Jamie Cassels Undergraduate Research Awards, 2014-2015 – Student Abstracts

Bradley Clements, Anthropology  "To analyze visitor experiences as part of the exhibition of Alberni Indian Residential School art exhibition at the Alberni Valley Museum October 2014-March 2015. I will be working with the director and curator of the museum, as well as its public program planner and Survivor advisors to the museum exhibition to create an account of visitor experience using ethnographic and visual anthropology methods (interview, participant observation, visual content and semiotic analysis). The purpose of this work is to answer the following questions:

1) How do members of the general public, as well as high school students studying residential schools in Canada, receive and engage information about the legacy of the schools through museum and art exhibitions?

2) Is it possible to use the public spaces of museums and galleries as strategic sites of engagement (contact zones) for reconciliation between Canadians and residential school Survivors?

3) Taken as a case study, how can this analysis contribute to the growing body of research around the world regarding curating of difficult knowledge in the aftermath of violence, and Canada specifically in the wake of its own Truth and Reconciliation Commission on residential schools? I will be supported for travel and accommodation while in Port Alberni for this work through Dr. Andrea Walsh’s SSHRC grant on residential schools in Canada."

Shawn Curé, Anthropology "The Department of Anthropology and the Legacy Gallery at the University will jointly host a two-day symposium on contemporary Salish art printmaking in the summer of 2015. This symposium will be followed by a major retrospective exhibition of Salish prints at the Legacy Art Gallery in the summer of 2016. My research project will entail creating a database of collections of Salish prints on the coast from the following institutions: Royal BC Museum, University of Victoria, University of British Columbia’s Museum of Anthropology, Vancouver Museum, Simon Fraser University, Burke Museum at the University of Washington, and the Seattle Art Museum. From the data associated with this survey of collections the following information will be sought from what is likely around 750 pieces of art:

- Establish the approximate number of prints in archives and collections at this time, when were the prints created, and who are the artists represented in these collections? And, what kind of documentary resources are available for the prints? Estimates of the number of prints are currently about 550 original designs.
- Conduct a stylistic analysis of design and content imagery. How has the trajectory of design and content made Salish printing distinct from and in line with other nations printing on the coast?
• Work with lessLIE (Coast Salish artist and co-curator of this project) and Dr. Walsh to connect with artists represented in this collection to keep them up to date on research progress and ascertain their interests in discussion topics and events associated with the summer 2015 symposium. This research will be supplemented by funding from Dr. Andrea Walsh’s resources for this major project. The work of my research will be the foundation of the published catalogue that will accompany the exhibition of 2016. I will be utilizing the skills I’ve learned through my Directed Reading (2014, spring) with Dr. Walsh on the curatorial responsibilities and requirements of working with Indigenous art collections, and the knowledge I am gaining through my work to complete my diploma in Cultural Resource Management alongside my Anthropology degree.”

David Parent, Anthropology (Indigenous Studies) "My project consists of three parts. First a literature review of Indigenous Studies and Anthropological literature that focuses on masculinities. Second, I will demonstrate how the intersections of language, culture and colonialism continue to shape Indigenous masculinities. Third I will propose a new method for understanding Indigenous masculinities in a way which centres land, community, and kinship. I have titled this triangulation ‘gender reciprocity.’

My literature review includes philosophies and examples of masculinity from Metis, Anishnaabe, Cree, Diné, Inuit, Kanaka Mauli and Secwepemec worldviews. Drawing from these examples, I will introduce how ‘gender reciprocity’ is articulated in its own unique way within each group.

Within my review I will also include how feminist and queer thought have approached masculinity. In many cases I will be drawing from these discourses in order unsettle reinforcements of patriarchy within the reformulation of masculinities. Moreover, I will explore how colonialism — that is the dispossession of land from Indigenous Peoples — continues to interrupt relationships between different genders.

Finally, I will demonstrate how healthy masculinities —developed in contrast to patriarchal domination —are a part of bringing health and balance back to Indigenous nations, communities, and families.”

Nicholas Wees, Anthropology “Currently, there is a growing public concern with food (for example its nutritional quality, access to, control of the food supply chain). And yet, without seed security there is no food security. Food is a central element of human culture and, prior to the 20th Century, seeds were the domain of farmers, gardeners, and amateur plant breeders. However, increasingly, control of seed is being concentrated in the hands of private corporate interests. Set against this trend are individuals and organizations saving and exchanging seeds of open-pollinated (i.e. non-hybrid, non-GE/GM) food plants. I propose to investigate this movement against the backdrop of the
control of seeds nationally and world-wide. In doing so, I will explore the following questions: “What motivates people to save and exchange seeds, and what significance does it have for them? And, how does this relate to broader concerns about food security?”

This research project would consist of a literature review, and a survey-questionnaire for beginner and expert seed-savers. This approach would provide a broader context for an understanding of the issues, while exploring the above questions. To implement the survey-questionnaire, I would draw on my involvement with two organizations: Seeds of Diversity Canada (I have been a grower-member for nine years and am currently on the Board of Directors), and the Victoria Seed Library (with which I have been volunteering), jointly run by LifeCycles Project Society and the Victoria Public Library. In addition to the poster presentation, a paper detailing the results of the project would be made available to anyone who expressed an interest.”

**Holly Cecil, Art History & Visual Studies** "A Joy to the Maker and the User": The Arts & Crafts Movement in Canadian Collections The British Arts and Crafts Movement flourished between its peak years of 1880-1910, and celebrated a return to artisan-produced decorative arts in an increasingly industrial era. Founding visionaries John Ruskin and William Morris revived high standards of traditional craftsmanship while also promoting social reform for workers.

This research project traces the origins of the British Arts and Crafts design movement to its reception in Canada, by analysing several representative objects in our Legacy Art Galleries collections. Uniting beauty and function, these works of art allow us to trace the movement and its appeal to Canadian collectors. A Burne-Jones stained-glass window, Ruskin pottery and Archibald Knox metalwork represent several British artisans; American works include Stickley's Craftsman-style furniture and L.C. Tiffany's artisan glassware.

This project will culminate in website-friendly short films, like my foundational William Morris film project (www.morris.heronweb.ca).

Caroline Riedel, Legacy Art Gallery Curator, writes: The film shorts could animate and support the curatorial narrative of the exhibition Magna Mater: Katharine Maltwood and the Arts And Crafts (tentative title) planned for June-September 2015 at the Legacy Art Gallery Downtown. These shorts could be shown in the exhibition and on the proposed exhibition website. The inclusion of Holly Cecil’s work . . . also underlines the mandate of the Legacy Art Galleries to foster research and learning through art and, where possible, to showcase the work of faculty and students who work with our collection.”
Aimee Hawker, Art History & Visual Studies "The Basilica of San Francesco in Assisi is an essential site of veneration and pilgrimage, and it is visited by thousands of pilgrims each year. It also houses the most expansive narrative program that survives in Italy from the 13th and 14th centuries, with masters such as Giotto, Cimabue, Simone Martini and Giunta Pisano taking part in the Basilica’s decoration. Through centuries there have been multiple traumatic events, which have degraded the artworks in the Basilica. These include a fire in the Lower Basilica on June 12th and 13th, 1952 and an earthquake on September 26th 1997. Along with these 20th century disasters, multiple additions during the Baroque period, as well as retouches, have been carried out on the frescos over the centuries, altering their original look. This project examines the current research on the degradation of the frescos of the Upper Basilica and the restoration and conservation efforts carried out by the Istituto Centrale per il Restauro (I.C.R.). I will analyse the decisions made by the conservators and the effect this decay and subsequent restoration has had on the viewing experience, based on my research into Italian restoration reports. This research emerges from my summer Art Restoration Workshop that took place in Assisi, Umbria, where I connected with various restoration projects in the provinces of Lazio and Umbria.”

Laurie White, Art History & Visual Studies "Community gardens play an important aesthetic and ideological role in our contemporary visual culture. Through the aesthetic medium of the garden these shared outdoor spaces promote social interaction and connection to nature and are in this sense works of “social sculpture”, a term coined by German artist Joseph Beuys. Whether they grow food or flowers, community gardens are an outlet for creative and political self expression and form an important part of counter-cultural struggles in the West today.

For this research project I wish to consider community gardens as works of art in themselves, both on an aesthetic and socially transformative level. This includes looking at overall garden design as well as specific objects that could be described as independent artworks and considering how these objects function to enhance the message or experience of the garden. I also want to consider how community gardens are represented through other visual media like painting, photography and web-design, and what these representations contribute to the community gardening movement at both the local and the global level.

In order to root my research in the local environment I will focus my study on community gardens in Victoria with special attention paid to gardens associated with arts institutions, such as The People’s Apothecary located at Vancouver Island School of Art.

My plan is to submit an article, “Community Gardens as Social Sculpture,” to
the peer reviewed Canadian art journal, *C Magazine*. Prof. Antliff, who has published a monograph on Joseph Beuys (*Joseph Beuys*, 2014) and several articles in *C Magazine*, has agreed to mentor me through this process.”

**James Dunbar, Biochemistry & Microbiology (Centre on Aging)** "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. 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 dexscan (i.e. bone density), EKG, echocardiogram, vision and hearing testing, cognitive testing, performance measures (e.g. gait, balance), etc. I will learn about clinical data collection for a national study involving older adults and I will focus on doing a literature review that will inform my knowledge of geriatrics and prepare me for medical school.”

**Karthik Gopalakrishnan, Biochemistry & Microbiology** "Brain Derived Neurotrophic Factor (BDNF) is a neurotrophin that regulates neurodevelopment and plasticity. Loss of BDNF or build up of the BDNF precursor, pro-BDNF is linked to neurodegeneration and impaired synaptic function. The goal of my honours project will be to determine how the expression of BDNF and pro-BDNF in the brain is changed following TBI (traumatic brain injury) using Western blotting techniques in a rodent model of mild TBI.

Recent evidence has also suggested that TBI may cause genetic polymorphisms in the bdnf gene, and so we would also like to use genotyping techniques to assess whether these changes are apparent in the rodent model utilized in our laboratory. Brain derived neutrophic factor (BDNF), a 27 kD polypeptide, is one of the most widely expressed neurotrophins in the brain, regulating neural development and plasticity. The BDNF gene contains a functional single-nucleotide polymorphism (rs6265), which results in a valine to methionine substitution (val66met), leading to reduced mature BDNF expression. This polymorphism has been widely implicated in a host of psychiatric disorders and is a focus of many ongoing psychiatric genetic studies, including TBI. The analyses of the polymorphism at this site will be performed according the protocol outlined in Sheikh et al., 2010.”

**Hayden McClure, Biochemistry & Microbiology** " My honors research project will involve the derivation of monoclonal antibody pairs and selection of these pairs for to capture and detection of two trypanosome antigen proteins that are found circulating in the blood of sleeping sickness patients. I will use the monoclonal antibody pairs to optimize two indirect antigen-capture ELISAs.
This honors project will involve the preparation of immunogens, immunization of mice, cell fusion and hybridoma selection, tissue culture, preparation and handling of antibodies, immunoblotting, ELISA and optimization of sandwich assays. Following optimization of the assay, the assay will be tested for detection of antigen protein in human plasma samples.”

Kate McWilliams, Biochemistry & Microbiology "Personalized medicine is a growing area of research that depends in part on tracking of the health status of individuals over time in order to establish baseline values for a variety of biomarkers. Currently, several biomarkers are measured in the blood/plasma/serum of people as part of routine (often annual) testing and their levels are reported in comparison to ranges observed in the general population. To improve upon this situation, a new immuno-mass spectrometry technique called stable isotope standards and capture by anti-peptide antibodies (SISCAPA) has been developed at UVic. This technique allows multiplexed quantitation of protein biomarkers in human blood plasma, is amenable to automation, is less expensive than current individual biomarker tests and is thus suitable for longitudinal biomarker testing of a multiplicity of proteins in individuals.

Cardiovascular disease (CVD) is the leading cause of death in Western and developing countries. Recent reports indicate that measuring various apolipoproteins, in particular the ratio of serum apolipoprotein B (ApoB) to apolipoprotein A1 (ApoA1), provides a more accurate risk assessment than current assays. My research will focus on development of an automated SISCAPA assay for ApoA1 and ApoB and will be used to determine the clinical utility of ApoA1 and ApoB for cardiovascular risk assessment by measuring the abundance of these analytes in blood specimens collected from normotriglyceridemic and hypertriglyceridemic patients. The project will involve peptide enrichment using an Agilent Bravo robot followed by mass spectrometric analysis of peptides.”

Laila Drabkin, Biology "The proposed research project will investigate psychological and biological markers for mild traumatic brain injury (TBI) in high performance rugby players. The primary psychological and biological markers in the proposed research project have previously been analyzed as markers for mild TBI in hockey players in two separate studies. The current study will investigate whether similar patterns emerge in rugby players, as well as whether there is a relationship between the two psychological and biological markers. Participants will undergo baseline testing at the start of their training season and then will undergo further testing if they sustain a mild TBI.

The principal psychological measure that will be measured is participants’ visual tracking ability using Neutrotracker technology. Previous research by Dr. Brian Christie has found that for hockey players, the ability to successfully complete
the Neurotrack sequences declines after the incidence of mild TBI. The principal biological measure that will be analyzed is the concentration of total-tau (t-tau) protein. T-Tau protein concentrations will be measured from 3-5 mL intravenous blood samples. T-tau protein concentration detection and analysis will be modelled after previous research that found t-tau protein concentrations were significantly higher post incidence of mild TBI in professional hockey players (Shahim et al., 2014).

The intent of the research project is to examine the impact of mild TBI as well as screen for markers that could reliably be used as indicators of mild traumatic brain injury in future clinical assessments.


**Graeme Keais, Biology** "The objective of my research project would be to elucidate the phylogenetic structure of important commercial fish in British Columbia. In order to do so, the mitochondrial genomes of *Hexagrammos lagocephalus* (rock greenling), *Ophiodon elongatus* (lingcod), and *Erilepis zonifer* (skilfish) would be sequenced and compared to all available mitochondrial sequence data of related fish (order Perciformes). The resulting phylogeny would be compared to the most recent topology of these fish as determined by Betancur-R et al. (2013) in PLOS Currents: tree of life. The purpose of this comparison would be to validate the phylogeny that is produced with the inclusion of the aforementioned mitochondrial genomes. The new sequence data would allow *E. zonifer*, a Scorpaeniforme in the family Anoplopomatidae, to be included in the Perciformes tree. This would potentially lend confidence to the placement of *Anoplopoma fimbria* (sablefish) within the Scorpaeniformes. Furthermore, as highlighted by Crow et al. (2004), the grouping of the genus *Ophiodon* in the family Hexagrammidae is questionable, with molecular data suggesting that *Ophiodon* be placed within the suborder Cottoidei. This relationship will perhaps be more concretely tested with full mitochondrial genome data from *H. lagocephalus* and *O. elongatus*. Ultimately, this information will help direct conservation efforts as commercial fishing of these species (most importantly lingcod and sablefish) continues to develop."

**Kelly Turner, Biology** "Type II Gaucher disease is a rare lysosomal storage disorder with devastating neurological symptoms that present in infancy and result in death in early childhood. Current available treatments such as enzyme replacement therapy are able to treat the somatic symptoms, however the enzyme cannot cross the blood-brain barrier so the neurological effects remain untreated. Currently, the mechanisms involved in neurodegeneration are not well understood because animal models are limited and it is unethical and infeasible to obtain brain biopsy samples from patients. We propose to
reprogram skin fibroblasts from patients to induced pluripotent stem cells (iPSC) using a non-integrating Sendai virus with the transcription factors Oct3/4, Sox2, cMyc, and Klf4. We plan to authenticate the iPSC’s using an alkaline phosphatase live stain as well as flow cytometry. Once we have established a stable iPSC cell line, we plan to further differentiate the iPSC’s into dopaminergic neurons in order to create an in-vitro disease model to better understand the mechanism of neurodegeneration in not only type II Gaucher disease, but other neurodegenerative disorders such as Parkinson’s disease.”

**Peter Watson, Biology** "Visual system homeobox 1 is a gene associated with corneal diseases such as keratoconus and posterior polymorphim dystrophy. The actual role of Vsx1 in corneal disease isn’t well understood, however it is thought that it might be linked to a role for Vsx1 in the corneal wound healing response. Since Vsx1 is not expressed in the cornea (Watson and Chow, 2011) we hypothesize that other tissues express Vsx1 in response to corneal damage. Specifically our area of interest is the trigeminal ganglion a sensory ganglion of the trigeminal nerve that innervates the cornea. To determine if Vsx1 is regulated in the trigeminal ganglion in response to corneal damage a mouse model will be utilized where mice will be subjected to a well-established corneal wounding protocol. Quantitative PCR will be used to detect Vsx1 expression in the trigeminal ganglion at various time points after corneal wounding. Determining whether or not Vsx1 is expressed in the trigeminal ganglion in response to corneal damage will lead to a better understanding of the role that Vsx1 plays in the corneal homeostasis and disease.”

**Karlee Bamford, Chemistry** "Inorganic group 15 elements (pnictogens, P, As, Sb, and Bi) share certain aspects of structural and reaction chemistry in common with carbon. However, the mechanisms leading to inter-pnictogen bonds and the nature of these bonds are poorly understood in comparison to the analogous understanding of organic (carbon) chemistry. This project has two major components: i) the synthesis of a collection of cationic phosphine complexes of antimony, and ii) the investigation of the mechanisms proposed for their formation by electrospray ionization mass spectrometry (ESI-MS). This analytical technique is highly sensitive towards low concentration, ionic species, making it an ideal tool for detecting ionic chemical species that are produced and consequently consumed during the course of a reaction (i.e. reaction intermediates). Collection of data in real-time not only allows for the identification of intermediates as they appear but also the assessment of reaction kinetics. The results of this investigation will expand our understanding of the reactivity patterns and bonding motifs for main group elements and, consequently, improve our ability to synthetically target increasingly complex main group compounds. Moreover, the *in situ* study of main group reaction mechanisms by ESI-MS has little precedence in literature and will further establish this technique’s versatility.”
**Rehan Higgins, Chemistry** "To synthesis and characterize four Ruthenium complexes using a newly synthesized diverdazyl ligand. Ruthenium complexes of the simple verdazyl radical have been synthesized previously by the group, and found the exhibit interesting redox properties. Two compounds will consist of a single Ruthenium centre coordinated to the diverdazyl ligand, and will differ in the other ligands completing the Ruthenium centres coordination spheres (acac or hfac). The other two compounds will be analogous, but with the diverdazyl ligand coordinating to two Ruthenium centres instead of one. The properties of these complexes will be investigated, especially the redox properties of the diradical ligand and the effects of the secondary ligands (acac and hfac). The diruthenium complexes are expected to exhibit very interesting redox properties due to the multiple redox active centres in the complex. Complete synthesis, characterization, and investigation of these compounds will be very useful for the understanding of the diverdazyl ligand and potentially lead to further and broader study of this ligand in the group’s future projects."

**Tasha Jarisz, Chemistry** "Diatoms are a class of phytoplankton commonly used to monitor a broad range of environmental conditions. Among these, *Thalassiosira pseudonana* has been widely used as a model for diatom physiology. Although it is a planktonic species, there is considerable interest in its interactions at mineral surfaces. I propose to use a combination of spectroscopic and imaging techniques to monitor the life cycle and chemical changes of this diatom in contact with silica, alumina, and fluorite surfaces. The influence of surface conditioning layers, and the behaviour of the diatoms in the presence of adsorbed bacteria will be studied. Time-resolved ATR-IR will be used to establish vibrational fingerprints of the conditioned surfaces, bacteria from the growth medium, and adsorbed *T. pseudonana*. This will be combined with phase contrast microscopy to correlate the observed spectroscopic changes with alterations in morphology. Spectroscopy and microscopy will be performed in Dr. Hore’s lab (Chemistry); diatom and bacteria cultures will be prepared in Diana Varela’s lab (Biology, EOS)."

**Andrew Roberts, Chemistry** "To synthesize a potential calixarene host-binding pocket that has both fluorescent chromophore and methyllysine binding properties built in. Positively charged pyridinium building blocks will act as the chromophore and will bind to the calixarene ring via Pd-catalyzed coupling, also known as the Heck Reaction. Mass Spectrometry will be used to study the Heck Reaction in detail, as well, rapidly identify reaction conditions that will lead to successful Heck coupling. The Mass Spec allows for real time data acquisition displaying the formation of product, the decrease in reactants, any unwanted by-product formation, and most importantly, reaction intermediates. The use of Mass Spec also has the advantage of being able to detect species at the molar level while simultaneously detecting species at the part per million levels. The properties of the binding pockets and its complexes made with methylated peptides relevant to stem cell regulation will also be characterized by NMR, UV-
Vis, and fluorescence spectroscopy. The long-term goals of this research are to enable drug discovery and new kinds of cellular assays.”

Annika Benoit-Jansson, Child & Youth Care "My research project will work in conjunction with another JCURA student, as part of the second half of a two-year research project exploring the sustainability of the Child and Youth Care Students' Society (CYCSS)—a member group of the UVSS Course Union. The project builds on work of a JCURA student last year, in order to create a questionnaire to be delivered to child and youth care students. My component of the project will be focused on distance students, distributing the questionnaire we build to those students completing their courses online and conducting focus groups. I will then analyze the data, compare it to the on-campus results, and present the findings to the CYCSS and School and Child and Youth Care faculty, staff, and students. The research will take place within the larger goal of developing a strategy to sustain strong student engagement in the department and in the wider professional network.”

Laura Sharp, Child & Youth Care “My research project is the 2nd phase of a 2-year research project re: the sustainability of the Child and Youth Care Students' Society (CYCSS)—a member group of the UVSS Course Union. I will be developing a questionnaire this summer through my two research courses in collaboration with my professors and supervisor. The plan is to create a solid questionnaire based on the experience of last year’s JCURA student’s research this summer, then to distribute the questionnaire early in the fall and host focus groups. The data will be analysed in the fall and an implementation plan developed that will be presented to the CYCSS and the School of Child and Youth Care faculty and staff in the spring term. This is an important part of a planned strategy to sustain strong student engagement in the department and in the wider professional network.”

Xinghang Ye, Computer Science “Nowadays, the security issue is a big research topic in network studies, because of the lack of security concerns when first designing and implementing the Internet. Many improvements have been proposed recently to make the Internet more secure, but because of their complexities and limitations, some are not widely deployed yet. For instance, DNSCurve and DNSSEC to secure the DNS infrastructure. My research project is about a lightweight system to improve the security in content distribution networks (CDN) based on DNSSEC, DNSCurve, and HTTPS. DNSSEC is an approach to use the parent zone to sign the child zone, so we can extend the trust chain from the parent to child. After repeating this and we can reach our target domain, and we are sure that the domain is secured and trustworthy. Because the domains need to send back DNSKEY (public-key) and RRSIG (private-key-signed resources), the scalability is a big problem and thus it can now only be deployed in regular domains, but not CDN domains (because
the latter needs to be refreshed frequently). DNSCurve is a new proposal but because it only provides end-to-end security, it cannot defend some attacks such as cache poisoning. HTTPS is an extension of HTTP. Unlike HTTP, in HTTPS the communication is encrypted. DNSSEC and DNSCurve can enhance the security in DNS resolution while HTTPS can provide security in Web communication. My project is try to best utilize these mechanisms to enhance the security of CDN without large overhead.”

**David Fletcher, Curriculum & Instruction** "I would like to investigate the effect the Indigenous Principles of Learning will have on students with poor grades when implemented in a public secondary school classroom setting. To do this I will create a classroom culture that incorporates the Indigenous Principles of Learning during my Fall practicum and investigate whether or not the Principles had a positive effect on the learning of those students. Through my previous work I have identified two themes that need addressing in relation to the inclusion of Indigenous principles: 1) inclusion of many voices in the classroom, including community members; and 2) enabling students to take responsibility for their learning. These two themes will be at the forefront of my thinking towards my second practicum. I see these as the most critical ways I can enhance my classroom culture using the Indigenous principles of learning, and provide a positive learning environment for as many students as possible.

My research project will consist of the following: 1) First, a literature review will be completed, to find relevant research that has been done in the area of indigeneity in classrooms; 2) I will consider my findings in my upcoming practicum experience, and integrate these ideas into my practice; and 3) keep a reflective journal documenting how successful I have been in implementing new approaches and ideas.”

**Rachel Lallouz, Curriculum & Instruction** "Using queer and feminist theory, I will be deconstructing the professional identity as it intersects with teaching. Specifically, I will be examining how concepts of authority, power, and privilege have maintained the prevalence of this identity in the teaching profession.

My research will examine how identity performance shapes and influences the student-teacher relationship. Along that vein, I hope to investigate the damage we inflict modelling to students how to emotionally compartmentalize. Specifically, I will be exploring how performing the professional identity affects the teaching of controversial subjects, and how it maintains or disrupts safe classroom spaces.

As a pre-service English teacher, I will scrutinize how my practicum experiences teaching creative writing - a vulnerable and intimate subject - were influenced by my performance of an identity rooted in the act of concealment.
I will be experimenting with a variety of creative non-fiction writing methods in the composition of my research paper, including personal memoir and narrative. My research methodology will be autoethnographic in nature, but will also employ dialogue from informal interviews held with certified teachers, pre-service teachers, and high school students.”

Emily Tench, Curriculum & Instruction "I intend to complete teacher action-research on the following question: how can the Indigenous Principles of Learning be incorporated in a more comprehensive way into mainstream classrooms to help build a strong and vibrant classroom and school community? This research will build on research previously begun in Spring/Summer 2014, and will aim to find concrete strategies and lessons to address the Indigenous Principles of Learning. Through prior educational experiences, I have worked with a variety of students of First Nations ancestry, and I recognize the importance of having these students feel engaged in the school community. However, the Indigenous Principles of Learning can also be implemented as a way of drawing students of all backgrounds into the classroom. My extensive experience in experiential education frames my understanding of the Indigenous Principles of Learning, and I hope to find ways in which the two intersect in their pedagogy and philosophy. In completing action-research, I intend to enact my knowledge of the Indigenous Principles of Learning in my classrooms during my practicum, to enhance the respectful community that we all strive to create in classrooms.

My research project will consist of 3 intersecting aspects. First, a literature review will be completed, to find relevant research that has been done in the area of indigeneity in classrooms. Next, my learning will be implemented in the classrooms on practicum, and reflection will take place. Lastly, a final reflection and next steps will be developed.”

Michael Conlin, Earth & Ocean Sciences "An analysis of landslides and their triggers in the Olympic Mountains. One goal is to test three proposed methods of calculating volume of material removed. Another goal is to see if denudation is equal to orogeny using previous studies involving Apatite-fission track analysis. The project will also involve investigation into the mechanisms and types of landslides that are present in the Olympic Mountains.”

Maura Dewey, Earth & Ocean Sciences "The runaway greenhouse is a positive feedback phenomenon where increased water vapour in the atmosphere limits the amount of thermal radiation escaping to space and causes rapid surface heating. It is hypothesized that this phenomenon occurred on Venus in the early solar system, and will eventually occur on Earth as the sun becomes larger and hotter as it ages.

In this project, satellite measurements will be used to study greenhouse effects on Earth in an attempt to empirically determine radiation limits for a runaway
Curtis Martin, Earth & Ocean Sciences "Nutrient coupling between surface and deep waters is controlled by biogeochemical processes occurring throughout the water column. Examples of such processes include photosynthesis, nutrient remineralization/respiration, vertical mixing of dissolved and particulate constituents, as well as the biological carbon pump. This project will involve temporal analysis of stoichiometric ratios in sediment trap material collected at monthly intervals for over one year from Saanich Inlet (VENUS sediment trap).

This project will have three main objectives: i) analysis of total mass flux; ii) analysis of particular organic carbon, particulate organic nitrogen, particulate organic phosphorus, biogenic silica, and lithogenic silica; and iii) interpretation of benthic data as compared with surface data.

The end goals of this project are to compare nutrient ratios between the benthic and pelagic environments through a time series of surface data, and to identify any links to environmental factors that affect these biogeochemical cycles."

Maya Kryzan, Economics "In 2011 British Columbia began to execute a new "BC Jobs Plan", which was created to increase employment and generate economic growth. Part of this plan includes building three Liquefied Natural Gas facilities in northern BC, specifically Kitimat and Prince Rupert. These LNG plants are to be in operation by 2020, and are anticipated to provide more than 39,000 jobs during the initial construction period and 75,000 jobs once the LNG plants are instated. Besides the economic advantages of employment that will be created by extracting Liquefied Natural Gas, there will also be an overall growth in GDP through export and trade with Asia. My research project will involve creating a trade model for Liquefied Natural Gas according to the 18 countries that currently produce and ship LNG, determining the comparative advantage BC has over other current producers in exporting LNG to Asia, and deducing the effects of these three new plants on trade, labour, and the environment for BC/Canada."

Craig Logan, Economics "I will be conducting research in the area of Financial Econometrics for my honours thesis in Economics and I would like to extend this project to the research fair. I intend on writing an empirical thesis on asset pricing, more precisely the relationship between dividends and stock prices in a present value model.

I will replicate Lee’s (1995) error correction model framework using Canadian data to test permanent and temporary components of dividend shocks and their implication on stock prices. I hope to extend the Lee model to include volatility clustering. By decomposing asset prices in this way I hope to gain insight into
stock price behavior and empirically test whether perfect information exists in financial markets, mainly, whether investors can differentiate permanent and temporary dividend shocks.


**Carolyn Tsao, Economics** "The value that pharmaceutical companies place on innovative research is critical to medicine development. However, the for-profit nature of drug firms sees innovation receiving suboptimal attention; new treatment development is pushed aside in favour of focus on modifying existing drugs to retain patent rights. This ethical conflict begs the question: how can we better align the for-profit and "for-health" interests of drug firms? The Health Impact Fund (HIF) proposes a solution: by offering firms research funds proportional to the impact of the product they produce, HIF looks to incentivize innovation and realign pharmaceutical companies with their intended purpose. We investigate the effectiveness of HIF's strategy by examining patent design: does the strategy provide enough incentive for firms to pull away from their patent dependency; if not, what more can be done? Furthermore, although the strategy is theoretically sound, is there another primary loophole that will allow firms to abuse this source of funding as well?"

**Alison Hill, Educational Psychology & Leadership Studies** "My project will carry out the implementation and evaluation of a multiaccess pilot in a k12 classroom, where learners will be able to choose how they want to join the class (in person or online synchronously or asynchronously). She will help conduct the ethics review, formation of measures, and data collection through survey and interviews during a limited term trial period. The goal is to determine the impact on quality of learning, class community, and attendance to learning. The results will be presented to the school community and via open access webinar. The writeup of results will be submitted for dissemination in the Canadian Journal of Learning and Technology and at research and professional conferences."

**Peter Kremler, Electrical & Computer Engineering** "Machine learning techniques for data mining and analysis are useful for the extraction of relevant information in various application domains. These techniques are computationally intensive, coupled with the small footprint requirement in embedded applications, such as handheld devices for fingerprint identification, hardware support is a necessity. This research project investigates how hardware accelerators such as GPUs, co-processors, FPGAs etc., can be used as an inexpensive platform for these applications."

**Katherine Goertz, English** "For this research project, I will focus on the question of Canadian identity. In "Geography Lessons: On Being an Insider/Outsider to the Canadian Nation” Himani Bannerji asserts that the
Canadian identity is based upon racist presumptions that cannot be supported by history. While being Canadian is associated with the “whiteness” of European settlers, Canada as a nation developed through the violent occupation of First Nations lands. Since early settlement, white Canadians have enshrined the Frontier myth to rationalize their continued occupation. In more recent years, the idea of “multiculturalism” has disguised the enduring racism in the Canadian identity. Through my research, I aim to gain a better understanding of what led to the Canadian national identity and discover how it contributes to the problem of racism. This research opportunity will also allow me to unearth important information for my honours graduating essay.

In order to better understand the relationship between early settlers and First Nations communities, I will consider works of fiction like Shoot! by George Bowering and Discovery of Strangers by Rudy Wiebe, which re-imagine early interactions between settler and First Nations communities. I will also consider major historical events, such as the Delgamuukw decision, as examples of political decisions that further enshrined Canadian racism. I also plan to examine various pertinent works of non-fiction, including The Burden of History by Elizabeth Furniss, If This Is Your Land, Where Are Your Stories? by J. Edward Chamberlin, White Civility by Daniel Coleman and The Inconvenient Indian by Thomas King.”

James Kendrick, English “A subject which is currently emerging in scholarship of Anton Chekhov is the examination of “Chekhov mutations” – adaptations which subvert, reimagine, or reconfigure elements and moments from Chekhov’s drama, for example, Christopher Durang’s Vanya and Sonia and Masha and Spike. After Shakespeare, Chekhov is the most widely performed playwright worldwide, so it is no surprise that his influence on other playwrights has been wide-reaching and long-lasting. Nevertheless, because books and articles analyzing Chekhov adaptations have only recently gained prominence, and because our definition of adaptation is itself the subject of current academic discussion, there is still much to explore. Notable American playwright Tennessee Williams called Chekhov the sole literary influence on his dramatic works – yet for the most part only one of his plays, The Notebook of Trigorin, is discussed as an adaptation. I intend to build on the foundation of studies in “Chekhov mutations” in order to come to a new understanding of Williams’ other works, particularly A Streetcar Named Desire. My research goals will be threefold: 1) to provide a fresh reading of one or more familiar plays by Tennessee Williams, 2) to interrogate the nature of adaptation in dramatic texts, and 3) to question the relationship between adaptation and originality in literature, especially with regards to works which come to be considered “great”. Some possibilities for research materials include: the plays of both Chekhov and Williams, work by Linda Hutcheon and others on adaptation theory, articles and reviews on both playwrights, and the letters of both
playwrights."

**Tye Landels, English** "In his major tragedies, Shakespeare puts his protagonists in ethically ambivalent situations: Hamlet confronts revenge; Othello confronts jealousy; Macbeth confronts usurpation. In each instance, the conflicted tragic hero must make an ethical decision regarding the right course of action. Invariably, the tragic hero makes a poor ethical decision, as is evidenced by the tragic events that follow his decision. Shakespeare’s major tragedies in this way function as ethical case studies, prompting the audience to judge the ethical decision of the protagonist from an ironic distance.

This research project will explore the anthropological implications of engaging with Shakespeare’s plays as ethical case studies. My working hypothesis is that Shakespeare’s major tragedies function as ethical self-discovery procedures for the reader/viewer. The ethical case studies presented in such plays as *Hamlet*, *Othello*, and *Macbeth* resonate with the reader/viewer’s own ethical struggles and subsequently inform his/her ethical beliefs and actions. Shakespeare’s major tragedies therefore contribute to the anthropological study and development of ethical belief systems.

Though not new in itself, such an anthropological approach to Shakespeare departs from the materialist and historicist critical approaches that have dominated recent Shakespeare criticism. In pursuing this research project, I shall revisit the work of nineteenth-century critics such as William Hazlitt, Samuel Taylor Coleridge, and John Keats, whose romantic or “proto-anthropological” approaches to Shakespeare anticipate my own. I shall also consult more recent critics such as Harold Bloom, Anthony Nuttall, and Michael Bristol, whose works represent a revival of romantic or anthropological approaches to Shakespeare."

**Brianna Wright, English** "*The Map of Early Modern London* (MoEML) project has digitized and made available to students and researchers the c. 1560s woodcut map of London known as the Agas map. However, this is only one of numerous early modern maps that depict the city before and after the Great Fire of 1666. In order to expand on MoEML’s work, I will compile a database of early modern maps of London between c. 1550 and c. 1700. My work will include information about each map’s date, medium, dimensions, repository location, and the identity of its creators (cartographers and engravers), and will also highlight significant features of each map. In addition, in order to demonstrate the transformation London underwent during this era, I will select one specific site in the city and trace its changing depiction on the various maps in the database. My project has the potential to be published on the MoEML website, allowing researchers to swiftly locate cartographical material on early modern London, correctly identify topographical changes in the city, and confidently use the many resources of MOEML in new and different ways."
**Peter Gibbs, Environmental Studies** "A directed studies focused on providing a broad background on the political, economic, legal and environmental factors influencing the expansion of the natural gas industry in BC and introduction of liquefied natural gas exports. To be concluded with a major research project that can help guide decision making by interested parties such as community groups and political parties."

**Nina Moffat, Environmental Studies** "Using repeat air photos from 1980s and 2013, I will examine how tundra vegetation has changed over approximately 30 years in the Tuktoyaktuk Coastlands (Canadian Arctic). Before doing so, I will complete a review of the recent literature concerning arctic vegetation change, particularly shrub expansion. This research is important for helping to further our understanding of the complex effects that climate change may have on Arctic ecosystems."

**Megan Spencer, Environmental Studies** "In close collaboration with Capital Regional District (CRD) Regional Parks department management staff, my research project will seek to identify a policy regarding the provision of front and backcountry camping within regional parks in the CRD. With my supervisor in Environmental Studies at UVic, I will complete a research proposal, annotated bibliography, and potentially an ethics application if it is determined that my project will include interviews. For both my ES supervisor and for the use of my supervising collaborators at the CRD, I will produce a comprehensive research report on my findings by December, 2014. At the CRD’s request, I also hope to produce an inventory of camping opportunities in the CRD to complement the report, and will produce a research summary in accessible language that can be pitched to and published by a local paper or magazine. I am pursing this project because it applies my academic interest in park management and park creation to a real-world, community-based issue—the CRD’s identified need to research and develop a comprehensive camping policy for its Regional Parks department. Within this mutually-beneficial framework, I hope to hone my research and analysis skills, report and creative writing skills, and interpersonal, collaborative skills in bridging practical local government needs and academic research."

**Isaac Davies, Exercise Science, Physical & Health Education** "This research project will use a cross-over, randomized, double-blinded design to determine the effect of a carbohydrate mouth rinse on performance during late endurance sport. The high performance cyclist participants will come in on a weekly basis (for 5 weeks) to complete a MAP test, a familiarization test, and 3 experimental trials. All sessions will be completed at approximately the same time of day. The exercise will be completed on an electrically braked cycle ergometer. Prior to session 1, the participants will complete PAR-Q and consent forms. The MAP test will start at a 100W, every 2.5 minutes there will be a 50W increase until heart rate reaches 160bpm, at which point 25W increases..."
will occur every 2.5 minutes until exhaustion. The familiarization session will introduce the cyclists to all procedures that will occur during the experimental trials (lactate, glucose, heart rate, EMG, mouth rinse solution, steady state and a time trial). Blood samples will be taken from capillary beds in the fingertips. Steady state cycling will occur at approximately 60-70% of their maximal heart rate. During the steady state physiological variables will be read every 20 minutes. The time trial will have a set amount of work determined by the MAP test. The time trial will be estimated to last approximately 30 minutes and will involve no encouragement. The purpose of this study is to see if there are any performance benefits from rinsing the mouth with a carbohydrate solution during an endurance event lasting greater than two hours.”

**Travis Gordon, Exercise Science, Physical & Health Education**  "The goal of the Motion and Mobility Rehabilitation research lab is to develop and/or refine sensitive and specific means of predicting falls based on detecting changes in early markers of decline (e.g., variability) in functional mobility and cognition in an elderly population. Young (19-40) and older (70+) participants with and without a history of falls will be asked to perform self-paced walking on a pressure sensing mat while wearing small (watch-sized) inertial measurement units on each leg, small pressure sensors placed in the sole of the shoe, and performing math-based cognitive tasks as well as performing gait initiation on tandem force plates while kinematics are recorded with a Microsoft Kinect motion capture system. We will first characterize differences in our battery of markers between young and older adults as well as between older adults who experience falls and those who do not. We will conduct an analysis of the sensitivity and specificity of each of these multiple measures of functional mobility and cognition both for their ability to retrospectively and prospectively predict falls in older adults. The strength of these measures will be evaluated independently and in combination. This understanding will provide a principled basis for the development, enhancement and evaluation of fall prediction strategies by indentifying the risk factors associated with increase incidence of future falls. This information will be used to develop, enhance and evaluate strategies for fall prevention and rehabilitation post falls.”

**Steven Noble, Exercise Science, Physical & Health Education**  "A proportion of maximal oxygen consumption (%VO2max) is a common measure used to gauge submaximal training intensity in endurance sports. Directly measuring VO2 is not feasible during training, consequently recreational and competitive cyclists commonly use either heart-rate (HR) monitors or a power output (PO) meters as indirect measures of this variable. Both HR and PO have a positive linear relationship with oxygen consumption (VO2), although which variable has the superior correlation to VO2 at submaximal training intensities is uncertain. This information would be of interest to athletes in the market for a device to monitor training intensity. Further, it could be used to inform athletes with power-meters (simultaneously monitoring both HR and PO) which
variable is best for accurately measuring and fine-tuning training intensity. This descriptive cross-sectional study will determine the relationships between HR and VO2 and between PO and VO2 during two cycle ergometer tests: one incremental cycling to exhaustion (VO2max) test and one steady state submaximal 30 minute cycle at 65% VO2max. Both tests will be performed by 15 male volunteers. Data will be analysed using Microsoft Excel 2010 to calculate correlation coefficients between the variables of interest. The objective is to determine which of HR and PO is a more accurate reflection of VO2 during submaximal incremental and steady state exercise.”

**Stephanie Norman, Exercise Science, Physical & Health Education** “My research project involves describing the kinetics of blood lactate, heart rate, and oxygen consumption during low volume high intensity (HIIT) exercise in comparison to endurance exercise. These physiological parameters will be tested in 15 recreationally active male volunteers, during a maximal aerobic (VO2 max) cycling test, an endurance cycling exercise consisting of 30-minutes of moderate-intensity cycle, and a HIIT 4-minute squatting exercise protocol. Although there is some literature on HIIT training indicating its effectiveness at improving aerobic fitness, little physiological comparisons of HIIT have been made directly with traditionally performed moderate endurance exercise. As HIIT can be performed quickly and in nearly any environment with no additional equipment necessary, it has become a popular new training protocol. This study is significant because it will help describe the aerobic factors associated with a 4-minute, high-intensity protocol which has been reported to provide similar aerobic demands on the body as a traditional, endurance exercise. If supported by the results of this proposed research, then it may provide a viable alternative for obtaining aerobic benefits to those whose who have difficulty finding time to fit longer exercise sessions in their day.”

**Taryn Burgar, French** "France’s most famous and infamous queen, Marie Antoinette, has been studied and written about since her birth. Currently, we are seeing a revival in her popularity as subject matter through 21st-century film, with at least six features produced since 2000. Historically, Marie Antoinette has been demonized as the woman responsible for the 18th-century failings of France, but there has been a swing in representations in the 21st-century to see her as a misunderstood figure overwhelmed by a future she did not chose. Why is there an apparent desire to rectify history’s perceived wrongdoings? Do politics come into play, or is this trend just another example of popular culture’s obsession with tragic stories? Cinema today is entranced with beauty and decadence, but why does Marie Antoinette specifically, in the long history of royalty, spark our imagination and create a fascination parallel to modern celebrity icons? As an historic figure whose image has been shaped by both fact and myth, Marie Antoinette has inspired current films aimed at a general audience and which have had a substantial effect on beliefs about her
in popular culture. This research project will examine both Anglophone and Francophone film from the classic Marie Antoinette of 1938 to the present, not only with the aim of answering these questions, but also to see how the two different cultures approach Marie Antoinette as a topic, and if their respective opinions vary over time when it comes to the dichotomy in which this iconic French queen has been placed.”

**Phelan Hourigan, French** "The Poetry of Louis Aragon during the Second World War: Love, Despair, and Hope in the Time of the Resistance My proposed research project is a comparative study of three poems written by Louis Aragon during World War II: “The Unoccupied Zone”, “Christmas Roses”, and “Tears Are Alike”. Each poem is thematically different. “The Unoccupied Zone” intertwines love of a woman with love of country; “Tears Are Alike” pertains to the commonalities of regret and despair, and “Christmas Roses” comments on the need for hope. In spite of their differences, the poems lend themselves to three common streams of analysis. I will investigate the symbolic usage of first person pronouns, colour imagery, and the nature of sentimentality present in these poems. The study will compare and contrast these aspects with the works of other poets from outside of France who also wrote during World War II: Welsh poet Alun Lewis, and Czechoslovakian poet Marina Tsetaeva. For example, I will discuss how the first person pronoun employed by Aragon is generally a plural I, i.e., it represents French society, whereas the I employed by Lewis is a purely personal one, designating the author himself. Parallels will also be drawn with Scottish writer Sorley Maclean, and New Zealand poet and soldier Denis Glover, whose works were contemporary to Aragon’s and present similar themes.”

**Colin Crawford, Geography** "This project brings together my degree major, urban geography, and minor, film studies, to critically examine the urban landscapes presented in the films *Blade Runner* (1982) and *Her* (2014). The medium of film is a powerful analytical tool to interrogate the cultural production and representation of urban futures. Both films deal with contemporary themes in urban geography, such as dystopian/utopian urbanism, gendered urban experiences, immigration, and the socio-spatial implications of rapidly advancing technology. These two films each construct a future Los Angeles to examine the human condition in the 21st century. Despite their thematic similarities, they pose contrasting aesthetic constructions of this futuristic metropolis. *Blade Runner* splices sci-fi with film noir to present a perpetually dark, raining, and violent dystopia. By contrast, *Her* simultaneously creates a picturesque and sterile utopian landscape devoid of crime, violence, and poverty. Through emphasizing the symbolic geographies of these films and the socio-spatial and socio-technological commentaries they make about urban futures, I hope to bring innovative insights into both my fields of research. Methodologically, discourse analysis provides the opportunity to look at how these films contribute to our cinematic, philosophical, and ideological
conceptions of urbanism. Through comparison to the 2014 film Her, I will be able to contribute new ideas to the vast academic discourse Blade Runner has inspired for the last thirty years.”

Stephen Finnis, Geography "The optical properties of harmful algal blooms (HABs) will be explored for phytoplankton taxa in Quatsino Sound, British Columbia. The general objective is to develop a spectral library for the harmful plankton in this region. This includes determining signature reflectance wavelengths of HAB taxa taken from radiometric measurements, pigment analysis through High Precision Liquid Chromatography (HPLC) and species identification/cell counts via microscopy. The potential for using optical instruments to detect and monitor HABs will also be assessed. Field data collection will occur from September 4-11, and October, 2014. Data previously collected in June and July 2014 will also be used. This work will be completed as part of an Undergraduate Honours Thesis.”

Travis Muir, Geography "Particularly when the costs of altercation can be severe (e.g., injury, death), animals that share resources often access them in different places or at different times. Black bears (Ursus americanus) co-occur with grizzly bears (Ursus arctos horriblis) and have overlapping resource niches. Spatial avoidance is one behavioural strategy black bears have been shown to employ to reduce competition. However, for sympatric bears, changes in temporal activity patterns may be evident to lower the rate of encounters. Additionally, some have suggested that black bears also avoid humans, resulting in greater nocturnal activity. I will be analyzing several years of remote camera and video data from ~ 200 cameras of the two bear species from an area over 20,000 km2 on the BC central coast. My research will quantify the differences in daily activity patterns in a natural biogeographic experiment: the bears are sympatric (on the mainland) and allopatric (on islands on which black bears occur in the near absence of grizzlies). I will also capitalize on a similar natural experiment in which some sites from each allocation host ecotourism (and associated human presence). Combined, this variation in context can yield insight into how black bears – and any animals – might adjust activity patterns according to the presence of competitors and human activity.”

Megan Neufeld, Geography "Honours Thesis – The Role of Emotions in Environmental Assessment: A Feminist Analysis I plan to investigate BC’s Environmental Assessment (EA) process and the extent to which and ways it accounts for emotions. EA is a key decision-making tool for identifying and attempting to minimize the impacts of major projects. It has increasingly been the subject of popular and scholarly critique. One potentially fruitful but as yet under-examined ground for critical interrogation surrounds how this ostensibly rational process accounts for inevitable emotional responses of local populaces
whose lands and lives are directly affected by development.

Feminist scholars have long exposed the problems with the Enlightenment binary of disinterested rationalism versus “interested” emotionalism. Recently, the field of emotional intelligence has revealed the inherent and indivisible connection between emotion and effective decision-making. Still, there is a dearth of scholarship specifically investigating EA in such context. While the communicative turn has challenged the authority of rational experts opening planning processes up to alternative knowledges and wider participation, it is unclear how emotions are treated and the extent to which they are accounted for in decision making.

My research will involve critical document analysis and interviews with EA officials and others who have been involved in EA processes to arrive at a multi-perspectival understanding of how emotions figure in EA reviews. Ultimately I hope my research can show how the acknowledgement and inclusion of emotions could benefit EA decision-making and hint at how that might be accomplished.

The JCURA award would grant me necessary time and resources to thoroughly research this subject, as well as increase my ability to interview multiple subjects.”

Erin Chewter, Germanic & Slavic Studies "My project will examine the biased portrayal of Eastern European women in Western popular culture. It will include the study of films, posters, literary works, and travelogues that contributed to the creation of orientalising and cold-war stereotypes of Eastern European women. I will discuss how the simultaneous fetishization and condemnation of Eastern European women as sexually exotic, communist vampiresses provided both the motive and means for conquering the Eastern Other in the imagination of the Western male. I will research the real world consequences of this stereotype, namely the increasing number of women from Eastern Europe being trafficked for sexual purposes and the rise of sex tourism in the region. By presenting this research in a poster format at the Undergraduate Research Fair I hope to foster critical thinking about the causes and effects of stereotyping women and other cultures in popular culture.”

Alexandra Hill, Germanic & Slavic Studies "I am interested in working on a research project entitled “Graphic Artists’ Response to Cold War Politics in the Soviet and post-Soviet Era”. This project would examine the development of Soviet and contemporary Russian graphic art and how it has been used as a propaganda tool both for and against the government.”

Lucas McKinnon, Germanic & Slavic Studies "A Life Incomplete: Towards a Poetics of Inexhaustibility I intend to explore themes of space, solitude and poetic voice through a dialogue between Romantic and Frankfurt School
aesthetic theory, the poetic works of Rainer Maria Rilke and Friedrich Hölderlin, as well as my own poetry. Particular attention will be given to the idea of space as a place that is necessary for the subject to express and explore its own inexhaustibility. This project relates to my supervisor’s work in that she also explores the formation of poetic space for the subject in German poets and aesthetic theory. By mediating theory and poetic practice, this JCURA project will also examine the significance of emotion in Romantic theory, and the Romantic understanding of the poet as a wanderer, as well as their expression in the modern, early 20th century context. Adorno’s theory of nonidentity will be especially relevant because it focuses on the ineffable and understands poetic praxis as an effort to do justice to this ineffability. Thus, an understanding of poetry as a space of negation and a turning away from the world begins to form. My studies here at UVIC consist of critical political theoretical and philosophical work; in this way, my JCURA project intersects nicely with my academic and artistic pursuits. Ultimately, this project attempts to locate the poet through a presentation of poetic reverie concerned with solitude, spaces of intimacy, anonymity and self-sacrifice, which are all informed by the desire for a space that conceals nothing, a transcendent space where honoring one’s own fleetingness becomes a concrete possibility.”

**Elliott Fuller, Greek & Roman Studies** "History of the Safety Pin Why are fibulae, ancient “safety pins,” so well represented both in votive deposits in sanctuaries and in burials in Greece and the Near East in the 9-7th B.C.? This is the foundation for my intended thesis. I plan to examine fibulae as they are found in religious, funereal and artistic contexts to determine what importance these objects held to their owners. Fibulae are often found in great quantities in sanctuaries across the Greek world and yet the reason for their dedication is unclear. Certainly they are often elaborate, as many examples from Boeotia and Phrygia show us; but there are few artistic representations of these small items actually being worn. In the Near East however there are a number of representations that may suggest a religious context for these items. I intend to use a comparative approach to assess the context in which fibulae are found in both areas to further illuminate why specific votive objects are dedicated and the particular meaning they may have had to the Greeks and their eastern neighbours. In order to achieve this I would like to create a map outlining the chronology and the geographical extent of the use of fibulae in votive contexts.”

**Mac MacDonald, Greek & Roman Studies** "Death in the Landscape: Ceramics and Society at Tanagra The ancient remains of Tanagra lie within eyesight of the Late Bronze Age settlement of Eleon in Boeotia, Greece where I have spent the past three summers participating in the Eastern Boeotia Archeological Project. The project surveyed the area around the site of the famous Tanagra tombs between 2007 and 2009 and collected surface material that could hopefully answer many questions that were left unanswered by
previous archaeologists. The Tanagra tombs are important because they contained many impressive and unique larnakes, painted coffins with funerary scenes painted on the exterior. The larnakes date to a period known as Late Helladic III A and B (1350-1250BCE), a period well attested at Eleon. Due to the minimal publications from the excavation of the area, it is unclear whether there was a Bronze Age settlement at Tanagra; perhaps the tombs were a product of the settlement of Eleon, the largest Mycenaean site in the region. My goal is to examine the findings from survey of Tanagra, and the surrounding area, and combine the findings with what has already been published about this area. I will also compare the survey styles of EBAP and other survey projects that have taken place that have employed different archaeological methods in order to enrich the understanding of this important Bronze Age site.”

**Elise Côté, Hispanic & Italian Studies** “The research that I hope to conduct for the Jamie Cassels Undergraduate Research Award is the translation into English of historic records from the Spanish exploration of British Columbia’s coast. The existence of documents from the Spanish expeditions came to my attention through a contact who works at the BC archives. Many of the documents have not been translated into English yet. As a student of Spanish in the Hispanic Studies Department at UVic, I will use my language and translation skills to translate certain key documents. My research project involves getting to know the collection and deciding which documents are most in need of translation. The translation will be accompanied by critical annotations, images of the original documents, and possibly reproductions of the drawings created by the Spanish explorers. This research project will create an important bridge between the Department of Hispanic Studies and the community at large in Victoria.”

**Kirsten (Kay) Gallivan, Hispanic & Italian Studies** “For my research project I will study a selection of engravings and street art produced by Mexican artists belonging to the Assembly of Revolutionary Artists of Oaxaca (Asamblea de Artistas Revolucionarios de Oaxaca, ASARO). The ASARO Collective began in 2006 as the artist sub-committee of the Popular Assembly of the Peoples of Oaxaca (Asamblea Popular de los Pueblos de Oaxaca, APPO), the central organizing body for an occupation of the city of Oaxaca, Mexico, which lasted from May to December of 2006. During the occupation, ASARO’s main function was to fill occupied areas with political street art. After the uprising ended, the ASARO Collective continued to produce engravings and street art and have since exhibited in many art galleries internationally. The fall of former governor I will study the artistic traditions present in ASARO’s works as well as the political history that led them from graffiti to gallery.”

**Jennifer McLean, Hispanic & Italian Studies** "I propose to examine the way in which Dante, in his *Divine Comedy*, constructs a massive internal
landscape to traverse from the abstract concept of memory. This memory is manifest in the context of mythological, classical, biblical and cultural references, but it is blended and transmuted to form an authoritative narrative voice that is, ultimately, creating a memory that is personal. This personal memory is the product of our necessary suspension of disbelief as reader that the Divine Comedy is the record of Dante’s journey as it ostensibly occurred; the memory is literal in that sense, but it is also a record of a fundamental human experience played out against the existential architecture of Dante’s cosmopoiesis. He is, then, the pilgrim traversing this world and by the same token its creator, the one who must observe, and the one who must recall and share the enormity of the experience, to the best of his ability. The nature of memory is necessarily retroactive, which is plainly demonstrated by Dante’s own tendency to rely on looking backwards in order to move forward towards growth. Memory in the Divine Comedy, then, is a vehicle for creation, for change, for movement, and for salvation.”

**Alissa Cartwright, History** “For my Honours History thesis, I would like to examine the role of the African-American church during the Reagan era. Prior to and during the civil rights movement, the church acted as a bedrock of communal support in the midst of racial inequality and violence. In particular, gospel music provided African-Americans with a medium for spiritual healing and self-expression. The 1980s were witness to another period of racialized crisis, as rapid urban decay, a widening income gap, and the proliferation of crack-cocaine affected African-Americans disproportionately. Further, an increasingly influential religious right brought white evangelical Christianity to the forefront, though in a manner which rarely challenged racialized inequalities. Evangelical spokesmen like Jerry Falwell framed the world (as did President Reagan) in terms of the American struggle against godless communism, and in the process infuriated black Americans by justifying relations with apartheid South Africa as a geopolitical necessity. Particularly in hard-hit urban areas, how did the African-American church respond to these racial tensions? What role did the modest gospel revival which took place in the 1980s play, and how did this historical form of musical expression interact with the newest form of African-American music, namely rap? How did black American Christianity negotiate with the religious right at the grassroots level of local churches, and what societal and political role did these churches fulfill? With a particular focus on African-American music, then, I hope to shed light on the racial tensions of the 1980s, the ramifications of which still affect American society today.”

**Erin Cotton, History** “I would like to research the experiences and activism of trans women in Vancouver between 1970 and 1985. My focus would be on the way trans women interacted with other subcultures, such as the gay community, the lesbian community, the feminist community and non-trans sex workers. In particular, I want to examine the degree to which an increasing
level of gay acceptance resulted in or was caused by the exclusion and oppression of other queer individuals. An event exemplifying this trend is the expulsion of trans women sex workers from the West End largely due to the actions of an increasingly affluent group of gay men. Feminist groups also actively worked to exclude and oppress trans women. The other key research question is how trans women responded to and protested against oppression, whether they worked primarily within sex worker advocacy groups, formed their own organizations, or worked with other queer groups. I feel this research is essential because the history of trans women is severely understudied, and in particular there are very few studies of trans women by trans women. This research project would go a small way towards filling that gap in the literature. Additionally, this research project would be an excellent opportunity to showcase the capabilities of the Transgender Archives at the UVic library."

Céilidhe Maher, History “Oh, That's Where They Kill Them”: The Institution of Kaufbeuren and the Stigma of Mental Illness after the Second World War My proposed research project is my honours thesis which I will be writing during the 2014 – 2015 academic year. For my thesis, I will be researching the issue of mental illness in post-1945 Germany. I will do so through an analysis of the institution of Kaufbeuren, which served as a T-4 centre under the Nazi Regime. While many other T-4 institutions ceased operations following Germany's surrender on May 8 1945, the atrocities at Kaufbeuren continued until July 2 1945. Despite the fact that American troops had been stationed in Kaufbeuren for 33 days, signs saying “Lunatic Asylum” and “Off Limits” caused the American troops to stay away from the institution until a German doctor informed them of what the institution's true purpose was. Using primary sources such as military reports, newspaper articles, and court trials, I intend to analyze why this institution was able to continue its operations without being detected. Moreover, I will consider the way in which the atrocities at Kaufbeuren were perceived at the time of its discovery and throughout the years that followed. The institution of Kaufbeuren is a representative of the negative stigma surrounding mental illness in this period. Moreover, the way in which it has been studied and perceived since July 1945 showcases how this stigma has changed over time. I believe that the perception of mental illness is a critical component of social history. Studying how Kaufbeuren relates to this perception will provide important insight into this aspect of history.”

Derek Turkington, History "With an aim to analyze intercultural relationships between First Nations and non-First Nations peoples, my proposal is to research the impact of industry on the first peoples of Canada. Beginning with forestry and transitioning into the fossil fuel industry in the present, I will research the effects of industry on communities with a specific focus on Lytton, British Columbia. Massive influxes of income and workers have had drastic ramifications for First Nations communities with increases in alcoholism, domestic violence and a deterioration of social structures. Through interviewing
Nlaka’pamux elder, Ruby Dunstan of Lytton First Nation and a recent nominee for a UVic Honorary Degree, I will endeavor to demonstrate the importance of understanding past impacts of industry on First Nations peoples and the value of ensuring community development and partnerships moving forward. As a pre-eminent political leader, social worker, fighter for social justice and educator, Ruby’s input and life experiences will assist me in developing discourse pertaining to the structures facilitating massive social change in First Nation communities. Industry is one of these structures and I propose there is a definite link between industry and systemic violence, alcoholism and suicide on reservations. I will use the funding to travel to several communities including Ruby’s to interview First Nations members in an attempt to understand the impacts of industry, both positive and negative. The federally approved Northern Gateway Pipeline and the corridor of First Nations communities it will affect highlight the necessity for the research I have proposed.”

**Alexah Konnelly, Linguistics** “How do hashtags contribute to identity construction on Twitter? Not only can hashtags act as a meta-message within a tweet, but they can also be used as tools of political or decolonial discourse-making and identity-informing. Though Twitter is becoming an increasingly popular platform for social movements, how activist discourse is constructed on Twitter is not yet understood. This project examines the use of hashtags on Twitter as an extension of larger activist practice. Tweets containing hashtags from movements such as #YesAllWomen, #BringBackOurGirls, and #JusticeForJane will be collected and qualitatively analyzed to reveal how the hashtag is constructed, how it adds meaning to the tweet, and what function(s) it serves for users, including the way in which discourse is embedded within broader social ideologies and identities.”

**Severne Robertson-Hooper, Linguistics** "Language loss is not only the loss of a communication system but also involves the loss of a community’s culture and systems of knowledge. In British Columbia, of the thirty-two First Nations languages, eight are severely endangered and twenty-two are nearly extinct. Fortunately many communities across B.C. are working hard to teach and learn these languages in language revitalization programs. One language classified as severely endangered is Ey7a7juuthem which is traditionally spoken on the northern part of Vancouver Island and coastal mainland by four communities: Homalco, Klahoose, K’ómoks, and Sliammon. In order to encourage language growth and community engagement with the language, these four communities have committed to creating a dictionary of Ey7a7juuthem together. In the current project I aim to collaborate with the Ey7a7juuthem community by creating possible resources that the community can use as reference to guide the creation of their dictionary. In order to complete this project, a methodology of Community Based Language Research will be followed meaning that the research is done on a language, for, with and by, the community as
explained by Czaykowska-Higgins (2009). The anticipated outcomes of this project include learning more about the alternative models of research and how to conduct such research in the Ey7a7juuthem speaking community, as well as contributing to language revitalization efforts in B.C.”

Jeness Weisgerber, Linguistics "Second-language assessment is perhaps one of the most essential learning and teaching tools, and when properly implemented, assessments can be an excellent source of information that inform instructors and learners about teaching and learning processes and outcomes (Huang, 2014). Recently, dynamic assessment (DA) has become of great interest to second language educators and researchers. DA, in contrast with standardized assessment, has a premise that is focused on the role of mediation that "enables learners to perform beyond their current level of functioning, thereby providing insights into emerging capabilities (Poehner & Lantolf, 2013, p. 323). DA has recently become a contentious subject across the fields of assessment and education. Many researchers (e.g., Sternberg & Grigorenko, 2002; Lantolf & Poehner, 2004; Poehner, 2008) advocate for DA practices in the classroom. Despite this, according to Poehner (2008), there is a gap in the DA literature in the field of second language acquisition. My proposed JCURA project aims to fill this gap through an empirical comparative analysis of DA and standardized assessment of English-as-an-additional-language oral proficiency. My research will utilize a mixed-methods research design that will involve gathering quantitative and qualitative data from both instructors/test administrators and learners about the outcome and perceptions of each assessment approach. The proposed study aims to provide pedagogical insights as well as empirical evidence to help instructors make informed decisions about the best method of classroom-based assessment in order to optimize the potential for learners to improve their English-speaking skills.”

Zhiyu Gong, Mathematics & Statistics "The project consists of numerical studies for marketing models on random graphs. The models include both external advertising as well as word of mouth marketing, and questions like the dependence of market share on the advertising effort, on the frequency of word of mouth information sharing, and on possible delays in marketing will be investigated.

I have a lot of interest in this type of mathematical modeling. If I was selected for this project, I would be willing to spend all my spare time on doing this research. I am good with calculating and numerical computations and would like do be involved with creative modeling, real life applications. I am familiar with some powerful math and stats software packages and can therefore cover the computational aspects of the project. Therefore, I am willing and able to do this research project.”

Shayla Redlin, Mathematics & Statistics "The so-called firefighter problem
concerns a discrete-time model of the spread of a virus (or fire) in a network. After the virus breaks out, at alternate turns the “defender” protects some fixed number of vertices, and then every unprotected vertex that is adjacent to an infected vertex becomes infected. The process ends when no more vertices can become infected.

The firefighter problem was first proposed by Hartnell in 1995, and has garnered considerable attention since then. In most research on the firefighter problem, the network in question has been undirected; hence the virus can spread from either end of an edge to the other. In a survey paper published in 2009, Finbow and MacGillivray proposed a number of possible areas for further investigation, including studying the problem on directed networks. To date, only one paper in this direction has appeared: Biebighauser, Holte and Wagner, *The firefighter problem for regular infinite directed grids*, Involve 5:4 (2012), 393-409. This paper is interesting in that it considers the qualitative question of whether the virus can be contained if only one vertex is defended per turn.

We propose to study the same question for other grid networks, and in particular the 3-regular grid (formed by tiling the plane with hexagons). The question of whether the virus can be contained by defending one vertex per turn in the undirected 3-regular grid is one of the main open problems in the area.”

**Chadi Saad-Roy, Mathematics & Statistics** "During the summer of 2014 (with an NSERC-USRA), I developed and analyzed some simple deterministic models for Bovine Babesiosis (BB), a prevalent tick-born cattle disease. My proposed research plan is to first see if any endemic equilibria of the latter two models can be found or shown to exist; then I would like to extend the BB models to incorporate more biological details; for example, vertical transmission (of the protozoa that cause BB) in cattle, increase in the infectivity rate of juvenile cattle (i.e., so it becomes greater than that of the adult cattle), and crossbred cattle susceptibility to BB. Basic reproduction numbers for these improved models will be determined from the Jacobian matrix (evaluated at the disease free equilibrium) of the models using the next generation matrix approach developed by van den Driessche and Watmough. My aim is to see how each factor influences these basic reproduction numbers as calculated analytically, and to use data from the literature to simulate these improved models, along with different control strategies (evaluated using the method from Shuai et al.). This research will use a mixture of mathematical tools including analysis, differential equations, matrix algebra, computational methods (using Matlab) and biological knowledge (including literature search).”

**Robin Spillette, Mathematics & Statistics** "The Guardians of Mid-Island Estuaries have been tagging the Canada Goose ( *Branta canadensis*) population in coastal estuaries on Vancouver Island since 2008. They have also been
conducting bimonthly surveys to count geese and resight leg or collar bands since 2010. We propose to estimate survival of this Canada goose population using a mark-resight model available in program MARK. We will deal with issues of tag-loss using post-hoc estimate adjustment methods of Seber and Felton (1981). We will deal with variable survey intervals by either pooling surveys or defining a weekly survival parameter \( \psi \) and then reparameterizing the model as \( \psi^t \) where \( t \) is the number of weeks between surveys. For example if there are 8 weeks between surveys A and B then \( t=8 \) and we would model the probability of survival between surveys A and B as \( \psi^8 \). If time permits, we may also modify Cowen and Schwarz (2006) to a mark-resight model, which would include information on double tags and deal with tag loss issues directly in the model. We may also look into incorporating the count data as an integrated population model.”

**Edward Alley, Mechanical Engineering** 
“Advanced hybrid-electric powertrain systems in vehicles enable the flow and use of energy from a variety of energy storage and conversion devices such as fuel, engines, electrical energy in batteries, and electric motors. It is established that using optimal control algorithms for these systems achieves superior fuel efficiency and reduced emissions in hybrid-electric vehicles. Focusing on hybrid electric marine vessels (HEMVs), these optimal control algorithms can be evaluated with computerized HEMV models that offer increased flexibility, significantly reduced costs, and improved data and feedback compared to actual HEMVs. The accuracy of the computerized models is key to developing the optimal control algorithms, which improve fuel efficiency and reduce emissions.

The UVic Department of Mechanical Engineering has developed computerized HEMV models; however, there are dissimilarities between the model results and certain aspects of real world vessel performance. The intent of the research is to improve the accuracy of the models to match real world performance as closely as possible. The models will be tested in both software and hardware environments, where results and data from the system can be captured. These results will be compared to physical ship test data captured with measurement instruments and the help of partner companies operating marine vessel fleets. By comparing these results, improvements will be made to the HEMV models with the goal of achieving equivalence between the two sets of data.”

**John Edgar, Mechanical Engineering** 
“Pluripotent stem cells (PSCs) have the ability to form any specialized cell-type in the body through a process called differentiation. This ability gives PSCs great potential in regenerative medicine for developing treatments or cures for devastating conditions such as Parkinson’s disease and spinal cord injuries (SCIs). PSC differentiation into specific cell types is mediated by a wide variety of cues, including cell-cell interactions, chemical factors, and the substrate on which the cells are grown. One chemical factor, retinoic acid, has been shown to induce PSC differentiation
into motor neurons. A method of generating motor neurons in a highly predictable and controlled manner would allow their eventual use in the rehabilitative treatment of SCI patients and potentially give mobility back to those who have suffered from SCI.

This project seeks to investigate the effects of retinoic acid on PSCs by delivering it in a controlled, time-release manner using biodegradable polymer microspheres. Previous research in Willerth Lab has found that microspheres can be readily incorporated into PSC aggregates, but further characterization is required to optimize motor neuron growth. This project would seek to further develop efficient protocols for fabricating microspheres, while investigating the dose-dependent effects of retinoic acid on PSC differentiation. By optimizing the concentration of retinoic acid delivered to cells and its overall distribution in PSC aggregates, a robust system could be developed to maximize differentiation efficiency.”

**Tyler Klassen, Mechanical Engineering** "With the exception of Whitehorse, the Yukon Territory is comprised almost entirely of small rural communities. Northern rural communities often lack the well-developed infrastructure that is required for citizens to have an adequate quality of life. In this study, a systems methodology will be used to examine the social, economic, and environmental factors resulting from deficient infrastructure and propose a methodology to prioritise upgrades that have a cost effective potential to significantly improve the health and sustainability of these communities. The focus of the research will be primarily on the current inadequacies of the rural infrastructure in these communities and the generation of scenario-specific interventions designed to improve their circumstances. With the use of the principles of systems engineering, a methodology will be created in which resources invested to improve the infrastructure can be allocated in an optimal fashion such that the overall highest possible benefit can be realised, resulting in a higher quality of life for the citizens of the Yukon.”

**Sarah Jenkinson, Medieval Studies** "In Medieval period, there are several accounts of a Popess that, at their core, share the same narrative, but with several different details. The bare bones of the story are as follows: a woman at some point in the past donned traditionally male clothes and was able to ascend the church ranks through her own merit – her true identity is only discovered when she gives birth during a procession. Jean de Mailly’s thirteenth century account focuses on Pope Joan’s academic skill and acumen. In later stories, Joan’s death becomes a violent event in which Joan is punished for transgressing gender roles. This change turned a tale of curiosity into a powerful warning that condemns Joan’s disobedience and invites the audience disdain her failure. Petrarch considered her trespass so heinous that he added the sky rained blood for three days after her death (New 106). In these early versions, the story does not sensationalize Joan’s crossdressing or even her
giving birth. Indeed, since the middle ages, Pope Joan’s trespass has been utilized to explicitly attack the perceived foolishness of medieval believers and the decadence of a church that was increasingly focused on temporal matters. Eighteenth century Protestants used the tale to emphasize the perceived foolishness of medieval Christians, which they in turn applied to a critique the modern day faith. (see, for example, A Present for a Papist, 1785). Today, Pope Joan continues to be a figure loaded with cultural baggage. These questions all orbit the same issue: the story of Pope Joan undermines the concept of fixed gender roles.”

**Jasmine Cox, Nursing** "The research project I will be involved with is the INtegrated Technologies for EveRyday Alzheimer’s Care and Treatment (INTERACT) project. Older adults living with dementia in the community often need support from family members (informal) or paid (formal) caregivers. The project will identify and pilot test a suite of cost-effective technologies that can relieve the burden on the care giver, the clinical team, and the healthcare system in general. It seeks to identify the caregiving needs of older adults with dementia to determine appropriate caregiving technologies. The project will investigate the relationship between health and well-being with changes in cognitive function and activity. Findings may allow early identification of increased health risks like delirium and falls. I will be working as a research assistant on the project and will be involved in all aspects of the research.”

**Courtney Ellis, Nursing** "The purpose of the study is to determine best practice guidelines for triaging new patients with diabetes mellitus. I will be working with Katherine Bertoni, MN, NP-PHC, and Diana Sherifali, PhD, to sample Diabetes Education Centers in British Columbia and across Canada regarding current triage guidelines utilized for adult patients who are referred to a diabetes education program. This study will investigate triage, wait times, access to healthcare providers, follow up, barriers, and type 1 compared to type 2 diabetes. The goal of the research is to standardize practice for all Diabetes Education Centers. The research was commenced in Southwestern Ontario, where nursing students developed a questionnaire and initiated data collection via email and telephone as part of an environmental scan. I will also be involved with conducting a literature review, preparation of an abstract, and creation of a poster presentation.”

**Courtney Greenway, Nursing** "We currently have several JBI Systematic Reviews in progress that would provide good learning opportunities for an undergraduate nursing student. The two projects are at different stages of development so we can provide a broader range of learning for the students. Two examples are 1) Student and educator experiences of maternal child simulation-based learning: a systematic review of qualitative evidence; and 2) Educating nursing students for working on intra-professional teams: A systematic review protocol of the experiences of health professional students
and educators. Key learning activities related to these projects include:

- Learn about how the JBI supports evidence informed practice
- Learn about the process of developing and conducting a Systematic Review
- Learn how to systematically search for relevant research studies by working with the team to plan the new protocol and search strategy
- Participate in the preliminary evaluation of the studies retrieved for the Simulation SR.
- Learn how to organize research papers in Ref Works to facilitate the review process

Richelle Stanley, Nursing "I will be involved as a research assistant on the Integrated Technologies for Everyday Alzheimers Care and Treatment (INTERACT) project. This project explores the use of remote sensor monitoring to provide critical information to inform early detection of illness or other adverse events for older adults with dementia living in the community. Our goal is to predict significant changes in health status that may put an individual at risk for events like falling and delirium. The project will identify a suite of cost-effective technologies that can relieve the burden for the caregiver, the clinical team, and the health care-system overall. I will be involved in all aspects of the research, including visiting participants in their homes to assist with data collection, participating in research team meetings, discussing data analyses, and reviewing reports."

Patrick Musgrave, Pacific & Asian Studies "The “great rebalancing” refers to the coming necessity of altering China’s economic model from a primarily manufacturing/export-driven one, to one driven by domestic demand and service-sector dominance. The economic rationales behind the prescription for rebalancing are fairly straightforward, and comprise issues such as structural risk in the financial sector and inflationary products of monetary policy. Yet, these patently “economic” issues do not tell the whole story. Some of the most consequential factors at hand in China’s coming rebalancing, this essay will argue, derive from sources not intrinsically “economic,” yet with profound impacts thereon. The idea will be put forward that, in terms of the success of the rebalancing to come, the Chinese legal system’s effect on, and subsequent feedback from, the economic and sociopolitical spheres will be pivotal. Before delving into an analysis of the Chinese legal system and its interactions, the theoretical underpinnings of an inquiry of this scope will be emphasized, with particular regard to the application of a style of reasoning consistent with the “law and economics” literature, and its overlap and contradictions with more traditional theories of normative jurisprudence and philosophy. Relevant theory from the social and geopolitical literatures will also be noted, and accented with China's empirical realities such as trade blocs and sanctions, resource endowments, cultural divides, and governance incentives. Finally, the bulk of the essay will partition the legal system, systematically analyzing, with respect to economic and sociopolitical entanglement, laws such as intellectual property,
securities and shareholder protection, environmental, labour, and trade.”

**N’Donna Russell, Pacific & Asian Studies** “For this research project, I will explore the use of popular culture in the teaching of the Japanese language. I will do this by exploring how Japanese culture, Japanese sociolinguistics, and popular culture (such as anime, manga, J-Pop, and Japanese television dramas) intersect to teaching foreign students the Japanese language, as well as exploring teaching methods and the issues that surround this form of teaching.”

**Jasmin Brown, Philosophy** “I intend to investigate the extent to which models of human and robotic vision can productively inform one another to achieve a fuller, interdisciplinary understanding of perception. Certain contemporary philosophers have rejected theories of perception that posit “picture in the head” representations of what is seen, favouring instead theories focused on the role of the body (embodiment) and environment (embeddedness). Supporters of the latter such theories argue that this departure lessens vision’s cognitive burden and does away with appeals to qualia. Particularly since philosophers Alva Noë and J. Kevin O'Regan and computer scientist Dana Ballard refer to robotic computation and vision in motivating and explaining their theories, embodiment and embeddedness models raise the issue of philosophy’s role in robotics, and vice-versa. My project will examine the connection between such theories of perception and recent work in computer science and robotic vision engineering, and what this connection may tell us about perception in general. In my paper, I will first evaluate the success of embodiment and embeddedness models of human perception and inquire into whether such models are successful in the realm of science and mathematics. Then, I will explore the plausibility, applicability, and advantages of a unified theory of natural and artificial perception. Even if such unification proves not to be viable, engaging perception research in a variety of fields will demonstrate what kind of role philosophy does and can play in this cross-field dialogue.”

**Bianca Crewe, Philosophy** “Within the analytic philosophical tradition, social construction as a phenomenon is often examined with regard to the relation between that which is constructed and the agents of construction. As such, questions surrounding social construction(s) within this tradition are concerned primarily with the reality of social constructions (what does it mean to be constructed? How do social constructions fit into our overall ontology?) and their existence in relation to agents (is it a causal or constitutive relationship? How and at what level are social constructions altered?). John Searle’s work on social construction and collective intentionality is a paradigmatic engagement with such questions. For my research project, I hope to examine the normativity of what Searle terms “social facts” in order to critically analyze the extent to which he takes social facts to be constitutently traceable to individuals. I will also look at how the relationship between individuals, collectives, and
social facts fits into a naturalist schema on his account. Furthermore, I will draw out some of the implications of Searle’s thesis for accounts of race and gender. In doing so, I will look to contemporary scholarship on social construction and collective intentionality within the analytic tradition, including the work of Margaret Gilbert and Sally Haslanger.”

Katie Lauriston, Philosophy "While legal pluralism at an international level has been explored in detail, pluralism on a national level remains a fertile area of research. Given that Canada now considers itself a multicultural society, pluralism may offer much-needed acknowledgement of practices outside its bijuridical system. In this project of legal and political philosophy, I hope to explore the topics of legal pluralism and Indigenous law in Canada, drawing from contemporary theorists such as John Borrows.”

Jessica Parker, Philosophy "My project is a study of Gilles Deleuze’s interpretation of Spinoza’s landmark philosophical work, Ethics, specifically with regards to expressionism. Deleuze ontologically and epistemologically self-identifies as a “spinozist”, and I intend to explore how he is justified in making this claim, and what this can in turn teach us about Spinoza’s philosophy. I will focus on the concept of expression to explore how despite their seemingly different ontologies – Deleuze’s ontology of difference versus Spinoza’s doctrine of univocity of being – for both thinkers being is ultimately a power that expresses itself in act. I will engage with literature on expressionism to determine the key points where their theories converge and depart, exploring questions such as how they situate themselves in the transcendence and immanence debate, how Spinoza’s tripartite ontology of Being, attribute, and mode relates to Deleuze’s distinction between Being, the virtual and the actual, etc to gain a deep understanding of what precisely it is to expound a philosophy of expression.”

James Hartwick, Physics & Astronomy "The anisotropy of light sources is often cited as a source of difficulty and systematic uncertainty in experiments. The proposed project seeks to create a light source that will offer improved isotropy over current methods. Applications are widespread and some examples include light dosimetry of human and animal tissue, imaging of water properties in the aphotic zone of the ocean, facial recognition, and in photometric calibration of telescope and camera optics. The primary focus will be toward improving the photometric calibration of Type Ia supernovae for Dark Energy Measurement. A spherical homogeneous 60-sided polygon has been constructed with a light emitting diode (LED) affixed to each surface. The polygon is then placed at the centre of a diffusing sphere. The LEDs are controlled individually by an array of micro-controllers programmed to ensure that a uniform light intensity is emitted. Now that construction is complete a photodiode mounted on a goniometric test stand along with a dark room are being constructed to measure the irradiance as a function of angle which will
determine the isotropy of the device.”

**Marlene Machemy, Physics & Astronomy** "One of the characteristic features of turbulent flow is the phenomenon of energy cascade. In three-dimensional classical fluids, a direct cascade implies the break-down of large-scale vortices until energy is dissipated by viscosity at small scales. Incompressible, inviscid two-dimensional classical fluids, however, exhibit different characteristics due to an additional invariant. Instead of being dissipated at small scale, vorticity aggregates into long-lived, large-scale structures. Their emergence is associated with a phase transition at negative-absolute temperature states. This phenomenon is known as an inverse energy cascade. It may be understood by studying the idealized point-vortex model.

Superfluids, such as Bose-Einstein condensates, may also be agitated into states of chaotic vortex motion. Two of the main differences with classical turbulence are that quantum vortices have a well-defined length-scale and can only be removed from the fluid through annihilation. For that reason, the point-vortex model is relevant for 2D superfluids. Experimental and numerical evidence of the presence of a Kolmogorov spectrum in 3D quantum turbulence have motivated more work to link classical and quantum turbulence and understand the characteristics of 2D quantum turbulence.

The main goal of this research is to get a better understanding at the role of vortex annihilation in Bose-Einstein condensates. We wish to see the effect of vortex annihilation on the phase transition at negative temperatures in the point-vortex model. We will compare the kinetic energy spectra and derive the spatial velocity correlation functions for three models: the point-vortex model, the point-vortex model with annihilation, and the Gross-Pitaevskii equation."

**Douglas Rennehan, Physics & Astronomy** "At present, the most important problem in the area of physical cosmology is to understand how galaxies arise and how they acquire their observed properties - in other words, identify the physical processes that shape galactic evolution and understand their action. This is key to not only making sense of the various multi-wavelength observations of galaxy populations at different epochs over the past 10 billion years, but also understand how structures at one epoch relate to structures at another, and how different components of the universe - dark matter, gas and stars - interact. Prof. Babul's research group has been using state-of-the-art, numerical simulations of the formation and evolution of cosmic structure to address the above issues. The proposed project has two objectives: first, to test some of the recent technical improvements that have been proposed in the community for a better description of the fluids dynamics by the simulation code, and second, to test the different facets of the physical model on which the simulations are based. Specifically, the project will involve running a suite of high-resolution cosmological simulations, making use of Dr. Babul computing
time allocated on the High Performance Computing WestGrid network, as well as analyzing the output of these numerical simulations. This dataset, covering a wide range of both technical and physical parameters, will enable to assess the properties of the structures within the resulting virtual universe, and compare these to published results from observational surveys. The results will be written up and submitted for publication.”

**Scott Aubrey, Political Science** "For my JCURA research project, I will ask the question, "How do target states respond to economic sanctions aimed at altering their political behaviour?" I will use a historical comparative method to examine the impact primarily of US sanctions against China from 1949-2000 and Iran from 1979-2013, contextualized by borrowing from a Regional Security Complex theoretical framework. This will focus primarily on state policy but will involve sanction impact on substate and domestic aspects of policy formation, as well as incorporating context based on the multilateralism of sanction regimes involving the US and historical context of policy formation and international relations in both countries. I will study the severity of the sanction regimes over time and compare that to changes that sanctions have brought about in the two states’ policies. I will use a Method of Difference analysis to identify the different policy responses in Iran and China over time and compare that with an historical survey of the economic impact of sanctions against them to determine how sanctions work as a foreign policy tool in altering the political calculations of target states.”

**Chase Blair, Political Science** "I plan to investigate the masculine norms that are prevalent within the National Football League (NFL). More specifically, I will examine the prevalence of concussions among players, and the lack of action by the NFL to combat the problem. Additionally, I will explore the locker room culture of the Miami Dolphins, exemplified by the bullying of Jonathan Martin by Ritchie Incognito, and the alleged discrimination against Chris Kluwe of the Minnesota Vikings. I will look at the underlying structures that have normalized concussions and workplace bullying in the NFL. The larger backdrop to this paper is the politics of gendered norms around sports, violence, public health, and mental health.”

**Zacharia Ciavarella, Political Science** "Examining the importance of popular culture to systemic patriarchy through the political conditioning of youth perspectives and identities with racialized constructions of heterosexuality and masculinity. Demonstrating the potential for feminist activism and discourse in online fandom and blogging communities predominantly comprised of young women. Examining fanfiction within these communities as a tool for reclaiming or unpacking heteronormative power dynamics and identities. Unpacking gendered themes of dismissal and trivialization of fanfiction from outside the communities and the significance of who is able to create knowledge and give it legitimacy. Finally, analyzing what fandom communities manage to subvert,
and what remains merely perpetuated and repackaged, looking specifically at issues of race and bisexuality as personal politics.”

**Kristoffer Jorgensen, Political Science** “Investigating potentially trapped populations in Bangladesh: Chittagong Hill Tracts (CHT) Growing public and academic attention over the last two decades has focused on the potential influence of environmental change on human action. This has largely centered on future predictions of large-scale displacement as a result of climate change and environmental degradation. Conversely, while still recognizing the unprecedented environmental threat, recent academic work has highlighted the potential of migration as a low-cost adaptation tool for affected communities through income diversification, skill development, and remittances, to decrease vulnerability. Attention has been focused on the ‘drivers of migration’, examining the way that economic and social capital may facilitate this movement in response to environmental impacts. However, focusing on movement can render the involuntarily immobilized invisible, thus increasing the vulnerability of ‘trapped’ populations. This JCURA project will examine the effects of climate change in the Chittagong Hill Tracts, Bangladesh. It will ask: 1) if migration is used as an adaptation tool by the indigenous Chakma, Marma and Tripuri and other populations in the region, and - if not; 2) whether these populations may be considered - or have the potential to become – “trapped” populations in the face of current and impending environmental change.

This project will draw largely from my current internship at the Refugee and Migratory Movements Research Unit (RMMRU) in Dhaka, Bangladesh, for large-scale primary research data, community contacts, and inspiration. Some addition research, including interviews, will be carried out. This project will allow me to develop my own primary research skills under the tutelage of Dr. Marlea Clarke, as well contribute to RMMRU’s work on trapped populations. I also hope to develop skills and relationships which will help me pursue graduate work in environmental and development studies.”

**Catalina Dau, Psychology** “Police investigators rely heavily on eyewitness lineup decisions; this can ultimately lead to false convictions and dismissing perpetrators after incorrectly rejecting photo lineups as eyewitnesses are not always accurate. Our aim was to establish a set of observable behaviours from video footage of the face-to-face interactions between participant eyewitnesses (PW) and participant investigators (PI). In the current study, undergraduate and professional PI’s interviewed four PW’s about good and poor quality views of short crime videos. PI’s searched through a database and selected a suspect that best matched the PW’s description; a photo lineup was then generated that included a picture of the suspect and five innocent foils. PW’s were asked to identify the culprit in the lineup. Variables that were assessed in relation to eyewitness accuracy included good versus poor quality video footage of the culprit, interview time, the quality and accuracy of detail regarding the crime
and the criminal, the latency period of making a lineup decision, nonverbal and verbal indicators of uncertainty, and indicators of attentiveness. Understanding behaviours predictive of eyewitness accuracy in lineup decisions is essential in minimizing the probability of making false convictions and maximizing the probability of sentencing offenders.”

David Drohan, Psychology "Work, health, education, sports, and environmental psychology all rely heavily on the concept of feedback in designing and testing interventions. Recently, a multi-million dollar industry has emerged around feedback devices like the Fitbit. Despite the widespread use of feedback in research and industry, however, the conditions under which feedback can be used effectively in behaviour change are debated. Two questions specifically are of interest in this study: Whether real-time multivariate feedback related to a target variable or behaviour facilitates greater behaviour change than feedback about that target variable alone; and what is the nature of the dynamic relationship between daily feedback and behaviour outcomes. Through a daily diary study, participants will complete a gratitude intervention while stress and affect are monitored, and single or multivariable feedback is provided. Behaviour change, study retention, and post-study intervention compliance will be measured. This study will contribute to the research developing dynamic, real-time analytics tying behaviour to outcomes more effectively. Further, it will identify if multivariable feedback provides supplementary effects beyond the effect of single variable feedback in behaviour change. A method for delivering daily feedback has already been developed in a previous study with Dandan Huang, a PhD student from the Computer Science department. The knowledge resulting from the proposed study can be mobilized to diverse fields, such as developing better patient outcomes in occupational therapy through feeding patient reported outcomes back to patients effectively, helping resident surgeons see correlations between stress and performance, and other applied and research domains."

Jacob Koudys, Psychology "This project proposes to investigate factors influencing white matter disease in a population of older adults with subjective cognitive decline and healthy controls using structural magnetic resonance imaging. Factors will include gender, age, education, IQ, and group membership as part of a multi-factorial analysis of variance. The goal is to establish correlates between global ischemic white matter burden and basic demographic factors as well as clinical condition. Participants were screened out for strokes and transient ischemic attacks to provide a less confounded sample. We would like to analyze the progression of changes in white matter along with its potential relationships to the mentioned factors. Aside from white matter changes, it is also of interest to look at white matter atrophy and patterns with advanced aging. Comparing these patterns to group membership could provide insight for classification and validity of prodromal phases in Alzheimer's
Phil MacIntyre, Psychology "A growing body of evidence has lead to an increased awareness of the health risks associated with mild Traumatic Brain Injury (mTBI; or concussion). According to Stats Canada there are approximately 94,000 activity limiting concussions per year in individuals age 12 and over (Statistics Canada, 2010). Concussion occurs when a direct blow, or indirect force, impacts the head, subsequently impairing brain functions (McCrory et al., 2009). However, these impairments may be masked by the cognitive benefits bestowed upon athletes by their training and fitness (Comper et al., 2010). A vulnerable cognitive function to the effects of concussion is executive functioning (EF), defined as the complex cognitive abilities that facilitate one’s capacity to inhibit behaviours, shift attention, update working memory, problem solve, and engage in valence-sensitive, volitional actions in the pursuit of goals (Garcia-Barrera, Frazer & Areshenkoff, 2012). Our intention is to use neuroimaging to examine the interaction of concussion and exercise on athletes’ EFs relative to sedentary controls. EFs are associated with specific cortical regions (e.g., N-back tasks assessing working memory and the DLPFC), thus knowledge of damage localization may aid in assessment and rehabilitation. We plan to use near-infrared spectroscopy (NIRS), which provides an inexpensive method of assessing neural activity by studying spectroscopic differences in oxygenated and deoxygenated hemoglobin.”

Candace McKivett, Public Health & Social Policy “This project has three principal objectives: 1.) Investigate the availability of culturally congruent services for Indigenous women who identify as sex workers and are HIV positive in the regions; 2.) Investigate perceived barriers to accessing services among this same population; 3) Make recommendations to Vancouver Island Health Authority/ local community based organizations regarding how to improve health service access for HIV positive Indigenous women who identify as sex workers. Recommendations will take into consideration cultural congruence, the findings regarding participants’ perspectives on access barriers, as well as select examples from other jurisdictions which may provide helpful information.”

Julie Casey, Social Work “As a non-Indigenous social worker, I plan to research the path in becoming an ally to Indigenous Peoples of Canada through a literature review and qualitative participatory research project. I will explore the process of personal decolonization, the counter-narratives of peacemaking and the fine line between cultural revitalization and cultural romanticism from both a non-Indigenous and Indigenous perspective. I am interested in creating a deeper understanding of the journey involved in becoming an ally, coming to know what it means to be a genuine ally and how to not cross the line into cultural appropriation.”
**Nicole Siemens, Social Work** "The Doukhobor people have endured persecution both in their country of origin, Russia, and in the communities they settled in, such as the Kootenay area of British Columbia. Despite this, Doukhobor culture remains prominent in parts of British Columbia to this day. As a person of Doukhobor ancestry, I am interested in exploring how Doukhobor culture survived in the face of both state assimilation policies (i.e. New Denver residential school for the more extreme Freedomite Doukhobors) and social pressure. What strengths do the people and the community possess that allowed for cultural transmission within two larger societies, Russian and Canadian, that often promote and value assimilation? In review of the literature, I will conduct strengths-based analysis on the factors that allowed for cultural transmission across continental borders and in light of the aforementioned assimilative policies. As there is little literature on cultural transmission within Doukhobor communities, I will also look at the experiences of other groups who have faced assimilative policies in order to understand how they maintained ties to their culture; for example, by looking at the experiences of Indigenous peoples in residential school. I will also investigate early immigration policy, designed to fully assimilate new immigrants into either English- or French-Canadian society, and how these groups resisted this. While the experiences and strengths of each cultural group are very different, this process will allow me to highlight shared traits and parallel experiences of the Doukhobors and other groups which have contributed to their ability to preserve culture within a socio-political context of assimilation.”

**Zachary Lewis, Sociology** “I propose to examine the transformation of corporate crime in Canada with a focus on the role of corporate culture. I will first review key theoretical approaches that have informed the study of corporate crime, including that several sociological theories that have been informed by Sutherland’s introduction of white-collar crime into criminological research. Next, I will examine key economic, social and political factors that have altered corporate culture over the past three decades or so and the impact these factors have had not only on the nature of corporate crime but also on the manner by which such crime is defined and prosecuted by the state. In particular, I will explore how regulatory changes under neoliberal regimes have impacted corporate social responsibility and contributed in part to the emergence of the type of criminal activities corporations engage in today. Finally, I will argue that previous conceptualizations of corporate crime fail to adequately account for corporate culture as a catalyst to crime and how more refined concepts are needed to better understand the evolution of current corporate criminal activity.”

**Renay Maurice, Sociology** “I will be working with Dr. Benoit investigating the links between identity and stigma for women involved in sex work. Our research will involve the qualitative analysis of data already collected by Dr. Benoit in her latest project involving sex workers, servers and hairdressers. The
project will focus on participant responses to qualitative questions regarding identity in relation to sex work and stigma and draw connections between stigma, gender, sex work and women’s sexuality, as well as taking other identity based factors into consideration such as race, age, space, location and the socio linguistic aspects of stigma. The research will look at the way in which stigma is mapped onto women involved in sex work by the larger culture in which they are immersed, and it’s affects, and simultaneously incorporate the views the women take of themselves and the various strategies women use to navigate, resist, challenge and transform stigma in order to cope. The projects main goal is to understand the role of stigma in the lives of female sex workers and illuminate the function that stigma serves in the social control of all women.”

**Jason Miller, Sociology** “The proposed project consists of an exploration of educator’s perspectives on the role of technology in learning. This will be carried out through analysis of existing literature and in-depth interviews with teachers at different levels of the education system and with various backgrounds. Technology and the way we use it is constantly changing, and the effects of this are felt no more strongly than in the classroom. Technology and learning are monumental pieces in the constructed identity of humanity that are inextricably linked. The goal of my research will be to develop a deeper understanding of the interplay between these concepts by exploring the perceptions and attitudes of educators. With technological devices being incorporated into the school system and introduced to students at a young age, technology companies are exerting more and more influence on the shaping of society through their involvement in the way we learn. Because of this I feel that studies of this nature are both timely and relevant. By gathering and reflecting on data I hope to unearth consistent patterns of thought that will bring clarity to a topic that likely breeds varying opinions and debate.”

**Brandon (Chase) Hiebert, Theatre** "This project will explore a technique of acting that engages and involves the audience in a cathartic experience. This research promises to reframe the actor/audience relationship in ways that emphasize the need for empathy.”

**Emma Leck, Theatre** "This project will examine the theories of Jerzy Grotowski and Vsevolod Meyerhold to determine how external actions can inform emotional states. This research promises to augment the actor’s process and illuminate issues involving the relationship between body and self.”

**Elizabeth Charters, Visual Arts** "What interests me most in my sculptural practice is space. Specifically, I am interested in how we interact with the space of the constructed environments we find ourselves in. Inspired by everything from streetlamps and neon signs to the objects displayed on a living room mantle, I am curious about the physical and psychological impacts that various
artificial environments-- have on our way of living. How we move through and interact with the space that is immediately found around us, whether it is in the private or public realm, can be reflected in our body’s relationship to the space and the objects within it. Most often using light as my medium, I construct various objects, spaces, and environments with the purpose of facilitating the viewer’s spatial understanding of the urban field. In doing so, I aim to challenge the viewer’s ideas about lived spaces, providing a platform for both a bodily and psychological understanding of the self within the space of an urban setting.

I intend to focus my research on a studio-based practice that explores object-making in conjunction with a study of the phenomenon of light as it affects our bodily experience of space. With the help of my supervisor, I wish to further explore the use of light and objects in our man-made habitats and to what purpose these everyday experiences can be recreated in a gallery setting. As part of my research, I plan to show my work periodically so as to facilitate discussions of it amongst my peers. In doing so, I will be able investigate how the viewer interacts with my constructed spaces and contemplate what meaning this interaction can hold for the viewer. Meeting weekly with my supervisor and reading assigned critical essays will help me to gain a greater understanding of my work as it relates to contemporary art theory.”

Hovey Eyres, Visual Arts  "Instagram is a social media application that produces 60 million photographs per day from 200 million users around the world. “Love” and “me” are two of the most popular tags used to describe these photos, and “selfie” is not far behind. These photos reflect my generation’s desperate search for identity and acceptance in today’s society. By reproducing these images with pencil and paper, I redefine their context and provoke questions about Instagram, identity, and society. The images’ content is recognizable and familiar, yet the materials make them surprising and stimulating. As I continue to investigate Instagram’s endless supply of images, I learn more about the relationship between social media and society. My drawings reflect issues including publicity versus privacy, appearance versus reality, and the individual versus society.”

Olivia Prior, Visual Arts  "My work focuses on the cohesion of technology, space, and light, by creating interactive installations that generate results unique to each engaging participant. My work will examine the control that the physical presence of each participant has in a space, by using various methods to measure values of proximity, sound, or touch. These values will ultimately produce outcomes that form a direct and personal relationship to the viewer. The main media used in this work will be light, reflecting the input received in the space.

This research creation concerns itself with the integration of art and technology,
and the influence it has made on design and installation art. It seeks to alter the idea of technological control by taking away dependency and necessity in the work. The light and methods of physical measurement will aim to remove the notion of control, and use technology as a way to reflect the ongoing activity in the space.”

**Lane Foster-Adamson, Women's Studies and Political Science (Social Justice Studies)** "I have arranged to conduct research with the students of Isha Vidhya Matriculation School in Cuddalore, India from October 15th until December 4th. I selected this school because Isha provides education past that of basic literacy for rural Tamil children and they claim to focus on the education of girls. Additionally, they are taught in English making communication for research purposes possible. The Isha Foundation reports that they have seen an increase in girls attending school, with approximately 45% being female. With this in mind, I seek to inquire about the lived experiences of girls and boys at the school, and their dreams for the future in regards to the education they are receiving. In terms of international development, education has been a major priority during the last decade. My research is broadly looking at whether or not it has been successful with regards to fostering gender equality. My research questions are: "Does the educational experience of rural female youth differ from that of rural male youth in Tamil Nadu? What aspirations do they have for their futures?" Within the given time frame, I would like to conduct recorded individual interviews in 4 scheduled visits to the school, with a sample size of approximately 20 to 32 self-identified male and female students. Upon my return in January, I would transcribe the interviews and then, guided by a feminist research ethic and critical social justice lens, I would analyze the data gathered and develop my poster presentation.”

**Bo Ya (Lena) Li, Women's Studies** "Inspired by the critiques on essentialism and eurocentrism in the dominant scholarship of western feminism, I intend to do a critical analysis of western feminist literature on Asian women. This research will include an analysis of how Asian women are represented in dominant western feminist writings, and in particular whether they are subject to a reductionist approach that makes false generalizations about Asian women’s experiences while in fact a great diversity exists among them. Such a reductionist approach risks invisibilizing those who do not fit into the hegemonic model of Asian femininity in the western eye, and thus taking away their socio-political activism and agency. My research goal is to deconstruct the essentialization, categorization, and racialization of people from certain cultures that prevail in contemporary western scholarship which hinders the formation of self-determination and the consciousness-raising of women in minority groups.”

**Fenn Olson-Mayes, Women's Studies** "*Victoria’s Gyms: Who’s Invited?* By
undertaking an intersectional discourse analysis, I will examine how neo-liberalism and the neo-liberal subject operates in the marketing of local gyms. Based on this research, I seek to develop a blueprint for fitness spaces that fully integrate and promote body diversity/positivity and anti-oppressive politics.”

**Jerry Flexer, Writing** “My topic is creative writing pedagogy, from the perspective of the discipline of the humanities, with an emphasis on creative nonfiction. Preliminary research revealed a wealth of literature about creative writing instruction. My research will consider two dominant approaches. The product-focused approach invites students to read published works and emulate, while the process-focused approach relies on a step-by-step process to gradually develop learners’ creative writing skills. One area of debate is whether a method based on a process of any kind can be effective. Some creative writing instructors, as well as some published writers, attribute artistic writing to talent and hard work, something instruction does not provide.

I will argue for the importance of including a process focus in creative writing instruction because research suggests it better meets the expectations and needs of learners. Rather than choosing a process-focused approach over the product-focused approach, I expect to recommend a method that blends both product and process as the best choice for instructors and students alike.”

**Cody Gies, Writing** "I propose to write and illustrate a weekly / bi-weekly alternative webcomic that will explore and make use of various structures and techniques of the medium. Inspired by ‘rubber hose’ animation and the highly imaginative works of Jean Giraud (Moebius) and Brandon Graham (an influential Vancouver cartoonist with Victoria connections), I hope to write a surreal fantasy focused on the journey and relationship of two protagonists. I plan to research and incorporate an interactive narrative experience (through use of links, gifs, games, etc. embedded in the sequential art). I trust this will prove to be a challenging task, as I am unfamiliar with interactive storytelling. I will also research the promotional aspects of creator-owned comics on the Internet, as well as specific methods of self-branding. For the Research Fair, not only will I showcase the digital comic, I plan to publish a limited-run print version.”