourth year Indigenous student within the school of Social Work I have been privileged to become part of the vibrant Indigenous community here at the University of Victoria. I am a Metis student who
has gained invaluable experience from teachers and fellow students in pursuit of my future profession. The exploration of my Indigenous identity has been at the root of my educational journey and I am eager to prove that these experiences within the Indigenous Specialization are essential to my success, both as a student and in my future profession.

Within this research project, as I begin to lay the foundation of a strong and influential Indigenous helper and healer, I hope to discover/analyse strategies of how this foundation of Indigeneity will continue to strengthen current and future Indigenous knowledges and ways of knowing.”

**Bryan Benner, Sociology** "Since 1994, the artefact "MSM" (men who have sex with men) has risen toubiquity in literature informing public health policy. Recent social movements (e.g., in UK, Spain) have prompted MSM to be sacked as a categorical barrier in the donation of blood, suggesting that health policy is informed by culture as well as epidemiology. This study will use a comparative and critical approach to qualify the history of the embargo on MSM blood, as reflected in cultural and health policy shifts, from five (5) EU member states. Further consideration will be given to the limits of MSM as a singular variable in health discourse, and to its stigmatising potentials in blood screening policy that aims to be ethically robust.”

**Olivia Guerra, Sociology** “The proposed project seeks to investigate the pharmaceutical marketing of psychoactive drugs, including drugs for the treatment of depression, anxiety disorders, and Alzheimer’s disease. Pharmaceutical companies spend as much on marketing as they do on researching and developing the drugs they manufacture. Marketing to physicians takes several forms, including advertisements in medical journal, product monographs, and the use of sales representatives. Pharmaceutical companies also advertise indirectly to consumers by providing financial support to patient and caregiver support organizations to run educational campaigns on the benefits of drug treatment—these campaigns often feature physicians as lead spokespersons. Evidence suggests that pharmaceutical marketing effectively influence physician prescribing practices while also increasing the number of patient self-initiated requests for drugs. This project will investigate the influence of pharmaceutical marketing by looking into how drug advertisements in medical journals serve as an interpretive resource for physicians. This will be done using a critical discourse approach to analyze a systematically selected sample of advertisements for depression, anxiety disorders, and Alzheimer’s disease. The project will draw on discursive and semiotic theory to
demonstrate how these advertisements frame the social meaning of these psychiatric disorders as effectively treatable diseases. Specifically, this study will articulate how these advertisements seek to influence physician prescribing by translating clinical trial outcomes into powerful narratives of hope, improvement, and patient satisfaction.”

**Olivia Merritt, Sociology**  “This project will explore how physicians differentially construct the chronic illnesses of two disparate demographic groups, young athletes and older adult patients. Using the example of chronic knee pain, this study will seek to uncover the social implications of biomedical discourses on chronic illnesses in the lives of young and old patients. Are the young athletes socially-constructed by doctors, and likely by society on a larger scale, as healthy, despite their chronic conditions caused by their involvement in sport? Similarly, are older adult patients able to disguise the implications of their chronic illness and maintain a “healthful” master status? Certainly there is irony in how youthful athletes are socially-constructed as the benchmarks of health and vitality, yet they experience very high rates of chronic conditions compared to their peers, whereas older adults are often stereotypically-constructed as degenerating, even if their chronic illness is minimal. This project will utilize a literature review, coupled with qualitative research methods, such as in-depth interviews with medical professionals and/or chronic knee pain patients, to elucidate greater clarity on the discrepancies between younger and older patients in the social construction of a biologically-congruent illness. With the Canadian population aging, fostering liveability for persons with chronic illnesses will be increasingly important to maintaining strong population health. By studying young elite athletes who are presumably able to cope well with chronic conditions, this research affords the ability to understand how chronic illness can be better socially-framed within the political and biomedical discourses to enable all individuals, particularly older adults, to live more manageably and healthily regardless of their chronic condition status.”

**Stewart Gibbs, Theatre**  “This research project will be aimed at discovering how two of the greatest 20th- and 21st-century theatre directors, Bertolt Brecht and Robert Lepage, empowered their audiences -- to be NOT just intellectually and politically passive consumers of culture, but active, critical, and creative contributors to it. Why was "creative spectatorship" so important to these two theatre artists, and how did they put their ideas into practice?”

**Sarah Johnson, Theatre**  “Dr. Warwick Dobson is writing a History of Applied Theatre. Last year I was his research assistant, studying the circulation of social energy in Renaissance Theatre. This year, my
proposal is to continue this research, with a new focus on examining the texts of Caroline England in the run up to the closure of the theatres in 1642.”

Jennifer Taylor, Theatre “The Enlightenment largely began on the stages of the early eighteenth-century London theatres, where playwrights and actors, unconstrained by the religious and political censorship that so firmly gripped the press and the theatres elsewhere at this time, freely engaged with the general public on the most progressive secular and democratic ideas of the day. Arguably the most influential works of this entire period was Joseph Addison’s \textit{Cato}, a play that inspired reformers around the world for decades to come, from the French \textit{philosophes} to the American revolutionaries. But it is clear from eye-witness accounts of the play’s premiere performance that what happened in the auditorium that night was almost as important as what happened on the stage. This research seeks therefore to reconstruct the sensational opening night performance of \textit{Cato} in London in 1713 in order to determine who was present on that crucial night, and exactly what they said and did to make \textit{Cato} such a galvanizing work at the beginning of a century of Enlightenment.”

Bronwyn McMillin, Visual Arts “In my proposed project, I will be investigating a sculptural practice with my instructor. This practice will revolve around objects that create a bodily experience, and evoke the artistic space which hovers between physical and cerebral knowledge. My project will have two components, the first being a position as a studio assistant to my instructor. In this position, I will have the opportunity to experience the studio practice of an established artist and gain technical insights into the sculptural medium. The second component of my project will be the development of my own studio practice, which will be supervised by my instructor. In this part of the project, I will be engaging in a form of applied research through artistic creation and experimentation. Through the year, I will develop a series of sculptural works which draw from bodily memory, and operate upon a principle of disrupted or re-interpreted physical narrative. Using this mentorship opportunity, I hope to explore the use of new materials in these works, using movement, sound and light in some works, as well as becoming increasingly proficient in my understanding of wood, metal, and other industrial materials. Upon showing this work within my faculty, I hope that these works succeed in suspending viewers between familiarity and destabilization, creating objects which are experienced rather than understood.”

Willie Seo, Visual Arts “The investigation of my research focuses on making a sculptural object or an installation in which two distinctive
times (past and present or still and moving) juxtapose through photography and video installation. The object I depict has a specific area which is the Old Town District in Victoria downtown. Through the research, I expect to gain specific knowledge about the Old Town District as well as the characteristics of photography and video as art medium.

Victoria downtown has such a beautiful historical old town area which makes visitors feel nostalgic; the visitors capture the frozen time and moment with their cameras and eyes. Lower Johnson Street and lower Yates Street, for instance, attract people by their representational antiquities—styles and colors. Clearly, the old buildings’ exteriors present the time in the past. However, people can often witness modernity (stainless steel refrigerators, electric fans, and fancy lights) through the windows of these old buildings. In fact, the buildings’ representation in Old Town District has its own specific time such as a building located on lower Johnson Street is dated the year eighteen eighty seven on the top of the building. However, people’s lifestyles inside of the old buildings keep developing into the city’s current time. Within the Old Town District, both times—still (past) and moving (current)—co-exist. Using photography and video, two of the most modernized art mediums, in a sculptural object will create an interesting harmony of times to the spectators.

As a visual art student, my goal of the research is to create an object which represents metaphoric, symbolic, abstract meaning of mixed times around people’s everyday life. The effort of making an object is to create a fluent visual language which is speaking itself to the viewers.”

Renay Maurice, Women’s Studies “My research will examine Response Based Practice (RBP), as it applies to the Canadian media’s portrayal of Idle No More. RBP is a best practices model derived from the Interactional and Discursive View of Violence and Resistance: developed by Canadian researchers Linda Coates and Allan Wade at the University of Victoria, for its potential in human services programming as it pertains to violence. Building on the work of Métis researcher Dr. Cathy Richardson (U Vic), an RBP Practioner and Indigenous rights advocate, this project seeks to examine mainstream media accounts of the Idle No More movement, and Chief Theresa Spence’s hunger strike. My research asks: Is the Canadian media using language that protects the perpetrators (or systems) of colonial violence and blames the victims? Finally, if there is evidence of discursive violence in media (mis)representations, this project hopes to map ways in which an RBP approach might address these injustices. In specific, I will focus on RBP
as a tool for mobilizing language in the service of social justice and healing in the Canadian context.”

**Kyla Slobodin, Women’s Studies** “A growing body of feminist literature has examined the recent “healthization” of sex. An active, pleasurable sex life is increasingly positioned by a range of sexual advice “experts” as an important part of health and wellness. The focus of the existing critique has been the coincidence of the emergence of the sex-for-health rhetoric with the medicalization of sexual dysfunction in the post-Viagra era of sexual pharmaceuticals. An implicit but less emphasized aspect of this critique is the notion that within the healthy sex paradigm, “sex” has for the most been framed as heterosexual intercourse. Using discourse analysis, this project will examine the message of “sex for health” as portrayed in “expert” sexual advice within pop culture, including women’s magazines and sex manuals. The project will continue to question the healthization of sex, and particularly focus on how “healthy” queer sex and other sexualities are hidden within this discourse. It will also consider how this message silences and pathologizes asexuality.”

**Claire Garneau, Writing** “I would like to complete the first chapter of a literary graphic novel and self-publish it. This would involve a collaboration between myself and a visual artist, with each of us bringing our distinct artistic strengths and passions to the project. For the research fair, I would also provide a detailed outline of the plot to come with some sketches from my artist collaborator, including (but not necessarily limited to) the final chapters and comprising one to two pages in length. Due to the nature of the story in question, much more historical, political and economic research would be required to supplement any research I’ve already undertaken. The chapter, when completed, would serve as jumping off point for the future, completed project.”

**Liz Snell, Writing** “Select submissions; work with writers on drafts and biographical notes; edit final versions; write an introduction to, design the cover for, and prepare for publication a thematically linked anthology of student-written memoirs and personal essays, based on assignments from previous creative nonfiction workshops and new submissions. The central topic of the essays will be “modern love,” widely interpreted, and these essays will explore the diversity and challenges of human relationships, in the hyper-connected and “hyperreal” 21st-century, using the various literary techniques of creative nonfiction. The final research project will be a complete anthology, designed and ready for publishing, both as a digital ebook and as a print-on-demand softcover anthology.”