14TH ANNUAL CROSSROADS INTERDISCIPLINARY HEALTH RESEARCH CONFERENCE
EXPANDING THE HORIZONS OF HEALTH

MARCH 11 & 12, 2016 | DALHOUSIE UNIVERSITY
HEALTH AND HUMAN PERFORMANCE GRADUATE STUDENT SOCIETY
Schedule of Events – Friday, March 11th

12:00 – 1:00 pm  Registration – Great Hall, Top Floor University Club (1 Alumni Cres.)

1:00 – 1:15 pm  Opening Remarks – Great Hall, University Club

1:15 – 2:15 pm  Keynote Speaker – Becky Marval – Great Hall, University Club
Occupational Therapist – Mobile Outreach Street Health (MOSH) & Adsum for Women & Children

2:15 – 3:10 pm  Community Networking Fair – Great Hall, University Club

3:15 – 4:15 pm  Workshop Session 1 (Attend one workshop)
Dr. Christine Chambers
#itdoesnthavetohurt: Using Social Media for Improved Health Research and Practice
University Hall, 3rd Floor, MacDonald Building

Dr. Lori Dithurbide
Performance Psychology: From Sport to the Everyday
Alumni Room, Ground Floor, University Club

Lisa Lachance
Supportive Environments for Young People with Complex Needs
President’s Room, Ground Floor, University Club

4:15 – 5:15 pm  Workshop Session 2 (Attend one workshop)
Dr. Jessie-Lee McIsaac
Demystifying the Science and Practice of Knowledge Translation
University Hall, 3rd Floor, MacDonald Building

Emily Drake
Building Patient Communities
Alumni Room, Ground Floor, University Club

Dr. Matthew Numer
Social Theory in Qualitative Data Analysis
President’s Room, Ground Floor, University Club

5:30 pm  HAHPy Hour Mixer – Great Hall, University Club
Appetizers & Cash Bar
**Schedule of Events – Saturday, March 12th**

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*Must be present to win door prizes*
Welcome from the Crossroads 2016 Co-Chairs

Welcome to the 14th Annual Crossroads Interdisciplinary Health Research Conference! On behalf of the School of Health and Human Performance Graduate Student Society (HAHP GSS), we would like to welcome and thank you all for attending our event. This conference is organized “for students, by students” and we are very excited to have you join us to learn about a vast array of health research topics. This year, we are welcoming over 100 presenters from 21 universities across Canada, each with varying backgrounds and research interests. This year’s theme, “Expanding the Horizons of Health,” builds on the interdisciplinary nature of Crossroads to promote and encourage collaboration and networking among students, faculty, health researchers, and community representatives in the health professions. Crossroads is an adjudicated, peer-reviewed academic forum, and provides an important opportunity for undergraduate and graduate students to learn from each other, gain experience, and showcase their work at a professional level. We hope that you enjoy your experience and take advantage of the opportunities that this weekend offers!

With warm regards,

Ella Vermeir
Julia Kontak

Thank You to Our Organizing Team!

Mariah Malone  Kirk Furlotte
Caitlyn Ayn  Brittany Barber
Nicole Doria  Natalie Houser
Heather Johnston  Lindsay Roach
Susan Robinson  Ariane Seguin
Kelsey Shea
Welcome from the Director

On behalf of the School of Health & Human Performance (HAHP), I wish to welcome you to the 14th Annual Crossroads Conference. This unique student-run conference serves as a stepping stone for undergraduate and graduate students to learn and gain experience in presenting at a professional level. The interdisciplinary nature of the Crossroads Conference provides an exciting opportunity for students and faculty engaged in health research across Canada to showcase their work while building relationships across the community.

While the School of Health and Human Performance fully supports the Crossroads Conference, it is important to note that the success of the event is entirely due to the work of the HAHP Graduate Student Society.

I hope you enjoy the 2016 Crossroads Conference and the hospitality of Dalhousie University and Halifax. I look forward to meeting you at the conference.

Sincerely,

Dr. Fred McGinn, Ph.D
Director, School of Health and Human Performance
Keynote Speakers

March 11: Becky Marval is the occupational therapist with two innovative organizations: Mobile Outreach Street Health (MOSH) and Adsum for Women & Children. In both roles, she works with people who have experienced homelessness, are at risk of homelessness or are street-involved, to maximize health, function and quality of life. Becky also identifies opportunities for community development and system-level change. She is an Adjunct Professor at the Dalhousie School of Occupational Therapy.

Seeing the Forest, the Trees, the Growing, and the Breeze: Promoting health among people with unmet basic needs

Health and its promotion are complex, especially among those whose basic needs are unmet. However, with every layer of complexity: the forest, the trees, the growing and the breeze, there is an opportunity for inquiry and interaction in the service of achieving health and health equity in our communities.

March 12: Janet Knox, President and CEO of Nova Scotia Health Authority, is an accomplished health executive and leader with a passion for improving the health of Nova Scotians. She is committed to engaging Nova Scotians in conversations that will shape the future of health and the health system in our province, and believes in managing our resources effectively for the sake of better health outcomes. A registered nurse by profession, Ms. Knox holds a Master of Nursing from Dalhousie University, a Master of Business Administration from St. Mary’s University, and is a Certified Health Executive with the Canadian College of Health Leaders. She was a surveyor with Accreditation Canada for more than 10 years. Before taking on the role of President and CEO of Nova Scotia Health Authority, Ms. Knox served for 10 years as President and CEO of Annapolis Valley Health, also assuming leadership for the former South Shore Health for a few months. Prior to these roles, Janet served as Executive Director, Acute and Tertiary Care Branch, with the Department of Health, and worked in progressive leadership roles at the IWK Health Centre. Ms. Knox has previously held assistant professor and lecturer positions at the University of British Columbia and taught part-time at St. Francis Xavier University and Dalhousie University. She is currently an adjunct faculty member of Dalhousie University, focused on both nursing and health administration. A strong supporter of community and economic development in Nova Scotia, Ms. Knox serves on the Board of Governors for Nova Scotia Community College, the 211 Board of Directors and HealthcareCAN Board of Directors.

Janet Knox’s Keynote

In comparison to other Canadian provinces, Nova Scotia’s health outcomes are among the poorest. What is Nova Scotia Health Authority’s role in working with partners and communities to create a healthier province? Janet Knox, President and CEO of Nova Scotia Health Authority, will speak to the opportunities ahead for the organization as it rolls out its first strategic plan and looks ahead to shifting health outcomes in Nova Scotia. This work is broader than the health system alone; Knox will speak to the partnerships that will enable Nova Scotians to shape a healthier future together, a few of the organization’s early successes and the importance of changing our collective narrative about health.

Adjudicators

Dr. Andrea Bishop  Shaun Black  Terrilyn Chiasson  Dr. Janet Curran
Dr. Crystal Dieleman  Dr. Jacqueline Gahagan  Dr. Robert Gilbert  Sherry Huybers
Dr. Lois Jackson  Dr. Niki Kiepek  Dr. Heather Neyedli  Dr. Lynne Robinson
Maureen Summers  Dr. Lori Weeks  Dr. David Westwood  Dr. Sharon Woodill
Workshop Facilitators

Dr. Christine Chambers “#itdoesnthavetohurt: Using Social Media for Improved Health Research and Practice”
Dr. Christine Chambers is the Canada Research Chair (Tier 1) in Children’s Pain and Professor in the Departments of Pediatrics and Psychology & Neuroscience at Dalhousie University in Halifax, Nova Scotia. Dr. Chambers’ research lab is based in the Centre for Pediatric Pain Research at the IWK Health Centre. She has published over 100 peer-reviewed papers on the role of developmental, psychological, and social influences on children’s pain, with a current research focus on the role of families in pediatric pain and social media for health knowledge mobilization. Dr. Chambers is the Principal Investigator of the “It Doesn’t Have to Hurt” social media initiative, in partnership with Erica YummyMummyClub.ca, and funded by the Canadian Institutes of Health Research (CIHR). She is a key mentor in the Pain in Child Health (PICH) training program and is the centre lead for the IWK’s Canadian Child Health Clinician Scientist Program (CCHCSP). Dr. Chambers holds various prestigious awards such as the American Pain Society’s Jeffrey Lawson Award for Advocacy in Children’s Pain Relief, as well as sits on an array boards and committees such as the being the Secretary on the Board of Directors for the Society of Pediatric Psychology and vice-chair of the Scientific Program Committee for the Canadian Pain Society. Dr. Chambers was identified as one of the top 10 most productive women clinical psychology professors in Canada. She is also the proud mother of 4 children.

Dr. Lori Dithurbide “Performance Psychology: From Sport to the Everyday”
Dr. Lori Dithurbide is a faculty member in the School of Health and Human Performance (Kinesiology) at Dalhousie University where she teaches classes and conducts research in the area of sport and exercise psychology. Dr. Dithurbide completed an undergraduate degree in Psychology from Saint Mary’s University, a Master’s degree in Health and Physical Education from Brock University and a Doctoral degree in Kinesiology, specializing in sport and exercise psychology from Michigan State University. In addition to her work at Dalhousie University, Dr. Dithurbide is the Lead Mental Performance Consultant at the Canadian Sport Centre Atlantic and consults with athletes of all ages and experiences on mental training, helping athletes reach their potential. Dr. Dithurbide hold Professional Member status with the Canadian Sport Psychology Association, and has consulted with athletes participating in a variety of sports including hockey, basketball, curling, figure skating, golf, paddling, sailing, and track and field. Dr. Dithurbide has experience in competing and coaching in a number of sports including hockey, and golf.

Emily Drake “Building Patient Communities”
Emily Drake is a health promotion specialist and a young adult cancer advocate. For the past two years she has been the Director of CancerFightClub, an initiative of Hope & Cope (Jewish General Hospital/McGill University), a cancer support organization in Montreal, Canada. She received her Bachelor of Science with Honours degree in psychology from Acadia University and her Master of Arts degree in health promotion from Dalhousie University. She blogs for the Huffington Post in the United States about various public health topics related to AYA cancer. Emily recently relocated to Halifax, Nova Scotia, where she is building her own consulting company (EmilyDrake.ca). A social innovator, in 2013, Emily co-founded and continues to grow Adolescent and Young Adult Cancer Societal Movement (#ayascm) and in 2014, founded Metastatic and Advanced Young Adult Cancer Community (#mayacc) – both are active, multi-disciplinary communities that are changing the way stakeholders interact and share information regarding young people living with cancer.
Lisa Lachance “Supportive Environments for Young People with Complex Needs”
Lisa is the Executive Director of the CYCC Network and Institute and joined the team in April 2013. Prior to this, she spent the majority of her career in the public sector, working first with the federal government in Ottawa, primarily at CIDA and with stints at PCO and DFO. At CIDA, Lisa worked in both programs and policy with a particular focus on children’s rights and participation. Since returning to Halifax in 2008, Lisa worked at the Nova Scotia Department of Finance, as well as consulting for Canadian, international and UN organizations, including children’s rights and gender equality projects. Lisa’s areas of expertise include policy development and implementation; strategic and operational planning and implementation; facilitation; and Results Based Management.
Lisa has also been recognized as an effective non-profit leader as past President and Board member of a range of national Canadian non-profit organizations. She remains active in numerous community organizations in Halifax.
Lisa holds a Bachelor of Arts in International Development Studies and a Masters in Public Administration (both degrees from Dalhousie University). She was an active participant in campus, receiving both a Golden D and Board of Governors Award at the end of her undergraduate program. Lisa and her partner Heather have two children and the family can often be found on outdoor adventures through Nova Scotia.

Dr. Jessie-Lee McIsaac “Demystifying the Science and Practice of Knowledge Translation”
Dr. Jessie-Lee McIsaac is a Postdoctoral Fellow and an Associate Research Scholar at the Atlantic Health Promotion Research Centre (Dalhousie University) funded by a Career Development Award from the Canadian Cancer Research Institute. Her fellowship focuses on supporting the implementation of effective strategies to promote child and youth health. Through an embedded research partnership, she is working alongside government partners to study the implementation of school policy interventions that are designed to increase cancer prevention-related behaviours of healthy eating and physical activity. Dr. McIsaac has a background in health promotion and public health and skills in case study research, population health interventions, qualitative and evaluation methodologies and knowledge translation and has partnered with various types of knowledge users to lead and support various research and evaluation activities.

Dr. Matthew Numer “Social Theory in Qualitative Data Analysis”
Matthew Numer is an Assistant Professor in the School of Health and Human Performance in the Faculty of Health Professions at Dalhousie University and cross-appointed to the Gender and Women's Studies Programme. His doctoral work in the Interdisciplinary program at Dalhousie examined gay men’s sexual health with a specific emphasis on health promotion and policy development aimed at HIV prevention. For a new investigator, his work is well-established in the fields of gender and sexuality. He was awarded the Institute of Gender and Health of the Canadian Institutes of Health Research Award of Excellence in 2009. His areas of research include gender and masculinities, sexual health, LGBTQ health with an emphasis on aging, and educational practices in large group instruction. In 2015, he was awarded the Dalhousie University Contract/Sessional Teaching Award for his efforts in the classroom. He is the former Chair of the Nova Scotia Rainbow Action Project, was a member of the board of directors for the Halifax Sexual Health Centre for eight years, and currently serves on the AIDS Coalition of Nova Scotia: Gay Men’s Health Advisory Committee.
The impact of chronic non-malignant pain on patient’s quality of life
Alanezi Sh, PhD(C); Feine, J, PhD; Elgeziry A, MD; Ibrahim E, MD

Background: Chronic pain is a major health problem that has important deleterious effects on health-related quality of life (HRQL). The aim of this study was to examine the relationship between intensity/location of chronic pain and HRQL.

Methods: This cross-sectional cohort study was composed of 130 consecutive patients who were referred to pain clinics at Hamad General Hospital, Doha, Qatar. All patients who met the inclusion criteria and were willing to participate signed the consent form. They were then asked to complete a socio-demographic survey, the Brief Pain Inventory (PBI) and the Medical Outcome Survey-Short Form (SF-36). Data analysis was performed using SAS software.

Results: Half of the participants reported having chronic pain in more than one location, with another third reporting pain in 2 different sites. Multiple linear regression analysis revealed that chronic pain intensity had a significant negative effect on daily life ($p<0.0001$). The higher the reported pain intensity and the more pain sites in one individual, the greater the negative effect on daily life ($p<0.05$), particularly in the domains of HRQL, role limitation due to physical (RP) and emotional problems (RE), physical function (PF) and bodily pain (BP) ($P \leq 0.05$).

Conclusion: These results indicate that, when chronic pain is in more than one body location, its intensity increases, and increased pain intensity reduces HRQL. To better understand how greater pain and location impact these domains, qualitative methodologies are recommended. Knowing how these quality of life domains are diminished by chronic pain can assist decision-makers on appropriate therapeutic alternatives.

Informing curriculum development for communication skills training in dental education
Caitlyn Ayn, Dalhousie University

Background: Patient oral and general health outcomes are positively impacted by strong dentist-patient communication. Communication skills training (CoST) in dental education has been known for some time to strengthen the communication skills of dental students and dentists.

Purpose: A scoping review was completed in order to compile recommendations for future CoST research and education. Based on these recommendations, a proposed study will explore dental student attitudes toward CoST. The findings from both the review and proposed study will be used to inform curriculum development suggestions for CoST.

Methods: Based on scoping review findings, the proposed study will employ a sequential, mixed methods design. Questionnaires collecting demographic information and items ranking attitudes toward CoST will be completed by approximately 150 dental students in one school. Results will be analyzed to determine correlations with demographic variables. A subsample of questionnaire respondents will be included in qualitative interviews. From these interviews, themes will be generated and analyzed in conjunction with statistical data to yield detailed findings.

Results: Findings from the scoping review include several frequent recommendations, such as the need to account for student diversity in CoST delivery. Results of the scoping review also suggest that the proposed study will demonstrate differences in attitudes toward CoST based on demographic diversity.

Conclusions: Recommendations from the scoping review and findings from the proposed study will be used to inform and develop curricular content for CoST. By developing improved CoST in dentistry, patient-centered communication skills of future dentists, and thus patient health outcomes, will be supported.
Oral Presentations

Age appropriate housing: The experience of aging for young adults with intellectual and developmental disabilities in long-term care facilities

Brittany Barber; Dalhousie University.

**Background:** Despite a trend of de-institutionalization for people with intellectual and developmental disabilities (I/DD), barriers exist for young adults with I/DD requiring supportive care within community based housing. To accommodate the housing needs of young adults with I/DD, these individuals are experiencing the process of being re-institutionalized within long-term care (LTC) facilities. It is largely unknown whether environmental, social, or cultural factors of a LTC facility impact the lived experiences of aging for young adults with I/DD.

**Purpose:** The purpose of this study is to understand the experiences of aging for younger adults with I/DD within long-term care facilities in Halifax Regional Municipality.

**Methods:** This study will use a qualitative description framework to explore detailed experiences of aging for young adults with I/DD in LTC facilities. Data will be collected from 5 to 7 face-to-face, in-depth interviews with younger adults that are diagnosed with I/DD (19-45 years of age). Inductive research methods will guide coding of transcripts through the six phases of latent thematic analysis.

**Expected Results:** This study is expected to describe and delineate the experiences of aging for young adults with I/DD. It is expected that the experience of aging for young adults with I/DD is influenced by environmental, social, or cultural factors of a LTC facility. It is significant this study begins to explore aging and I/DD from a community based approach that focuses on giving voice to people with I/DD.

**Conclusion:** From this study, implications of the experiences of aging for younger adults with I/DD will facilitate community-based directions of change to positively influence how younger adults with I/DD live and interact within LTC environments.

A narrative approach: Barriers and facilitators to access in care in services for youth eating disorders in Atlantic Canada

Michael Bartellas, BSc (Hons), MSc (MED)(AHSR), MD (currently) Memorial University of Newfoundland, Dr. Olga Heath, Memorial University of Newfoundland, Dr. Kate Tilleczek, University of Prince Edward Island

**Background:** It has been well documented that eating disorders have a huge negative impact on quality of life, affecting psychological and physical aspects of health (Jenkins, Hoste, Meyer, & Blissett, 2011). It has also been observed that less than 20% of individuals with an eating disorder will be treated by a mental health professional (Mond, Hay, Rodgers, & Owen, 2007). Through a narrative approach, this study explores youth and family perspectives on experiences in accessing eating disorder services in Atlantic Canada.

**Purpose:** My main research question was, What are the significant barriers/facilitators to accessing services related to eating disorder care in Atlantic Canada?

**Methods:** These narrative journeys were explored through conversations with a range of participants (five youth and six parents) in a one to one interview setting, thus providing rich and specific experiential data.

**Results:** The main barriers discovered were a lack of psychological services, guidance from family physicians, resources, and eating disorder education. Main facilitators included having a knowledgeable family physician, psychological support, an outpatient program, an eating disorder advocacy organization, and an adolescent eating disorder service. Major recommendations focus on increasing the number of experienced clinical psychologists in the province and increasing specific eating disorder training for service providers.

**Conclusions:** This type of multi-vocal data is novel in Atlantic Canada, and holds value in including voices of youth and their families when exploring how to better improve services. The findings are interpreted in relation to ecological models of youth development.
Mechanical effects contribute to phase 1A and 1B arrhythmias through distinct mechanisms during acute regional ischemia in the isolated rabbit heart

Peter A. Baumeister, BHK; Tarek Lawen, MSc; Ilja Uzelac, PhD; Flavio H Fenton, PhD; T. Alexander Quinn, PhD
Department of Physiology & Biophysics, Dalhousie University, Halifax, NS
School of Physics, Georgia Institute of Technology, Atlanta, GA

Introduction: Acute regional ischemia (ARI) disrupts cardiac electrical activity ("arrhythmias") contributing to Sudden Death. Recently, mechanics have been implicated in ARI arrhythmias.

Purpose: To investigate the contribution of altered cardiac mechanics to ARI arrhythmias and underlying mechanisms in the isolated rabbit heart.

Methods: Electrical activity monitored by ECG / optical mapping. Left ventricular loading controlled with intraventricular balloon. ARI induced by ligating a coronary artery branch for 60min. Three groups tested: (i) physiologically-loaded (Loaded, n=10); (ii) unloaded (Unloaded, n=10); (iii) physiologically-loaded, non-contracting (Non-contracting, n=10). Mechanisms tested in Loaded with: (i) voltage-Ca$^{2+}$-optical mapping (Calcium, n=10); (ii) Dantrolene-stabilization of ryanodine receptors (Stabilized, n=9). Values (mean±SEM) compared by ANOVA (p<0.05).

Results: Two arrhythmic peaks reported in Loaded: 5-20min (Phase 1A) and 25-45min (Phase 1B), both with greater incidence of ectopy (12.0±6.1; 41.6±20.7) than in Unloaded (0.8±0.4; 3.6±1.6) and Non-contracting (0.4±0.3; 5.0±4.6). In Calcium, only Phase 1B ectopy was reduced (11.7±6.1; 1.9±0.7), attributed to intracellular Ca$^{2+}$ buffering by the high-affinity Ca$^{2+}$ dye. Stabilized, trended towards reduced Phase 1B ectopy (16.9±9.1; 8.8±4.4). The contribution of Ca$^{2+}$ to arrhythmias in Phase 1B only is attributed to distinct temporal changes in action potential (APD) / Ca$^{2+}$ transient (CaTD) duration. APD decreased immediately, stabilising by 10min (-34±2msec) however, CaTD stabilisation occurred by 30min (-24±4msec). This resulted in an increased window (CaTD - APD) during electrical diastole for Ca$^{2+}$-driven after-depolarisations (8±1 to 37±4msec).

Conclusion: Mechanical effects contribute to ARI arrhythmias through distinct mechanisms in the isolated rabbit heart. During Phase 1B, mechanically-induced arrhythmias are calcium-driven. Mechanisms in Phase 1A remain to be elucidated.

The influence of breastfeeding on cortical and bio-behavioral indicators of procedural pain in newborns: A randomized controlled trial proposal

Britney Benoit, MScN RN PhD(c)1,2; Marsha Campbell-Yeo, PhD NNP-BC RN1,2,3,4; Ruth Martin-Misener, PhD NP1; Aaron Newman, PhD5; Margot Latimer, PhD RN1,2
1School of Nursing, Dalhousie University; 2Centre for Pediatric Pain Research, IWK Health Centre; 3Department of Pediatrics, IWK Health Centre; 4Maternal Newborn Program, IWK Health Centre; 5Department of Psychology and Neuroscience, Dalhousie University

Background: Untreated early pain is associated with adverse neurological consequences1,2. While 24% oral sucrose is considered standard care for acute pain relief in infants3, recent data questions the efficacy of this intervention in reducing pain in the infant brain4. Evidence supports the efficacy of breastfeeding for relieving pain5, however, no studies to date have examined the effect of breastfeeding on pain-specific electrophysiologic activity in the newborn brain.

Purpose: To a) examine the influence of breastfeeding in comparison to 24% oral sucrose on pain-specific electrophysiologic activity in the newborn brain during a heel lance procedure and b) to determine if there is convergence among outcome measures (electrophysiologic activity, bio-behavioral pain score) in either of the intervention conditions.

Methods: Utilizing a single blind, randomized controlled trial design, 60 healthy term infants will be recruited within the first two days of life. Infants will be randomized to have a heel lance completed in one of two possible conditions: 1) breastfeeding (n = 30) or 2) sucrose (n = 30). Pain-specific brain activity will be recorded on electroencephalogram during heel lance. Infant facial response will be video recorded, and heart rate and oxygen saturation will be measured for calculation of Premature Infant Pain Profile-Revised (PIPP-R) Score, a reliable and valid bio-behavioral measure of pain in infants’ 26-44 weeks gestational age6.

Significance: This will be the first study to examine the effect of breastfeeding on pain-specific brain response in newborns. Findings will have important implications for informing optimal pain management practices in newborns.
**Oral Presentations**

**Beyond food: Contribution of a community kitchen to well-being, sense of belonging, and cultural and linguistic identity of Francophones and Francophiles living in St. John’s, Newfoundland**  
Karine Bernard, Memorial University of Newfoundland

**Background:** Studies have shown health disparities between Anglophones and Francophone minorities in Canada. This is particularly relevant to Newfoundland and Labrador (NL) where the proportion of Francophones reporting difficulties accessing health services in French is the highest in Canada. Research has demonstrated the need to explore how activities offered by les centres scolaires et communautaires (school community centres) for Francophone minorities can foster health and well-being. Community kitchens are recognized as health promotion strategies. However, to our knowledge, no studies have examined their contribution to well-being and identity among Francophone and Francophile minorities.

**Purpose:** This research asks: which factors motivate people to participate to the community kitchen recently launched at the Centre scolaire et communautaire des Grands-Vents of St. John’s, NL? The study explores the perceived impacts of this activity on well-being, skills and practices, sense of belonging, and identity. We expect that the community kitchen contributes in multiple ways to promoting well-being among Francophone and Francophile participants.

**Methods:** A qualitative approach including overt participant observation and semi-structured interviews with key informants, participants and non-participants is used.

**Preliminary Results:** Preliminary results show that community kitchen participants share cooking tips and nutritional knowledge. Results also indicate that, through participation in the community kitchen, participants find social, emotional, cultural, and linguistic support.

**Conclusions:** Health promotion activities in French have the potential to foster well-being of Francophone minorities and promote cultural and linguistic identity of Francophone and Francophile minorities. Our results call for an expanded understanding of public health to include cultural and linguistic well-being.

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**Women’s well-being during pregnancy: How fears of engaging in sexual activity relate to women’s sexual and relationship outcomes during pregnancy**  
Beveridge, J. K., Vannier, S. A., & Rosen, N. O., Dalhousie University

**Background:** Many pregnant women report declines in sexual frequency, sexual functioning, and sexual and relationship satisfaction. The beliefs that women hold may play a role in these declines. More than 40% of women avoid sexual activity for fear that it could harm their pregnancy. However, no previous study has examined if fear-based reasons for not having sex are associated with declines in well-being during pregnancy.

**Purpose:** The present study examines how avoiding sexual activity for fear-based reasons relates to sexual and relationship outcomes during pregnancy. It is hypothesized that fear-based reasons will be negatively associated with sexual frequency, sexual functioning, and sexual and relationship satisfaction and positively associated with sexual distress.

**Methods:** To date, 132 pregnant women involved in a romantic relationship have completed an online survey. The survey assesses fear-based reasons for not engaging in sexual activity as well as sexual frequency, sexual functioning, sexual and relationship satisfaction, and sexual distress.

**Results:** Preliminary analyses indicate that 14 to 33% of women report fear-based reasons for not engaging in sexual activity. Controlling for trimester and parity, more fear-based reasons were associated with greater sexual distress ($\beta = 0.20, p < .05$), but were not associated with sexual frequency ($\beta = 0.11, p = 0.22$), sexual functioning ($\beta = -0.16, p = .08$), sexual satisfaction ($\beta = .04, p = 0.65$), or relationship satisfaction ($\beta = -0.12, p = 0.20$).

**Conclusions:** Women who avoid sexual activity for fear of harming their pregnancy report more distress. These results may inform future interventions to improve women’s well-being during pregnancy.
**Oral Presentations**

**Inhibition of return for grasping movements**

Kaila Bishop, Dalhousie University, MSc Candidate; Supervisor – Dr. David Westwood, Dalhousie University

**Background:** Inhibition of return (IOR) is a mechanism that refers to the impaired perceptual and/or motor performance at the location of a previous stimulus as compared to a new location (Taylor and Klein, 2000), reflecting a selective processing bias created by prior sensory and/or motor events. It has been proposed that IOR exists for both sensory and motor processing (Cowper-Smith et al., 2013).

**Purpose:** IOR has not been studied for object-directed manual actions like grasping; reaching involves only location information about the target, whereas grasping requires the extraction of object form and orientation information. It is possible that IOR might delay the start of the action, but it is not clear if it will also impact the shaping of the grasp to the size of the object. Such insights have not been possible in saccadic and reaching studies. This will help to elucidate fundamental mechanisms of sensorimotor control for the upper limb, which could lead to improved rehabilitation techniques, and more efficient designs for human-computer interaction.

**Methods:** Sixteen participants with normal or corrected-to-normal near vision, and no history of neurological or motor diseases will grasp two objects in succession, located on the same or different side of a central position; object sizes will vary. A 3D motion-capture system will be used to analyze both reaction time and the scaling of grip opening to the size of the target object. An electrooculography system (EOG) will be used to measure eye movements.

**Expected Results:** Grasping actions will be delayed (greater reaction time) when the target object is in the same location as a preceding grasping action as compared to a different location. The psychophysical function linking object size and grip aperture (i.e., amount of hand opening) will be altered when the target object is in the same (versus different) location as a preceding grasping action.

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**The interrelationships between cognitive, behavioral and affective aspects of cultural identity and perceived discrimination in predicting depressive symptoms among Aboriginal adults from across Canada**

Shanté Blackmore, Dalhousie University.

**Background:** Aboriginal peoples are over-represented in terms of physical and psychological illness in the Canadian population. Past forms of collective discrimination intent on removing Aboriginal identities have been shown to have relationships with health outcomes within the population. However, little is known about the mechanisms connecting cultural identity and discrimination to well-being.

**Purpose:** To identify the relationships between aspects of cultural identity, perceived discrimination and depressive symptoms. It is hypothesized that behavioral and cognitive aspects of identity are positively related, but have different indirect paths in predicting depressive symptoms. Whereas identity centrality (cognitive) is likely indirectly related to an increase in depressive symptoms through augmented perceived discrimination, enculturation (behavioral) is likely linked with reduced depressive symptoms through increased cultural pride (affective).

**Methods:** Data analyzed using the AMOS 20 multiple group path analysis and maximum likelihood parameter estimation. Analysis conducted on a data set collected from a survey of 292 Aboriginal adults from across Canada. Variables measured using the Cameron social identification scale, Perceived Ethnic Discrimination Questionnaire, Vancouver Index of Acculturation and the Beck Depression Inventory (short form).

**Results:** As hypothesized, identity centrality is indirectly related to an increase in depressive symptoms through augmented perceived discrimination and enculturation is linked with reduced depressive symptoms through increased cultural pride.

**Conclusion:** Results emphasize the importance of culture to well-being and presents the need for culturally appropriate healthcare practices when treating Aboriginal patients. Emphasizes the importance of proper education on Aboriginal issues and the need for culturally appropriate social programs, allowing Aboriginal peoples to engage in cultural practices.
Oral Presentations

The effect of experience, personality and learning on health and safety performance and physiologic responses of miners training in a simulator

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Background: The use of simulator training has been well researched in certain industries, such as aviation, medicine and military fields. It has been observed that individuals who were trained on simulators show increased hazard identification abilities. Simulators are especially useful for providing a controlled and risk-free environment for learning, which provides novice workers with a much safer venue to learn complex and dangerous tasks.

Purpose: There is a lack of research regarding the effectiveness of mining equipment simulators in training. Additionally, it is not understood how individual factors affect learning and performance in the simulator. This study will determine how individual factors affect safety performance and physiological responses in a mining simulator in order to improve workplace health and safety.

Methods: Novice and experienced mining employees were recruited. Their learning styles and personalities were assessed with the Learning Style Inventory and the Big Five Index respectively. Physiological responses to training (i.e. stress, relaxation) were quantified by determining heart rate variability (HRV).

Results: It is expected that there will be a correlation between the resilient personality and performance in the simulator. Additionally, learning style is not expected to affect performance. Moreover, it is expected that experienced workers will exhibit less stress reactions than novice workers.

Conclusions: The results of this study will expose any potential limitations of simulator training for underground mining equipment in terms of experience, personality, and learning style. Ultimately, the results will be used to modify training procedures in order to improve worker safety in the mining industry.

Supervised exercise for optimizing peak oxygen consumption in childhood cancer survivors treated with a known cardiotoxic agent: A meta-analysis

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1Dalhousie University

Background: As childhood cancer survival rates have increased, so too has the concern over the cardiotoxic effects caused by the treatments these children receive. Cardiotoxicity is a characteristic of many cancer treatments, which may result in damage to the heart, and subsequent cardiovascular disease. Recent studies have explored the potential of non-pharmacological options against cardiotoxicity. Similar to its cardiovascular benefits in other clinical populations, exercise therapy has shown benefit in both adult and childhood cancer survivors (CCS). Although no study has investigated the cardioprotective potential of exercise for children receiving cardiotoxic therapies, several related studies have assessed the role of exercise to improve cardiorespiratory fitness (CRF), a measure of cardiovascular health.

Purpose: The proposed meta-analysis will be an original synthesis of all CCS studies that have used exercise as an intervention and CRF as an outcome. Secondary objectives will include investigating how variables of clinical diversity, and exercise parameters may change the intervention effect.

Methods: Procedures for this review are based on those in the Cochrane Handbook for Systematic Reviews of Interventions. Data analyses will include measuring treatment effect, assessing risk of bias, assessing heterogeneity, subgroup analyses, and sensitivity analyses.

Results: An overall increase in CRF following exercise is expected. This is based on the findings of previous reviews of adult cancer survivors. It is also expected that certain subgroup analyses (i.e., treatment status, workload, duration, and adherence) will show associations with the intervention effect.

Conclusions: This study will serve as the first review to systematically explore the cardioprotective potential of exercise in CCS.
Oral Presentations

**Electroconvulsive therapy for major depressive disorder: A retrospective chart review concerning the impact of gender on treatment efficacy**

Natasha Bowman, Emily Hawken, Roumen Milev. Queen’s University (Kingston, ON).

**Background:** Motreja et al. (1997) found that the post-ictal prolactin response was significantly higher in female patients than it was in male patients following electroconvulsive therapy (ECT). Additionally, Bloch et al. (2005) found that ECT was significantly more effective in treating schizophrenia in female patients than it was in treating schizophrenia in male patients. Schizophrenia and major depressive disorder are frequently related. This suggests that gender differences observed in the efficacy of ECT treatment for schizophrenia might also exist in ECT treatment for MDD.

**Purpose:** The present research aims to explore the nature of the relationship between gender and the efficacy of ECT in the treatment of MDD. We expect that ECT treatment will be more effective in female patients after adjusting for five potential covariates (treatment with benzodiazepines, treatment with antipsychotics, age, electrode placement, and season).

**Methods:** We will perform a chart review on adult MDD patients who received ECT treatment between 2004 and 2014 at Providence Care Hospital in Kingston, Ontario. An extended Cox proportional hazards regression analysis will be used to assess the association between gender and treatment efficacy.

**Results:** Data analysis is in process and will be finalized in February 2016.

**Conclusions:** This is an important topic which should be studied because MDD is a debilitating illness. Developing an understanding of the factors which might bolster or lessen the efficacy of MDD treatment is thus essential if physicians are expected to refer the appropriate patients to the appropriate treatments and maximize every patient’s chance of recovery.

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**Breastfeeding for lifetime prevention of gastrointestinal autoimmune diseases: Literature review and areas for future inquiry**

T Brown, C Morley. Acadia University, Wolfville, NS.

**Background:** The benefits of breastfeeding are well established; however, while 89% of new Canadian mothers initiate breastfeeding, only 26% continue for the recommended six months. Encouraging breastfeeding to confer lifetime protection against gastrointestinal (GI) autoimmune diseases (e.g., Crohn's disease and colitis) in susceptible populations may offer a means of reducing malnutrition and mortality by reducing diarrhoea among children.

**Purpose:** For a Research Methods term project, a literature review was undertaken to explore the relationship between breastfeeding and autoimmune diseases of the GI tract, to determine any immunological mechanisms of protection, and to articulate possible research directions.

**Method:** A comprehensive literature review was done of peer-reviewed articles in journals of immunology, pediatrics, and lactation promotion. Search terms were breastmilk, IgA, gastrointestinal disease, immune system, and mucosal tissue.

**Results:** Findings were that breastfeeding does decrease GI autoimmune diseases in children through lifelong enhancement of the immune system, and improves and extends immune system maturation. Human milk has been used to treat GI disease in infants. Immunoglobulin A is a significant contributor to protection against pathogens, and may provide the protective link between breast milk and GI autoimmune diseases.

**Conclusions:** Possible future investigations include longitudinal studies of the correlation between breastfeeding and gut health, and retrospective assessments of breastfeeding vs. formula feeding and breastfeeding duration in people who develop GI autoimmune conditions. Other areas of inquiry are connections between breastfeeding, respiratory disease, depression, and gut microbiota colonization.
**Oral Presentations**

**Distinguishing between controllable and uncontrollable illnesses: Are optimists more clear-sighted than pessimists?**

Karen Buckle, St. Thomas University; Jean-Christian Maillet, St. Thomas University; Dr. Nancy Higgins, St. Thomas University

**Background:** Optimists and pessimists differ on how they handle health adversities. However, is this difference based on their ability to distinguish between the controllability and uncontrollability of illnesses?

**Purpose:** It was hypothesized that, in contrast to pessimists, optimists would be better able to distinguish between controllable and uncontrollable illnesses, and, furthermore, optimists would actively cope with controllable illnesses and be more accepting of uncontrollable ones. In contrast, pessimists were expected to be accepting of illnesses regardless of controllability.

**Methods:** One hundred and forty-three participants completed a measure of optimism and a health condition questionnaire.

**Results:** Contrary to prediction, both optimists and pessimists accurately distinguished between controllable and uncontrollable health conditions. Of particular interest, pessimists scored higher on active coping when the illnesses were uncontrollable, which is the opposite of what would be expected.

**Conclusions:** The finding for pessimists is not only contrary to the expectation that they would give up in the face of adversity, but it is also counter-intuitive, since pessimists “give up” more when illnesses are controllable than when they are not.

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**Key predictors of self-rated health and use of health services among different ethnic groups of undergraduate students in Maritime Canada (In Progress)**

Emily Budden RN, MN Thesis Student, Dr. Audrey Steenbeek, Dr. Donald Langille; Dalhousie University

**Background:** Maritime universities have become mosaics of cultural, ethnic and racial diversity more so than ever before. Although an abundance of research exists on the racial/ethnic disparities in health and healthcare, there remains a paucity of studies thus far, examining key predictors of self-rated health and use of health services among undergraduate students from different cultural, ethnic and racial groups.

**Purpose:** 1. Determine the key predictors of self-rated health and use of health services among different ethnic/ racial groups of undergraduate students in Maritime University Campuses; 2. Identify the relationship and/or associations between self-rated health and use of health services among the different ethnic/ racial groups.

**Methods:** The proposed research will utilize a secondary analysis on data previously collected from the 2012, Maritime Undergraduate Student Sexual Health Services Survey (n=10, 361); an online survey administered to undergraduate students attending eight Maritime universities. The outcome variables: self-rated overall health and health service use will be analyzed between the different ethnic groups with theoretically important predictor variables – age, race, gender, biological sex, sexual orientation, socioeconomic status, social support perception and place of residence.

**Results:** Univariable logistic regression will be used to examine individual relationships between self-rated, overall health, health services use (stratified by race/ethnicity and sex/gender) and the independent variables. Multivariable logistic regression will then examine and predict relationships and interactions between self-rated overall health and health service use with the independent variables.

**Conclusions:** The aim of the research will be to determine the key predictors of self-rated health among undergraduate students from different cultural, ethnic and racial groups.
Evaluating hamstring muscle strength bilateral asymmetry in an alpine ski racer one year after anterior cruciate ligament reconstruction: A pilot study.

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Background: Ski racers commonly experience rupture of the anterior cruciate ligament (ACL). This injury requires ACL reconstruction (ACLR) to permit return to sport. The semitendinosus muscle tendon from the injured leg is used as an autograft to replace the original ACL. Hamstring muscle strength deficits have been observed in the affected leg of individuals even two years after surgery. The hamstrings, typically act as a safeguard against ACL loading in deep knee flexion. Strength deficits in the affected leg of ACLR skiers could put them at risk for reinjury.

Purpose: The objective was to use dynamometry to compare knee flexor torques of the ACLR limb (intervention) with the contralateral limb (control).

Methods: One male skier (age 17 years, height 174.5 cm, weight 75.3 kg) was tested. After a bike warm up, the participant began with the right leg and performed three isometric maximum voluntary contractions at 15, 45, 75, 90, and 115 degrees of knee flexion on the dynamometer, with three seconds between each contraction and one-minute rest between each angle. Identical testing followed on the left leg.

Results: Bilateral asymmetry in deep knee flexion (32.7% at 115°) was over 9.6 times that observed at the most extended angle (3.4% at 15°). Mean bilateral asymmetry across all angles was 16.1% in favour of the uninjured limb.

Conclusion: The mean bilateral asymmetry exceeds the literature based recommended maximum asymmetry of 15% before return to sport after ACLR. The skier therefore has a strength deficit in the injured limb that increases risk for reinjury.

Does online ‘brain training’ change your brain?

Cameron M. Clark¹, Linette Lawlor-Savage¹, & Vina M. Goghari¹
¹University of Calgary

Background: Recent investigations have shown improvements in fluid intelligence (i.e., novel problem solving ability) via training of working memory (WM). Subsequent follow-up investigations and meta-analyses have returned mixed results. The literature remains divided on whether fluid intelligence can be increased via training of WM.

Purpose: We utilized functional neuroimaging in addition to traditional neuropsychological testing in order to examine the effects of WM training. Changes in brain function in response to training, even in the absence of improved test scores, will help disentangle the variables influencing the effectiveness of WM training for a wide range of clinical applications.

Methods: A total of 60 participants between the ages of 18 and 40 were randomized into three groups which received either: 6-weeks of WM training, 6-weeks of processing speed (PS) training (active control), or no training at all (no-contact control). Participants in the training conditions underwent pre- and post-training fMRI scans, and all three groups underwent pre and post neuropsychological testing.

Results: Neuroimaging results indicated quantifiable differences between the WM and PS training groups. Importantly, in response to a non-trained fluid intelligence task, the WM training group showed increased post-training activation in diffuse frontal and parietal regions – a finding that was not observed in the PS group. Neuropsychological data is currently being tabulated.

Conclusions: Online brain training is able to alter patterns of neural activation in response to novel tasks, in healthy young adults. The degree to which these neural changes manifest in day-to-day tasks, and clinical populations remains a fertile area for future research.
Oral Presentations

The effects of alcohol consumption on cognitive and academic performance

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Mount Allison University and University of Calgary.

Background: Alcohol consumption has direct effects on cognitive function. When consumed heavily, alcohol leads to impaired working memory, executive functioning, and general memory abilities. When consumed in light-moderate quantities, however, it exerts positive effects and leads to improved functioning in these same cognitive dimensions.

Purpose: Because cognitive abilities are closely related to academic performance, we investigated how the effects of drinking on cognitive function are reflected in the grades of undergraduate students. As our sample lacks heavy drinkers, we hypothesized that alcohol consumption would be positively correlated with cognitive abilities. We also hypothesized that alcohol consumption would be related to academic performance, and that this relationship would be mediated by cognitive performance.

Methods: First year students from Mount Allison University reported their drinking habits through the use of a questionnaire and completed cognitive tasks that assessed verbal memory, working memory and executive function.

Results: Preliminary analyses demonstrated that alcohol consumption was positively correlated to performance on tasks of verbal memory and executive function.

Conclusions: The final findings from this study will have significant implications for understanding the relationship between alcohol consumption and cognitive function and for understanding how these effects are reflected in the academic performance of healthy young adults.

‘Life after diagnosis’: Narratives of the lived and co-constructed experience of disability

Suzanna Crawford, University of Calgary

Background: As the world’s largest minority, people with disabilities (PWD) represent a diverse and often misunderstood population. With more than 1 in 10 Canadians diagnosed with a disability, many families experience disability alongside their family member. Supporting families with caregiving roles promotes family sustainability over time.

Purpose: Although a breadth of literature focuses on health outcomes of PWD, limited sources seek to understand disability as a family experience. To better understand how healthcare professionals might best care for and support families, I will examine the following question; what is the intersubjective experience of disability and how do families experience access to care services?

Methods: Narratives offer an impactful modality for understanding experience. By enticing emotion in readers, narrative accounts can be expressive, meaningful, and unifying. Drawing on interested members of a Calgary-based non-profit organization serving PWD, I plan to co-construct a narrative or series of narratives through a partnership with three families affected by disability. Data will take the form of unstructured interviews, dyadic dialogue, observations, and the reviewing of creative media over a 12-month period.

Results: Narratives provide a landscape to which healthcare professionals, policy makers, and key stakeholders find traction. The embodied experience of families affected by disability offers a unique perspective in the literature and has a number of theoretical and clinical applications.

Conclusions: Understanding intersubjective experience involves in-depth inquiry and illustrative expertise. This methodology is not intended to reform healthcare; rather, narrative accounts texturize experiential nuances that instil emotion and reflexivity in practice for better-informed service delivery to promote family sustainability.
**Oral Presentations**

**Living with COPD through the eyes of war veterans residing in London, Ontario**

Erisa Deda, University of Western Ontario; Dr. Deborah Fitzsimmons, University of Western Ontario; Dr. Marita Kloseck, University of Western Ontario; Dr. Marie Savundranayagam, University of Western Ontario

**Background:** Chronic Obstructive Pulmonary Disease (COPD) is a prevalent debilitating condition characterized by a chronic, progressive decline in lung function. COPD is particularly prevalent in military veterans, yet little focus has been placed on gaining an understanding of the lived experiences of veterans with this condition. Further research is necessary to better understand this subgroup’s experience with COPD and their knowledge of the healthcare services available to them.

**Purpose:** This study will examine the lived experiences of Canadian war veterans diagnosed with COPD.

**Methods:** Using a hermeneutic phenomenological approach, ten individuals will be invited to participate through purposeful sampling. Recruitment of participants will occur in the five branches of the Royal Canadian Legion in London, Ontario. To be eligible for this study, participants must reside in London, Ontario; be 65 years of age or older; a Canadian war veteran; a current smoker (or have quit within the last 5 years); and diagnosed with COPD (including chronic bronchitis or emphysema). The participants will undertake a semi-structured interview. Data analysis will proceed concurrently with the data collection process through the usage of the immersion and crystallization strategies.

**Results:** Thematic analysis of the interviews will provide a richer understanding of the lived experience of veterans with COPD and provide insight into their use of services to manage their COPD.

**Conclusions:** As few studies have focused on the lived experience of veterans with COPD, this study will provide a voice for the participants and fill a much needed gap in the literature.

**A comparative analysis of different analytical techniques for describing maximum reach envelope**

Colleen Dewis, PhD Candidate, Heather Johnston and Dr. John Kozey, Occupational Ergonomics and Biomechanics Lab, School of Health and Human Performance, Dalhousie University, Halifax, NS, Canada.

**Background:** Maximum reach envelope (MRE) was defined by Konz and Johnson (2008) as the area (volume) in which a seated or standing human can reach while performing a task. Research has shown that the size of the MRE will vary due to individual anthropometry, reach type and physical demand of the task, therefore one analytical approach may not fit all applications of the MRE in all designs.

**Purpose:** The purpose of this paper is to provide a comparative analysis of the analytical methods used for the maximum reach envelope in clinical applications.

**Methods:** The Computerised Potentiometric System for Anthropometric Measures (CPSAM) was developed by Kozey and Das (1994) to calculate the position of a stylus in 3-D space in order to facilitate collection of anthropometric measures, such as reach envelope. The collected reach envelope data points can be analyzed and modeled in Cartesian, Spherical or Cylindrical Coordinates, depending on the desired application. Pilot reach envelope data has been collected from 10 seated, healthy subjects and the current analysis compares different analytical techniques. The overall goal of this analysis is to design a systematic process to create reach envelope models for healthy subjects, with a long term goal of extending this to persons with shoulder impairments.

**Preliminary results:** Preliminary data analysis has been conducted on data for 10 seated subjects using traditional (ANOVA) techniques on the reach vectors. Differences due to subjects, reach direction and loads have been determined. Future analyses are aimed at determining a robust clinical assessment tool based upon these findings. This includes other methods of determining reach vectors as well statistical comparisons, principal component analysis, pattern recognition and different methods of normalizing the data to measure differences due to experimental conditions.

**Conclusions:** A simple, easy to use system have been developed and shown to be sensitive to a variety of experimental conditions. The next significant step in this research will to develop simple knowledge translation tools that can easily be used and understood by clinicians.
Substitute decision-making for incapable persons as part of the family conference in Ontario
Lynda Yu Ding, student, University of Western Ontario; Margaret Ann Wilkinson, supervisor, University of Western Ontario

Background: The need for good communication in healthcare is rising. Communication in this area grows in complexity and is less than ideal. The matter becomes even more difficult in a situation where a substitute decision-maker is necessary. A family conference is a medium through which healthcare providers, seekers, substitute decision-makers may share health or personal information. Substitute decision-making and personal health information, however, is governed by preexisting legislations. It is unclear, however, whether these regulations are acknowledged in current family conference practices.

Purpose: This paper aims to examine how health information, substitute decision-making, personal data, and privacy laws in Ontario may affect how information flows in formal family conference sessions.

Methods: An integrated, empirical, contemporary legal analysis using insights from information sciences will be used to investigate the legal context around family conferences. Empirical family conference literature, and formal legal text will be reviewed, with specific focus given to the Health Care Consent Act, 1996, the Substitute Decisions Act, 1992, and Personal Health Information Protection Act.

Results: Empirical literature in family conferences is limited. Substitute decision-making laws are acknowledged and considered, if only implicitly, in some of the literature found. Personal data and privacy law, however, is minimally, if at all, considered. Legally ambiguous participants, or persons whose role does not clearly fall under provincial legislations, have been identified.

Conclusion: There is a gap between the practice of the family conferences and the governing law in Ontario that should be addressed in future research.

The world of dance: A feminist poststructural analysis of food and body among female dancers
Doria, Nicole & Numer, Matthew
Dalhousie University

Background: Eating disorders are a public health issue in Canada, where as many as 600,000 to 990,000 Canadians currently meet the diagnostic criteria for a clinical eating disorder; 80% of these Canadians are females. Of particular concern are female athletes that participate in aesthetic sports, such as dance, as they are at the highest risk for developing clinical eating disorders.

Purpose: To explore the experiences of female dancers and the impact of the dance environment on their eating behaviours. This study will examine how dominant discourses within the world of dance impact the female dancer’s relationship to food and body.

Methods: Feminist poststructural discourse analysis will be employed to critically explore the values and beliefs of female dancers. One-on-one semi-structured interviews will be conducted to elicit the experiences of female dancers and understand how their stories are connected to the dominant discourses in the world of dance. Data will be analyzed using discourse analysis.

Results: This research will investigate the way the world of dance frames the experiences of young women in relation to food and body. It is anticipated that the dominant discourses in the world of dance will likely contribute to the prevalence of (ED)Bs in female dancers.

Conclusion: Using feminist poststructuralism and discourse analysis offers a unique perspective for understanding (ED)Bs in female dancers. This research will provide knowledge for guiding health promotion initiatives and prevention efforts targeted at reducing (ED)Bs in female dancers.
The prevalence of low back pain in the emergency department: A systematic review and primary study in the Charles V. Keating Emergency and Trauma Centre, Halifax, Nova Scotia, Canada.

Jordan Edwards, Dr. Jill Hayden, Dr. Kirk Magee and Dr. Mark Asbridge. Dalhousie University

Background / Purpose: Low back pain (LBP) may be having a significant impact on emergency departments (ED) around the world. Two analyses conducted in the USA and Australia suggest that LBP is one of the leading causes of emergency department visits. However, in the peer-reviewed literature, there has been limited focus on the prevalence and management of back pain in the ED setting. Furthermore, the applicability of the available research to our local ED setting is unclear.

Methods: This project includes two studies to investigate the prevalence of LBP in the ED: 1. a comprehensive systematic review of the published literature to gather a comprehensive and global perspective about the prevalence of LBP in the ED setting, and 2. a retrospective cross sectional analysis using six years of data from our local ED, the QEII ED, Halifax, Nova Scotia.

Results: Initial results suggest there is a wide range of prevalence estimates for LBP in the ED and there are many gaps in the literature. Specifically, there has been little research conducted in rural EDs and in Canada. Data from our local ED will be analyzed prior to the Crossroads Conference.

Conclusions: This project includes the first systematic review to assess prevalence of LBP in the ED setting. It is also the first study, that we are aware of, to assess the prevalence of LBP in a Canadian ED. Results from this study will inform healthcare providers, as well as administrative and policy decision-makers, of the global and local impact of LBP in the ED.

Evaluating the health-related benefits of older adult male participation in a physical activity-oriented third place

Kassandra Fernandes, Lakehead University

Background: Older adults tend to stress the importance of maintaining independence and the ability to successfully preform activities of daily life, which require competence in multiple dimensions of health\(^1\). Although older adults have the most to gain from participating in physical activity, this age-segment of the population is the most sedentary\(^2\).

Purpose: To explore older adult males’ perspectives on and the perceived outcomes of an indoor walking initiative in Northern Ontario. This study will assess the meaning of, motivations for and effect – both physical and psychosocial – of self-paced, indoor walking on men 55 and older in a physical activity oriented third place.

Methods: The investigation follows a qualitative case study design in which information gathered from older adult males 55 and over through interviews, a survey, and functional fitness measurements is compiled and assessed. The data will be examined for meaning using categorical aggregation to identify and label common topics that in turn will be organized into relevant themes and patterns\(^5\).

Results: The data collection process is currently underway, but observation has shown that the walking initiative is popular and valued by the older adult community.

Conclusions: Physical activity is beneficial to physical health across the life course\(^6\) but further exploration of senior physical activity initiatives is needed to assess the psychosocial health benefits also associated with these types of initiatives. Focusing research on this population has the potential to improve public health initiatives geared toward this population.

Barriers and facilitators for gay and bisexual men in accessing primary healthcare services

Kirk Furlotte (Dalhousie University)

Background: Gay and bisexual men have unique health concerns but there is evidence they are stigmatized and discriminated when using healthcare systems and services, primarily stemming from stigma and discrimination. As many find healthcare systems further stigmatizing this results in decreased likelihood to access services and exacerbates health inequities.

Purpose: This proposed study will explore barriers and facilitators gay and bisexual men identify and experience when accessing healthcare services.

Methods: This research will be a qualitative study with individual interviews. Participants will be recruited through local community organizations and advertising. Data will be interpreted through a transformative worldview focussed on confronting oppression. A community advisory panel of gay and bisexual men, health researchers, and healthcare providers will provide feedback during the iterative thematic coding of qualitative data (in addition to advice from thesis committee members).

Expected Results: It is expected that stigma and discrimination, in various forms, will play an important role in determining healthcare services access. Knowledgeable and empowered gay and bisexual men may prove to be an exception. It is hoped that results of this study will help healthcare providers develop improved outreach and educational campaigns, leading to improved health outcomes for gay and bisexual men.
Exploring barriers that refugees and refugee claimants experience in accessing reproductive health care services in Toronto

Helen Gateri and Donna Richards; PhD Students in Social Work, York University, Toronto, Ontario

Objective: To review and identify gaps in the current literature on the barriers experienced by refugee women’s experience accessing reproductive health care services in Toronto.

Methods: A systematic search and critical review of relevant studies using online searches of electronic medical health databases, such as Cumulative Index to Nursing and Allied Nursing Health Literature (CINAHL), Medline (Ovid), Nursing and Allied Health Source (ProQuest) and Medline (PubMed). PsycINFO, Sociological Abstracts, Social Science Abstracts and CBCA Complete that examined issues relating to reproductive health care access and refugee women.

Results: The literature reviewed focused on reproductive health care in pre- and postnatal care and cervical cancer screening. Factors such as racism and discrimination, language and communication, and cultural differences were found to be barriers to reproductive health care services that disproportionately affect refugees and refugee claimants’ women in Toronto.

Conclusions: Inequities in health care access and utilization among the refugee populations, and particularly refugee women play an important role in understanding why disparities in the health status of immigrants and ethnic minorities continue to exist despite Canada’s universal health care access policy. The literature review will guide this research study in further exploring these barriers and in identifying appropriate interventions and policies that will address equitable reproductive health care services for the refugee population and other marginalized women.

Associations of social capital and rurality with adolescent unrealized and unmet need for mental health and substance use services in Atlantic Canada

Bruce Gregoire, Dr. Mark Asbridge, Dr. Leslie Anne Campbell, Dr. Donald Langille (all at Dalhousie University)

Background: Unmet mental health needs are common among adolescents in the Atlantic Provinces. Social capital may decrease unmet needs by creating relationships that transfer information about services and support decisions to get help. However, differences in rural communities’ relationships to mental health may decrease the benefits of social capital.

Purpose: (1) To estimate the prevalence of unrealized needs and unmet needs for mental health services among adolescents in Atlantic Canada; (2) to estimate the associations of social capital and rurality on the aforementioned outcomes, and; (3) to determine if rurality is an effect modifier for social capital’s association with unrealized or unmet needs.

Methods: This project will employ the 2012 Student Drug Use Survey in the Atlantic Provinces; a cross-sectional survey administered to 9000 students in Atlantic Canada public schools. Depressive, anxiety, and drug disorder needs will be determined by the CES-D, SCARED, and CRAFFT scales. Unrealized and unmet needs will be classified using students’ perceptions of need and use of services. Social capital will be measured using a scale from the HBSC survey. Logistical regression will be used to estimate the associations of social capital and rurality (measured by StatsCanada). Stratified logistic regression will indicate whether rurality is an effect modifier.

Results: TBD based on analysis pending in February. We anticipate higher social capital will increase perceptions of need and use of services, but in rural communities the benefits will be lessened.

Conclusions: Hopefully these results will inform where access issues are more prevalent in Atlantic Canada, and how increasing social capital could increase access.
A comparison of peak power values between the power clean and hexagonal barbell jump squat exercises
Sean Hagen, Bachelor of Science Kinesiology with Honours, Dalhousie University; Supervisor – Dr. Scott Grandy; External Reader – Dr. Michel Ladouceur

Background: Two sport specific movements that are very important for various sports are sprinting and jumping. Strength and conditioning coaches are always trying to improve athlete’s performance in these two movements by prescribing various exercises such as squats, countermovement jumps and Olympic style lifts. It is important to compare various exercises and variations of those exercises to give a better understanding of what effect they have on athletic performance.

Purpose: The purpose of this repeated measures study was to compare the power clean to the hexagonal barbell jump squat in regards to relative peak power, absolute peak power, peak force and rate of force development. Additionally, these two exercises were compared from two different starting positions, from the ground and mid-thigh for the power clean and from the ground and hang position for the hexagonal barbell jump squat.

Methods: Participants were provincial and national team athletes from the Canadian Sport Centre Atlantic and were asked to attend 2 testing sessions. The participants performed both exercises from both starting position and the variables of interest were compared across exercise and start position.

Anticipated Results: The researchers anticipated that the power clean would produce greater values for rate of force production and peak force. They also anticipated that the hang and mid-thigh start positions would produce greater values for absolute and relative peak power, rate of force development and peak force.

What are we teaching kids today? The relationship between physical literacy and physical education
Natalie Houser, Dalhousie University, Halifax, Canada

Background: A goal of the Nova Scotia physical education (PE) curriculum is enhanced physical literacy (PL). Currently a lack of research addresses the relationship between physical education and children’s physical literacy.

Purpose: The purpose of this study is to examine the relationship of physical education teachers’ self-efficacy and physical literacy of children living in Nova Scotia.

Method: With parental consent and child assent, children’s physical literacy will be determined following protocols from the Canadian Assessment of Physical Literacy (CAPL). The CAPL consists of four domains: physical competence, motivation and confidence, knowledge and understanding, and daily behaviours. The combination of these domains provides an overall physical literacy score for each child. Physical education teacher self-efficacy will be assessed through the Teacher Efficacy Scale for Physical Education (TESPE) questionnaire completed by the physical education teachers from schools in which their students provided CAPL data. The relationship between the physical education teacher’s self-efficacy and physical literacy scores will be assessed through multilevel modelling.

Expected Results: A positive relationship between a physical education teacher’s self-efficacy and levels of physical literacy in children is expected.

Conclusion: This study will increase the understanding of children’s physical literacy and how it is developed in the physical education setting.
Access women’s clinic: A proposal for the evaluation of a physician-supervised student initiative in St. John’s, NL

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Background: Recent investigations and interviews in St. John’s, NL have highlighted a gap in services provided to women living with complex social factors such as discrimination, addiction, involvement in sex work, homelessness, and mental health concerns. Such experiences can affect women’s abilities to access healthcare in a traditional setting, as well as quality of treatment they receive within that setting. Access Women’s Clinic is a physician-supervised student initiative that aims to provide primary healthcare to women who have been underserved by traditional healthcare services. This initiative offers a safer space where women can receive comprehensive, respectful and anti-oppressive care, and an opportunity for medical and social work students to engage in service learning that will contribute to their development as future healthcare professionals.

Purpose: The study will evaluate the main objectives for the Access Clinic project. These are providing safe and nonjudgmental healthcare for women in the community, providing service learning opportunities, ensuring sustainability and continuity of care and integrating services with community partners.

Methods: We will conduct an objective-based evaluation of accessibility, learning opportunity, sustainability, and continuity of care using qualitative patient interviews and mixed-method student questionnaires. Qualitative data will be assessed by thematic analysis, and quantitative data using descriptive statistics, chi-squared analyses, and repeated measures t-tests. This evaluation will start in the Spring of 2016.

Conclusions: Based on evaluation outcomes, the program will be altered as necessary in order to better serve the community, and enhance learning opportunities for students.

A study on university students’ perceptions and experiences around food practices

Kelly Hunter, Memorial University

Background: Undergraduate university students make up a predominantly well-educated group that is likely to understand basic information about health and nutrition. However, a variety of aspects within the socio-cultural environment may deter them from consuming healthy foods, considering they are often young, unskilled in cooking, have limited time to devote to food preparation, are living away from home for the first time, and often have significant economic constraints. It is known that poor nutrition is connected to poorer health and well-being, which could likely affect students’ performance and success in their post-secondary education.

Purpose: This research explores the multifaceted challenges by looking at university students’ perceptions and experiences around food practices. It looks at the social and cultural factors influencing food choice; economic challenges students may face in accessing affordable, nutritious foods; physical environmental barriers that influence students’ food purchasing and preparation practices; and how factors like media impact students’ perceptions and attitudes around eating.

Methods: This study uses a mixed-methods approach, gathering descriptive data on participants’ food purchasing, preparation, and eating practices through a survey questionnaire and complementing these findings with qualitative data from focus groups. This research uses an ecological framework, considering a range of environmental factors that influence food choice from four different, interrelated levels: individual influences (intrapersonal), social environmental influences (interpersonal), physical environmental influences (community settings), and macro-system influences (societal).

Results: As this study is ongoing, the presentation will report on the quantitative results from the survey, as well as the preliminary focus group findings.

Conclusions: The presentation will highlight the complexity behind university students’ food practices and the interdisciplinary nature of health and well-being.
Crafting the warrior’s edge: A reinvestigation of combat training through motor control.

William Johnson, Dalhousie University

Background: There are many ways of training for combat. Often combat systems developed before the modern scientific era thus many training claims would not be backed by current military psychology and motor control literature and may be limited in their effectiveness.

Purpose: We investigated a number of training methods and their claims of potency at transferring to criterion violence.

Methods: We identified a number of traditional combat training methods and tactical concepts. We then conducted a systematic review through online databases for literature relevant to each method as well as basic motor control concepts and literature. The relevance of the tactical and practical implications of each study is then compared to the combat training method.

Results: Training that does not require certainty of attack when drilling is more effective than choreographed forms when in stressful environments such as being attacked.

Conclusions: For martial arts, fencing, and other modes of combat training an increasingly dynamic and varied training environment will be better for developing skills that will be performed under pressure.

Maximum seated reach envelope with and without a handheld load in a healthy adult population

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Background: Reach envelopes are used to measure and quantify a person’s workspace [1]. This knowledge used frequently in the design and layout of workstations is important for decreasing fatigue and injury by improving productivity, health, and safety.

Purpose: Little is known about manual materials handling tasks and the consequences on maximum reach envelopes. The objectives this investigation were to:

a) Map the maximum reach envelope with and without a load in hand;

b) Determine differences between maximum reach envelope with and without a load.

Methods: 10 adult participants participated in the reach measures. Reach measurements were conducted using a computerized potentiometric system for anthropometric measures (CPSAM). Participants performed 9 trials of each three load conditions of 0Kg, 0.5Kg and 1.0Kg.

Results: Cylindrical coordinates (r, theta, z) were mapped in panels of Z-level by θ angle in relation to each participant’s acromion. Mean and median reach values were computed for each panel to create the envelope. The reach envelope was smaller for that of the 0.5, and 1.0Kg load conditions compared to the control (0Kg). There was no significant difference between the two load conditions.

Conclusion: In this young healthy adult population, load decreased the reach envelope across participants. Load could be a factor affecting reach and should be considered when designing a workspace. Layouts requiring hand-held items such as tools or protective equipment may require considerations of a decreased reach. At what specific load level reach is affected should be further investigated.
**Host-microbe interactions influence the development of Inflammatory Bowel Disease**

Casey Jones¹, Gavin Douglas¹, André Comeau¹, Johan Van Limbergen², Richard Hansen³, Richard Russell¹, Georgina Hold⁴, and Morgan G.I. Langille¹

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**Background:** Inflammatory bowel disease (IBD), is an increasingly common disorder that causes inflammation in the gastrointestinal tract, affecting over 5 million worldwide. Although causes are elusive, recent findings have uncovered over 200 risk loci for IBD in the human genome. Additionally, the microbiome has shown to play a prominent role in IBD pathology.

**Purpose:** A primary objective was to determine if sufficient host DNA from shotgun metagenomic data could be used to call human single nucleotide polymorphisms (SNPs). Secondarily, we investigated which is a stronger diagnostic predictor of IBD risk: human genetics or microbiome variation.

**Methods:** Metagenomic shotgun sequencing and 16S rRNA gene sequencing was carried out on 20 pediatric patients with Crohn’s disease (CD) and 20 controls from a previously studied cohort. SNPs were called from metagenomic data using an established bioinformatic pipeline (GATK).

**Results:** We successfully gathered information on host genetic variation from metagenomic reads, with a mean sequencing depth of 7.5x at 3,590,660 SNPs in the human genome in one sample. Risk scores based on IBD loci were determined and integrated with changes in the gut microbiome. Microbial community composition significantly differed between CD and controls as measured by beta-diversity (p = 0.0259).

**Conclusions:** We have demonstrated the ability to profile both human genetics and microbiota from a single sample source, presenting a streamlined bioinformatic pipeline for analyzing and integrating this data for IBD clinical research. Future studies can leverage our findings for ongoing clinical diagnostics that involve both human and microbiome components.

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**Do physiotherapy students demonstrate an ageist attitude?**

Michael Kalu, BMRPT, MSc; MSc candidate in Rehabilitation Science, School of Rehabilitation Therapy, Queen's University, Kingston, Ontario & Kathleen E. Norman, BScPT, PhD; Associate Professor, School of Rehabilitation Therapy, Queen's University, Kingston, Ontario.

**Background/Purpose:** There is a projected increase in demand for physiotherapists to work with older adults because of reduced mobility in many older adults. Physiotherapy students are the future physiotherapists who will care for the ageing population. Reviews from 1970’s to 1990’s show that physiotherapy students had either negative or neutral attitude towards older adults. No recent review was found which investigated attitudes of physiotherapy students towards older adults. It is important to determine current attitudes, as attitudes are noted to influence the quality of service received by older adults. Therefore, the purpose of this review is to examine recent evidence about attitudes of physiotherapy students toward older adults.

**Research Question:** Do physiotherapy students demonstrate ageist attitude?

**Methods:** A scoping literature review was conducted using multiple databases. Search terms included physiotherapy, student, perception, attitude, knowledge, belief, older adults, geriatrics and related terms. Articles published in English from 2000 to 2015 were retained for analysis if physiotherapy students were the research participants. Data was analysed using thematic analysis.

**Findings:** Eleven articles were found that met criteria. A total of 1,261 physiotherapy students spread across six countries participated in the studies reviewed. Of the 11 articles, 6 reported knowledge about attitude, 4 reported a low level of knowledge while 2 reported a high level of knowledge. All the studies reported that physiotherapy students held a positive attitude towards older adults.

**Conclusion:** Physiotherapy students do not demonstrate ageist attitude, unlike in previous decades. It was also noted that knowledge has no effect on attitude towards older adults among physiotherapy students.
**Oral Presentations**

**Filling the gaps: Public health responses to sexual violence against peoples with DisAbilities**

*Dana Krementz, BS Biological Sciences, MPH Candidate, Simon Fraser University*

**Background:** When compared to nondisabled peoples, Peoples with DisAbilities (PWDs) are at higher risk of contracting STDs, experiencing sexual violence, have considerably fewer pathways to safety, and experience sexual violence at the hands of a greater number of perpetrators (Lewis and Ortoleva). Despite this extensive and well documented crisis there is a disturbing lack of public health intervention.

**Purpose:** While data exists regarding the intensity of this health inequity, information has yet to be translated into a functional model to guide public health action in resolving this hidden crisis. In continuation of literature reviews I have conducted, I aim to fill these knowledge gaps by creating a visual framework guided by Marxist historical materialism that breaks down the historical, cultural, and social contributions to high rates of sexual violence against PWDs and highlights important areas of potential public health interventions.

**Methods:** Working in conjunction with public health practitioners, social justice advocates, and critical disability studies activist from the Simon Fraser University’s Faculty of Health Sciences, Simon Fraser Public Interest Research Group, and Simon Fraser Students Society’s United for Disability Support, a visual framework to guide future public health interventions will be refined for organizational implementation.

**Results:** After interdisciplinary interrogation, this framework will be consolidated into a format that can be distributed to various organizations to inform, inspire, and guide public health practitioners in alleviating this crisis.

**Conclusions:** Ultimately, I seek to present this work to showcase my personal literature synthesis and to facilitate dialogue around the necessity and methodology of public health responses to sexual violence against PWDs.

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**The role of p53 status in modifying the effects of p66ShcA-induced ROS on breast cancer development and progression**

*Rachel La Selva (PhD Candidate)*

Department of Experimental Medicine, McGill University, Lady Davis Institute for Medical Research, Ursini-Siegel Lab

**Background:** The ShcA adaptor protein plays a critical role in breast cancer development. The ShcA gene encodes three isoforms: p46, p52 and p66. While the p46 and p52 isoforms confer pro-tumorigenic properties, conflicting data suggests pro- and anti-tumorigenic functions of the p66 isoform. p66 induces the formation of reactive oxygen species (ROS) and is critical for a successful p53-induced oxidative stress response, which activates a pro-apoptotic program, protecting against the propagation of malignant cells. However, ROS is able to induce inflammation and genomic instability, both of which increase the malignant phenotype. These paradoxical properties are also consistent with the fact that elevated p66 expression levels have been associated with both good and poor prognosis of cancer patients in independent studies.

**Purpose:** We propose that the p53 status of breast tumors will dictate whether p66 confers pro- versus anti-tumorigenic properties in luminal breast cancers.

**Methods:** To study this relationship, we have generated ErbB2-transformed, p53+/+ and p53−/− murine breast cancer cell lines that express low baseline p66 levels. We have engineered these cells to express wild-type p66 or a mutant that can no longer promote ROS production (S36A). These cell lines will be tested for their effect on growth, oxidative damage and chemosensitivity in vitro. Orthotopic mouse models will be used to study tumor growth, metastasis and therapeutic responsiveness in vivo.

**Conclusions:** These findings could have important prognostic value as well as therapeutic implications because ROS-associated toxicity is critical for the success of many chemotherapies and radiotherapies.
**Oral Presentations**

**Machine learning reveals microbiome differences in exercise mouse models**

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**Background:** The human microbiome is known to have a complex, yet vital relationship with human health. While both exercise and the gut microbiome have been shown to be important contributors to health, the direct effects of exercise on the intestinal microbiota in a controlled setting remains understudied.

**Purpose:** To characterize changes in the gut microbiome in response to varying forms of exercise using a mouse model with a controlled environment and diet.

**Methods:** Mice were randomly assigned into one of three exercise treatments: voluntary wheel running, forced exercise through the use of a treadmill, and a control group with no access to exercise equipment. Food intake, weight, and body mass composition were monitored over the experimental period. Bacterial DNA, purified from fecal samples throughout the experimental timeline, was analyzed using 16S rRNA gene sequencing. Microbiome differences between treatment groups were evaluated using established bioinformatic, statistical, and machine learning approaches.

**Results:** Mice within the voluntary exercise group were found to intake more food and weigh significantly more than control mice and mice undergoing forced exercise. Microbiome analysis revealed on average 1094 operational taxonomic units per sample, but did not initially identify any major differences between exercise treatments. Machine-learning methods trained with microbiome data could reliably predict the correct treatment for each sample 81% of the time suggesting a modest but measurable shift in the gut microbiome in response to exercise.

**Conclusions:** Our study shows that exercise has an identifiable but limited effect on the gut microbiome and questions the impact of exercise on the human microbiome.

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**The impact of long-term urban park restoration on place attachment and psychological well-being: The case study of Point Pleasant Park after Hurricane Juan**

Larter, Patrick; Saint Mary’s University

**Background:** In 2003, residents of Halifax, Nova Scotia, witnessed the devastation caused by Hurricane Juan to their beloved park, as 75% of the forest cover was destroyed. Many park users were struck with grief as they mourned the loss of such a meaningful place. Since 2005, the park has been under-going restoration.

**Purpose:** This study examines the impact of the long-term restoration of Point Pleasant Park on park user’s place attachments. This research also assesses how users’ perceived mental well-being is impacted by the change in place attachment. Additionally, it will determine if park user’s place attachments and mental well-being have been restored, given 10 years of restoration.

**Methods:** Semi-structured interviews and open-ended questionnaires were utilized to examine place attachment and mental well-being. A textual analysis of the 90 responses was conducted to determine changes to place attachment and perceived mental well-being.

**Results:** Preliminary results suggest that pre-Juan users have overcome their initial grief and have a restored, positive place attachment with the park. However, many recall memories of a ‘greener’, ‘fuller’ park, suggesting that place attachment may never reach pre-Juan levels and that mental well-being may vary as a result. Park users who have never experienced the park before Juan have positive place attachments with the park and receive mental benefits during visits.

**Conclusions:** Given a long enough restoration time-frame, place attachment and perceived mental well-being appear to be restored. Although it is unlikely to re-create pre-disaster attachments, a plan that encompasses user’s needs and beliefs will eventually establish new attachments and mental benefits.
**Oral Presentations**

**Does size really matter? Exploring the interference effects of size and orientation within a sequential grasping task**  
*Kevin LeBlanc & David Westwood*

**Background:** Previous research has suggested that the orientation of an object might be more influential in sequential tasks than size information. However, recent evidence from our lab has shown that preparing an action to the second object does not produce interference to the first action, but attending to its size for verbal judgment does. Specifically, as the size of the second object increased, the amplitude of peak grip aperture towards the first object also increased when performing the perception condition.

**Methods:** The current study was designed in order to incorporate both size and orientation within a sequential task. Participants were required to grasp a cylinder (5cm in diameter) place it on an identified target area and then either grasp or make a perceptual judgment to the second object. The second object was either 3cm or 7cm in length and was either presented on a 45-degree angle towards the left or the right.

**Purpose:** Based on the action-centered model of attention, it was predicted that both conditions would yield similar results when analyzing the interference of the size and orientation of the second object when grasping the cylinder.

**Results:** However, the results revealed that orientation information affected grip posture more so than size information in both conditions.

**Conclusions:** The implications of this research will give us a better understanding of how sequential actions are selected, planned, and executed. Furthermore, given that disorders of movement-control impairs independent functioning it is extremely beneficial to get a better handle on how movements are actually represented in the brain.

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**Drug metabolism potential of the human microbiome varies by age.**  
*Travis LeBlanc & Morgan Langille; Department of Pharmacology, Dalhousie University, Halifax, NS, Canada*

**Background:** The human microbiome is the collection of bacteria living in and on the human body. Several studies have demonstrated that the gut microbiome can alter the metabolism of commonly used medications. However, there has yet to be a broad-scope analysis to determine the presence and variance of microbial genes with drug metabolizing potential.

**Purpose:** The aim of this study is to survey the drug metabolising potential of the human microbiome. We examine what drug metabolising genes are present in these microbes, and how the abundance of these genes changes based on body site, gender, and age.

**Methods:** A subset of 50 microbial genes with the potential to metabolize drugs was manually curated from the Kyoto Encyclopedia of Genes and Genomes. These genes were annotated for two publically available gut microbiome metagenomic datasets. Relative gene abundance were compared across body site, gender, and age of the individuals.

**Results:** All 50 genes were found to be present in the human microbiome, and 46 were different in proportion within the gut compared to other body sites. Although there were no significant differences based on gender, we identified 22 genes that were significantly different based on the individual’s age that could have clinical implications for a wide array of therapeutic treatments.

**Conclusions:** The ability of the human microbiome to alter drug metabolism is diverse and variable across the human population and changes with age. Future studies will test other factors that could alter the drug metabolising potential of the gut, and incorporate this knowledge into personalized medicine applications.
Exploring the influence of oral health literacy and oral health chronic disease knowledge on older adult’s oral care behaviours.

Alison C. MacDougall, MSc(c), University of Prince Edward Island; Dr. Lori Weeks, PhD, Dalhousie University; Dr. William Montelpare, PhD, University of Prince Edward Island; Dr. Sharon Compton, PhD, University of Alberta.

Background: Unlike previous generations, baby boomers are keeping their own natural teeth as they enter into older age.

Purpose: The purpose of this mixed-methods online study was to explore the influence of oral health literacy (OHL), and oral health chronic disease knowledge (OHCDK) on oral care behaviours (OCBs).

Methods: This exploratory, Internet based mixed method study recruited a sample of 69 community dwelling men and women aged 50 to 69 years.

Results: All participants had some natural teeth and 72.46% had access to private dental insurance. The mean OHL score was 13.36 and the mean OHCDK score was 10.01. Pearson product moment correlation co-efficient procedure revealed a low but positive correlation between OHL and OHCDK scores. \[r = 0.31, n =69, p = 0.008\]. The mean dental behaviours score was 5.60. Regression analysis determined the significant predictor model for dental behaviours included: (1.46) dental insurance + (0.85) age cohort + (0.6) level of education. \((F(3) = 311.87, p = < 0.0001, R^2 = 93.5\%)\).

Qualitative analysis revealed six major themes: Relying on Dental Professionals, Only Knowing Part of the Story, Making the Connection, Living with the Consequences, Practicing and Valuing Oral Health, and Identifying Barriers to Care. Triangulation also showed that participants had adequate OHL, yet were lacking in OHCDK and reiterated the influential role that dental insurance has on OCBs.

Conclusion: Future research should focus on a larger sample sizes with equal numbers of men and women to further explore what factors influence the oral care behaviours of baby boomers.

Lessons learned from implementing a collaborative flashcard project at Dalhousie Medical School

Mark Maclean,¹ Hui, A.,¹ Lee, H-J.,¹ Taylor, A.,¹ Macleod, A.,² and Hart-Matyas, M.³ (Dalhousie University, 1 = Medical School, 2 = Faculty of Medicine – Division of Medical Education).

Background: There is a considerable amount of factual knowledge that undergraduate medical students are expected to learn throughout their training. The efficacy of using digital flashcards as a modality for learning factual knowledge is well established in the education literature, and provided the basis for the formation of the collaborative digital flashcard project at Dalhousie Medical School.

Purpose: To explore a collaborative approach to creating digital flashcards based on factual material from the undergraduate medical curriculum.

Methods: A group of 3 students have organized a collaboration among their (30) classmates to create, peer-review, and share digital flashcards. The flashcards were created using Anki, an open-source, free, digital application. They were peer-reviewed, prior to upload onto shared cloud-storage folders, which members could access.

Results: Tutorials and guidelines were created to highlight critical concepts. A number of roles were created to maintain consistency with creation, delivery, and correction of the flashcards. A shared work-load spreadsheet was used to organize, standardize, and track assignments and their status of completion. Later, during study of the flashcards, some members observed that occasionally flashcard errors escaped peer-review. A role was created to rapidly correct and disseminate these flashcards to members.

Conclusions: In an effort to improve long term retention of factual knowledge encountered in the medical curriculum, a group of students successfully established a collaborative flashcard project. There are a number of guiding principles learnt from the experience of operating the project that could be utilized by health science students and faculty members to establish similar projects at their institutions.
To be continued: Preliminary findings on the importance of intimacy in later life, as told by older long-term care residents

Mariah Malone, Dr. Brad Meisner, Dalhousie University

Background: Despite the many health-promoting and disease-preventing benefits of intimacy in later life, older adults’ sexuality is limited by a series of complex factors. For older adults in long-term care (LTC), the living environment may present an additional barrier to intimacy.

Purpose: The present study seeks to explore the perspectives of LTC residents to gain a better understanding of their intimate needs and desires. It examines the desired forms of sexual expression among residents, the barriers/facilitators to these needs and desires, and the efficacy of a life review approach for research with LTC residents.

Methods: A qualitative descriptive approach has been chosen to give voice to the experiences of 6-10 residents in one LTC facility in Halifax, NS. Data is being collected in two phases. First, life review is employed to compile a written and photo-record of residents’ life stories. This approach serves to a) establish rapport and b) situate residents’ perspectives on sexuality in the context of their personal histories. Second, semi-structured interviews are conducted with each resident. Thematic analysis is used to extract central themes from the data, producing a collective story of residents’ experiences.

Results: Preliminary findings from ongoing data collection and analysis will be discussed, demonstrating the importance of first-hand perspectives on this topic.

Conclusions: Findings may be used as the foundation for the development of more sensitive policies and practices informed by the lived experiences of those most intimately affected by these decisions.

Comparing different views of evidence in Ontario public health units: A qualitative study

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Background: In order to assess the implementation of the Ontario Public Health Standards (OPHS) and to inform the current public health renewal initiatives in Ontario, there is a need to further understand factors influencing evidence uptake within public health units. One of the key factors reported in the literature is perceptions of different healthcare practitioners and decision-makers about evidence. Because different professional groups tend to differ in educational backgrounds, value systems, and professional roles, their perceptions about evidence are likely to be distinct. However, empirical evidence on how different healthcare professionals make sense of evidence is sparse.

Purpose: This study aims to compare, and as such identify similarities and differences in, the views of evidence between public health managers and frontline staff in Ontario.

Methods: The study is designed as a secondary qualitative content analysis, and will use pre-existing data from Phase 1 of the Renewal of Public Health Systems (RePHS) research project. The data include transcripts of focus groups with managers (n=6) and with frontline staff (n=6) involved in chronic disease prevention programs at six public health units across Ontario. All transcripts will be analyzed in NVivo using an inductive approach, with emphasis on questions/content concerning “evidence”. This study will conform to the eight “big-tent” criteria’s quality and ethical standards.

Results: Findings will help understand how differences in views might impede and/or facilitate the use of evidence in public health practice and decision-making in Ontario.

Conclusion: This knowledge will inform context-specific strategies that enable public health professionals to further develop and implement evidence-based programs/services.
Oral Presentations

Workplace wellness: A Lifestyle-Behavior Approach (Online Program, Addo): Process and outcome evaluation using the RE-AIM Framework
Kaleigh Meisner, University of New Brunswick

Background: The workplace provides health promoter’s access to more than 65% of the population aged 16 years and older (Deitz, Royer, Hersch, & Leaf, 2014). Access to a large portion of the population in this setting is ideal for implementing strategies to reduce the prevalence and burden of obesity, inactivity and other unhealthy habits. In addition, the workplace has the advantage of access to employees at an age when interventions can still change their long-term health trajectory. Addo is an online platform designed to influence behavioural change by optimizing the four major influencers of human behaviour – cultural, social, individual, and environmental factors.

Purpose: To assess the process implementation of the online-application Addo as a workplace wellness initiative. To assess the impact of Addo on employee’s general health outlook and behavior outcomes.

Research Questions:
- What is the reach, efficacy, adoption, implementation and maintenance of the Addo platform?
- What short and long-term impact does completing the Addo challenge have on self-efficacy and health behaviors of individuals?

Methods: One hundred and two participants from Nova Scotia volunteered to completed individual surveys between October 2015 and February 2016. Ten qualitative interviews were conducted in November 2015. Respondents were full-time employees, working 35 hours or more between the ages of 20-69. Instruments were designed following the RE-AIM framework. A questionnaire (Health Behaviors Survey), was constructed using Google Forms and sent to participants using their e-mail address. The Health Behaviors Survey was developed with the use of the RAND-SF-36, General Self-efficacy Scale, and Nutritional Balance Scale. The analysis of the survey and informal interview results are currently in progress and will be computed using SPSS, following the RE-AIM framework.

Results: Study In Progress.

Conclusion: Aim to: (1) utilize primary care and preventative actions to target the large population of aging and sedentary employees in Nova Scotia (2) address the growing amount of workplace wellness programs and their efficacy in helping employee's create healthy behavior change to improve health or reduce/prevent health problems from developing.

We need to talk: The influence of disclosure of sexual dysfunction on sexual and relationship well-being
Kathleen Merwin, Dalhousie University & Natalie O. Rosen, PhD., Dalhousie University

Background: Disclosure (sharing personal thoughts, feelings, and information) is an essential part of relationships. General disclosures in romantic relationships and sexual disclosures (e.g., disclosing personal sexual likes and dislikes) in particular are related to higher sexual and relationship satisfaction. Sexual problems are common in romantic relationships, with research showing that 59 to 68% of adults have experienced one or more sexual concerns in the previous 18 months and 38 to 59% of adults report that their partner experienced at least one sexual concern during that time. Despite the high prevalence of sexual problems, the relational and sexual consequences of disclosing sexual problems to a romantic partner remain unknown.

Purpose: The present study examines the rate of disclosure of sexual problems, and whether disclosure is related to sexual and relationship satisfaction. It also examines why women disclose sexual problems to their partners and how this affects the relationship.

Methods: Participants (N = 200) completed online questionnaires about their sexual problem(s), and whether and why they told their romantic partner about them.

Results: We predict that disclosure (vs. non-disclosure) of sexual problems will be associated with greater relational and sexual well-being, and that goals for disclosing will moderate these associations.

Conclusions: Results may identify factors that could lead to improvements in or exacerbate difficulties in relational and sexual functioning, and highlight the positive or negative impact that goals for disclosure have on the relationship. This research may contribute to enhancing knowledge of adaptive and maladaptive communication in the many intimate relationships that encounter sexual dysfunctions.
**Baseline step counts in first year university students enrolled in the R.E.C.E.S.S. study.**

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**Background:** Health Canada states those aged 17-21 years should be completing 8000 to 13000 steps/day to meet the recommended daily Physical Activity Guidelines (CPAG). Our study objective was two fold to investigate: 1) whether first year undergraduate students met the CPAG and 2) if there was a difference between the number of steps taken by Kinesiology (K) and non-Kinesiology students (nonK). The data was from a larger study in 2014-15 describing measures associated with Recreation Exercise, Caloric Expenditure, Sitting, and Sleep (RECESS) behaviours, in full time first year students attending the University of Calgary.

**Methods:** A total of 63 students (n=39K; n=24nonK) with a mean weight of 67.5 ± 14.4kg and waist circumference of 81.0 ± 9.3cm were recruited. Biometrics were inputted into Garmin Vivofits™ and 37 students provide complete data for total steps over 8-weeks. Independent T-tests were used to analyze associations between sex, faculty, Body Mass index (BMI) and total steps.

**Results:** The average total steps for all students over 8-weeks was 718008±185771 (K 793613±140602; nonK 612160±193540). The step difference between K and nonK was significant (p=0.0025), as was the association between BMI and steps throughout the semester (p<0.0001). No difference between the steps reached in the first 4-weeks compared to the second 4-weeks of the semester occurred.

**Summary:** Both groups met 8000 steps per day over the 56 days period but only the K-group met 13000 steps per day. However previous studies by the ACSM show using a pedometer in a college population demonstrate less steps achieved with an average of only 7,700 steps per day.

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**Secondary analysis of self-rated health and health service use of female bisexual undergraduate students on Maritime campuses (Work in Progress)**

Joelle Monaghan RN, BScN, MN Student, Dalhousie University School of Nursing; Audrey Steenbeek RN, PhD, Associate Professor Dalhousie School of Nursing; Erna Snelgrove-Clarke RN, PhD, Associate Professor Dalhousie School of Nursing; Donald Langille MD, MHSc, Professor Dalhousie Department of Community Health and Epidemiology

**Background:** Given the limited research on the health of bisexual female undergraduate students, findings suggest that this population is experiencing disproportionate rates of health disparities. Among LGBQ women, bisexual women report higher rates of mental health concerns, sexually transmitted infections, and risk-taking behaviors. As well as report less protective factors, such as adequate social support.

**Purpose:** Therefore, the purpose of this research is to examine and predict bisexual female students’ health status and use of healthcare services in order to reduce inequalities in health for this population.

**Methods:** A secondary analysis of cross sectional data collected by Drs. Steenbeek and Langille during the Maritime Undergraduate Student Sexual Health Services Survey 2012 (N=10, 232) will be used to examine the health and health service use of bisexual female undergraduate students on Maritime university campuses (n=357) and answer: What are the predictors of self-rated health and use of healthcare services for bisexual female students on Maritime University campuses?

**Results:** Descriptive analysis will be used on the study population data across all variables of interest. Pearson’s chi-square tests will determine the differences in the health and health service use among female students. Two phases of logistic regressions will examine the relationships between health, health service use, and specific determinants of health among bisexual females.

**Conclusions:** It is hopeful that this research will add to the current knowledge gap on young bisexual women’s health and health service use on Maritime university campuses. As well as support the development of inclusive health promotion and illness prevention strategies on Maritime campuses.
Oral Presentations

Implementation and perceived effectiveness of the Exercise is Medicine Canada Exercise prescription resources among health care providers across Canada

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Background: The Exercise is Medicine Canada (EIMC) initiative promotes exercise counseling and prescription within health care.

Purpose: To evaluate perceptions and practices around exercise counseling in health care professionals.

Methods: Prior to and following EIMC Workshops, 143 participants from 7 provinces completed self-reflection questionnaires, (n=79 physicians; n=43 other health professionals (OHPs), including primarily nurses (32) and others; n=21 exercise professionals (EPs) including kinesiologists (16) and physiotherapists (5)).

Results: Compared to OHPs, physicians saw more patients (75.9% > 15 pts/day vs 97.6% < 15 pts/day; p<0.001) and had lower frequencies of exercise counseling (47% > 50% of sessions vs 77% >50% of sessions; p<0.001). EPs had higher confidence providing physical activity information (91±11%) compared to both physicians (50±24%; p<0.001) and OHPs (55±23%; p<0.001). Physicians experience greater difficulty including physical activity and exercise counseling into sessions (2.68±0.90, out of 5) compared to EPs (1.47±0.68; p<0.001) and OHPs (2.07±0.93; p=0.002). Most physicians (86%) provided a written prescription for exercise in <10% of appointments, and reported lack of: time (94%), exercise education in medical school (89%), resources (91%) and personal knowledge (82%) as primary barriers.

Following the workshop, the vast majority of physicians reported that the workshop increased confidence to provide information and advice (97%), assess readiness (92%), provide individualized physical activity program (97%) and make an appropriate referral (87%). 97% of physician attendees stated they viewed the workshop as valuable to their practice.

Conclusion: This evaluation underscores the value of EIMC workshops to increase capacity for physical activity counseling and exercise prescription in health care practice.

An exploratory study on a community program seeking to improve the health of inner-city youth in Halifax, Nova Scotia

Jennifer O’Reilly, (MA Health Promotion Candidate), Dalhousie University

Background: Research shows that social programs can provide youth living in low-income communities with access to many resources and/or opportunities such as nutritious food, employment support, and positive social relationships. There is relatively little research, however, focusing on how these social programs influence multiple dimensions of youth’s health (i.e. physical, social, emotional, mental, and spiritual). Social programs targeting youth focus more on the physical, social, and emotional dimensions of health and less on the spiritual and mental dimensions (i.e. the thinking part of health), and therefore more research is needed.

Purpose: This research explored one community-based program (Hope Blooms) that is aimed at inner-city youth in Halifax, Nova Scotia. The key purpose was to understand, from the parents’ perspectives, how they think the Hope Blooms program and its multiple components influenced their child’s health. Health was widely defined to include physical, social, mental, emotional, and spiritual dimensions of health.

Methods: This is a qualitative study that involved face-to-face, semi-structured interviews with nine parents who, in 2015, had children ages 10 to 17 participating in the Hope Blooms program. Grounded theory techniques for data analysis have been utilized, such as memo writing and constant comparison.

Results: Three key program components positively influenced the youths’ health and these included: the Hope Blooms community garden, the social enterprise (youth-led salad dressing business), and community-based activities and events that the youth participate in.

Theme one showed that the Hope Blooms program provides the youth with access to healthy food and many opportunities (e.g. participation in physical activities). Theme two demonstrated the changes (e.g. increased confidence) that the youth experienced because of their participation in the program.

Conclusion: Social programs that have multiple components may be more likely to influence multiple dimensions of youth’s health. This research can be used to inform other social programs that aim to improve the health of youth in Canada and beyond.
Oral Presentations

**Sexual safety on campus: An applied health research investigation**  
*Charles Odenigbo; Supervisor - Dr. Elizabeth McGibbon; Second reader - Dr. Patti Hansen-Ketchum  
St. Francis Xavier University*

**Background:** Gender-based violence is perhaps the most widespread and socially tolerated of human rights violations. University women are at greatest risk of sexual violence victimization when compared to other populations, including women of similar ages in other settings, women of other age groups, and men. The incidence of sexual assault in Canadian universities is 15-25% over the four-year university period. It is highest during the first two years.

**Purpose:** To determine the prevalence of sexualized violence in a rural university setting, as well as students’ understanding of sexualized violence.

**Methods:** A broad cross-section of collaborators were consulted in all study phases (e.g., student, academic administration; health and counseling services). A 56-item questionnaire was adapted from the Massachusetts Institute of Technology (MIT) *Community Attitudes on Sexual Assault* survey. The survey was circulated via Fluidsurvey © to all enrolled students. Question formats included Likert scale and qualitative open-ended questions regarding strategies to support a solution-focused approach to decrease sexualized violence. A critical theoretical approach guided the study. Critical theory examines the relationships of power and social structures that produce inequalities among members of a society. Quantitative data will be analyzed using the Statistical Package for the Social Sciences (SPSS) (e.g. cross tabs, frequency distributions, correlations). Qualitative data will be analyzed according to Sandelowski’s qualitative descriptive framework. Ethical approval was granted by the University Research Ethics Board.

**Results:** Data collection is ongoing. Preliminary results will be presented.

**Conclusions:** Findings will aid in addressing sexualized violence on Canadian university campuses.

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**Low-income working immigrant families in Quebec: Exploring their challenges to well-being**  
*Rebecca S. Pitt, BSc(N), Jessica Sherman, MSc(A), Mary Ellen Macdonald, PhD; McGill University*

**Background:** In Canada, 39% of one-earner households live under the low-income cut-off, often in non-full-time, non-permanent work linked to poor health outcomes. Immigrants are more likely to be in working poverty than their Canadian-born counterparts.

**Purpose:** To identify low-income working immigrant families’ health challenges and understand their barriers and facilitators to navigating those challenges.

**Methods:** We conducted a focused ethnography in a food bank in Montreal, Quebec. Using purposeful sampling, we recruited participants who had at least one employed family member and one live-in child. Sensitizing concepts included social determinants of health (SDH) and family strengths. Participant observation, focus groups, and in-depth interviews constituted primary means of data collection. Thematic and contextual analyses were conducted iteratively.

**Results:** We recruited 25 participants, including 22 clients (15 women/7 men; ≤5 children/family) and 3 staff. All clients were immigrants, ranging from 2 months to 23 years in Canada. Challenges included insufficient finances, employment conditions, hurdles in professional equivalency, isolation, children’s acculturation, health care access, and climate. Barriers and facilitators to navigating challenges centered on parents’ sense of challenges being finite, control over discrete dimensions of life, and hope of children’s future success. Families who incorporated these perceptions into their narratives seemed to describe challenges as navigable. Importantly, the SDH model did not anticipate the importance of immigration factors in defining challenges.

**Conclusion:** In order to help low-income working immigrant families face diverse challenges to well-being, community workers and policy makers must consider the specific challenges of immigration and the importance of individual families’ outlooks as they navigate them.
Oral Presentations

Outdoor spaces and their impact on health and well-being
Brian Portner & Asa Rahimi, Simon Fraser University (SFU)

**Background:** SFU’s vision for a Healthy Campus Community is one of the first of its kind across the country. The vision has been divided into six systemic areas for action, each of which contributes to overall health and well-being. One of these areas is Physical Spaces, or the overall physical campus environment in which campus members learn, study and interact. **Purpose:** Our hypothesis was that students would be keen on using outdoor spaces for studying, eating, and lounging but that the spaces would be seen as uninviting and unusable. The objective of this special project was to collect and summarize student perspectives on the current state of outdoor spaces at SFU to assess student interest in using the spaces and what design changes would encourage their use. Research shows that elements such as sufficient lighting and natural materials positively influence cognitive performance; therefore, it is imperative that they be incorporated into such spaces. **Methods:** The researchers collected student feedback via a qualitative survey that they created and sent to both of their networks. Thematic analysis was performed on results and a summary report was created outlining trends in the feedback. **Results and Conclusions:** Trends in responses were closely linked to what existing research says on the need for a connection with nature in improving overall well-being. Students expressed a need for flexible seating options, proper surfaces, heating, lighting and colour. The data collected through the survey is being used internally to inform the (outdoor) space-related renovation projects across campus in which Health Promotion is formally involved.

In their words: The mental health experiences of Nova Scotians living with obesity
Kathryn E. Rand; Sara F.L. Kirk, Dalhousie University

**Background:** Quantitative research has established links between mental health issues and obesity. However, there is a gap in research exploring these links from a qualitative perspective. It is important to explore the mental health impact of weight status on individuals seeking support for obesity, in order to create effective mental illness prevention strategies. **Purpose:** The purpose of this study was to explore the mental health experiences of those living with obesity and what supports they felt were needed to promote positive mental health. **Methods:** Using data collected as part of a study on weight management (Kirk et al., 2014), we conducted a thematic data analysis using the three mental health domains: emotional, psychological, and social well-being. We further analyzed the data across the social ecological model (SEM) to categorize themes within different environments. **Results:** We identified key mental health themes across the individual, interpersonal, organizational, and community level of participants’ environments. The themes were food as a coping mechanism, blame and shame in relationships, condemnation and lack of psychological care in the health care system, and the social stigma of obesity. Participants indicated that positive mental health is promoted in a judgement-free and understanding health care environment. An overarching theme of weight bias was the main source of negative interactions, which further shaped the emerged themes. **Conclusions:** The identification of the key themes and their perceived negative impact on mental health suggests the need for further research and policy development to address weight bias and promote positive mental health for individuals living with obesity.
Oral Presentations

Intimate partner violence through a social media lens.
Rempel, E., Donelle, L., Hall, J., & Rodger, S.; Western University

Background: Intimate partner violence (IPV) is a significant public health issue. Social media interventions available to women experiencing IPV exist but there is little research evidence supporting their access and use.
Purpose: Therefore, this research explored and reviewed IPV-related online social media network sites to understand the nature of the information contained within these online networks. This research was framed using the reclaiming self framework developed by Merritt-Gray and Wuest (1995) that looks at leaving an abusive relationship as a process of four stages of: counteracting abuse, breaking free, not going back and moving on.
Methods: Search terms of ‘violence against women’ and ‘intimate partner violence’ were used to search Facebook groups, Twitter hashtags and Apple iPhone apps. Publically available, English-language Facebook groups and Apple iPhone apps were included. Twitter data was collected using the Excel plugin NodeXL®, all data from those that tweeted the hashtag #VAW (violence against women) was included.
Results: Thirty-six Facebook groups, 1,399 twitter hashtags and 18 apps met the inclusion criteria and were analyzed. Four apps focused on counteracting abuse and six focused on breaking free. The Facebook groups and twitter hashtags analyzed in this research served to generate awareness and dissemination of information regarding VAW to the public.
Conclusion: This type of social awareness is promising given the prevalence of women who are in abusive relationships and the blame they often endure. There was a lack of online information to support women after the act of leaving an abusive relationship (the not going back and moving on stages).

How helpful are the pamphlets? Perspectives of parents and guardians raising children with autism
Hailey Rheault; Undergraduate student, Sociology, St. Thomas University

Background: Medical perspectives describe autism as a ‘problematic’ disorder which impairs individuals’ social capabilities. While autism diagnoses have increased, the cause of autism remains unclear, there is no cure for autism, and there is no universal intervention tool for assisting autistic individuals. These ambiguities create a heavy set of demands for parents learning about their child’s autism and accessing services.
Purpose: This small research study sought to answer the question: How does information provided by Autism NB resonate with parents’ experiences raising autistic children? My project was the first sociological study to analyze how parents negotiate with autism information. Inspired by the theoretical work of Michael Foucault, I examined parents’ understanding of autism in light of professional practices and lay discourses.
Methods: I used a qualitative, exploratory case study design to frame this project. In New Brunswick, 6 parents of autistic children took part in semi-structured interviews. Thematic coding was used to organize and analyse the data.
Results: Most parents understand their child’s autism by a dominant psychological model which describes autism as a ‘behavioural problem’ that needs to be treated through intensive therapeutic programming. A small number of parents disagreed with this perspective. Those who disagreed had more difficulty accessing support services.
Conclusions: The information provided to parents of children with autism was used to create an ideal way of being autistic and parenting an autistic child. For some, this ideal was enabling as it provided guidance. For others, this ideal served to increase feelings of failing at being a good parent.
**Improving mental health care in New Brunswick**  
Melanie Richard, University of New Brunswick

**Background:** There is often a large gap of time between initial assessment and follow up visit for many mental health patients. A need has been identified to bridge this gap thus decreasing the number of emergency room visits made by the mental health patient while waiting for follow up care.

**Purpose:** The purpose of this paper is to explore if the implementation of nurse practitioner led clinics will decrease gaps identified in mental health care in New Brunswick. Will these clinics improve overall care for mental health patients and decrease the number of emergency room visits by this population?

**Methods:** In a literature search articles were identified and retrieved from PubMed and CINAHL using the terms “mental health” and “nurse practitioner”. 34 Articles were reviewed and seven were chosen to support this paper.

**Results:** There has been little Canadian research to date to support this idea, as nurse practitioner led clinics are still in their infancy in some provinces and are not operational in some provinces at all. International data from Australia and the United states is positive.

**Conclusions:** It is clear from international research that nurse practitioner led clinics can be an optimal solution to the identified gap in mental health care. In order to move forward in New Brunswick, further support from Canadian data is needed as well as the initiation of nurse practitioner led clinics. This is a formidable task, but the time is ripe for change.

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**Project PLaY (physical literacy in the early years)**  
Ms. Lindsay Roach & Dr. Melanie Keats, Dalhousie University

**Background:** Adequate physical activity (PA) is associated with improved overall health, yet few behavioural changes are being made. While all ages are affected by physical inactivity, preschool children were long believed to engage in sufficient PA through an inherent desire to explore. Unfortunately, objectively measured data found otherwise. Media-based campaigns have only proven effective at increasing awareness on physical inactivity, and a more aggressive approach is warranted, leading us to the concept of physical literacy (PL). In the preschool years, PL depends primarily on the development of fundamental movement skills (FMS), which are associated with increased PA participation. Research suggests that play alone is no longer able to foster FMS development in preschool children and structured interventions are ultimately required.

**Purpose:** The current pilot study will observe the effectiveness and relative enjoyment of two different FMS interventions compared to a free-play control.

**Methods:** Three daycare centers (ages 3-5) will be randomly allocated to a skill-station, a structured play or a control group. Interventions will consist of two 45-minute sessions per week over an 8-week period. Pre- and post-intervention movement ability will be assessed using the 2nd edition of the Test of Gross Motor Development and enjoyment will be assessed using a 7-point likert scale, developed specifically for the younger population.

**Results:** It is hypothesized that both interventions will provide positive improvements in FMS abilities, yet the play-based intervention will deliver increased participant enjoyment.

**Conclusion:** The current study aims to compare the effectiveness of different FMS interventions and ultimately revalue the importance of play to children’s motor development.
Case study: Understanding student engagement in program evaluation of an interdisciplinary global social development project
Alysha Savji-Cameron, RN, BScN, Ryerson University; Dr. Margareth Zanchetta, RN, PhD, Ryerson University

Background: A social development project used empowerment training to help facilitate access for local children and youth to socially mobilize and increase political action in marginalized communities in the Dominican Republic. Research conducted investigated how changing laws of a society build relations between youth and community leaders and influence the political system from a macro perspective. Mainly guided by the discipline of social work, nursing contributed a unique role to look at health literacy, gender, and health perspectives of this global health population. A Master of Nursing student engaged and participated in program evaluation research by creating a survey questionnaire to evaluate impact of the project in its educational scope to promote political empowerment of youth in the Dominican Republic.

Purpose: To examine the link between research activity and contribution of nursing knowledge within the process of student engagement. Additionally, to explore issues of leadership in an international social development project.

Methods: Area of impact addresses nursing knowledge translation by in-person research and implementation of an evaluation survey approximately one year after empowerment training. The program evaluation was developed using an empowerment evaluation framework.

Results: Preliminary analysis indicates an understanding of how research activities inform other Registered Nurses engaged in global health activities to address project evaluation in an impact/empowerment setting from a critical social theory perspective.

Conclusion: This project offers a first-hand view of collaboration projects between disciplines positioned within the same university. Results aim to give a better understanding of interdisciplinary collaboration amongst Schools of Nursing and other faculties within Canadian Universities.

Impact of community-academic partnerships on nursing students and the community: An integrative review
Angela Schneider, Laurel Stephens, Sonia Semenic, McGill University

Background Community-academic partnerships (CAPs) are increasingly being developed in nursing education to enhance the number of clinical placement sites, to develop community nursing knowledge and skills, and to “give back” to the community; however, literature to date is largely descriptive with limited empirical data on key outcomes of CAPs.

Purpose: To synthesize the current literature on nursing CAPs in order to identify their impacts at the individual, community, and organizational level.

Methods: Whittemore’s updated methodology for the Integrative review was used to conduct a systematic literature search from January 2005 until November 2015 using CINAHL, Medline, EMBASE, and Global Health electronic databases.

Results: Ten studies were included, primarily from the United States. Twelve themes were generated for community and academic outcomes. Service users gained greater access to health information, became more engaged in their health, and expressed satisfaction with students’ services. CAPs improved community health outcomes and provided greater access to care. They expanded local health outreach and enhanced quality of care. Students developed an awareness of population needs, and an appreciation for interprofessional collaboration. Students felt they made a difference, they learned experientially, and expressed satisfaction with their community placement.

Conclusions: Few studies have formally examined the impact of CAPs on community and academic stakeholders. Evaluation methods are varied and the quality of existing studies is low. CAPs may have numerous positive outcomes; however, an evaluation tool needs to be developed, and further research done to formally evaluate CAPs and validate the themes identified in the study.
Breastfeeding supports and resources for mothers of preterm infants in Canadian neonatal intensive care units: Mothers' perspectives

Scime, N. V. & Burke, S. M.

1 Faculty of Health Sciences, Western University, London, Ontario

Background: The health benefits of breastfeeding for preterm infants and their mothers are well established. Despite this, breastfeeding rates among this dyad are consistently lower than that of mothers with full-term infants. Postnatal support and education as well as breastfeeding-friendly neonatal intensive care unit (NICU) environments have been identified as promising interventions for improving breastfeeding outcomes in this population. Additionally, understanding mothers’ experiences and perspectives regarding the provision and effectiveness of such supports is critical.

Purpose: The purpose of this study is to understand, via the use of online surveys, mothers’ perceptions and experiences regarding the availability, use, and effectiveness of various breastfeeding-related supports and resources during their preterm infant’s stay in a Canadian NICU.

Methods: A retrospective, mixed-methods, web-based survey will be used to gather information from a large sample of mothers who have delivered a preterm infant (<37 weeks gestation) in the previous five years at a Canadian tertiary care NICU. The online survey will ask participants to rate and describe their perceptions and experiences with regard to breastfeeding resources available in the NICU. Participants will be recruited via social media forums, online support groups, and word-of-mouth.

Results: The results from this study will provide an overview of mothers' perceptions regarding breastfeeding supports and resources in Canadian tertiary care NICUs.

Conclusion: Findings will be circulated among participating hospitals and will serve as a potential evidence base through which health professionals can review the strengths and weaknesses of the breastfeeding resources in their NICU.

Exploring age stereotypes and physical activity among older athletes in Nova Scotia: A qualitative study

MA candidate Ariane Seguin & Dr. Brad Meisner, Dalhousie University

Background: Nova Scotia’s population is aging, this is important as old age (OA) is associated with a rise in chronic disease. Physical activity (PA) in OA has many positive health implications and can act as a modifiable and prevention factor for chronic disease. Although the majority of OA know the benefits of PA, many remain inactive. Age stereotypes (AS) are a barrier to PA in OA. AS that depict decline in physical and functional health hinder the possibility of PA as an age-appropriate option for health promotion. However, OA athletes are different and continue to engage in PA despite living in a youth-centric PA context.

Purpose: This study will explore positive aspects of aging that are essential to support psychosocial resilience and promote PA in OA. This study will explore the meaning OA athletes attribute to the aging process, the factors that shape their PA behaviours, and the barriers and facilitators for PA.

Methods: This exploratory qualitative research will follow a qualitative description approach. Data collected from semi-structured interviews with the stakeholders of a provincial wide organization that encourages PA in OA will be transcribed and coded following thematic analysis.

Results: It is expected that this project will identify and describe PA-possibilities that can be achieved in OA. It is expected that factors that facilitate the resistance of AS in PA and aging context will be discussed.

Conclusions: This study will contribute to the development of effective PA tools, programs, policies, and a socio-cultural shift that can promote healthy aging from the individual-to-public level.
Oral Presentations

Implementation of The Pediatric Oncology Exercise Manual (POEM): The effects of an exercise guide on healthcare professionals’ attitude towards exercise
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Background: Despite increasing evidence suggesting that physical activity (PA) is safe, feasible and provides various health benefits for childhood cancer patients and survivors (CCP&S), PA levels of these individuals have been found to be less than their healthy peers. It is believed that an overly cautious approach to PA with CCP&S is a contributing factor, and that an increase in the awareness of PA benefits and resources among healthcare professionals could help increase PA levels. The Pediatric Oncology Exercise Manual (POEM) has been created and details the benefits of PA for CCP&S, as well as instructions on discussing and counseling PA with this population.

Purpose: This qualitative study aimed to explore the impact of a POEM educational seminar on the attitudes towards and perceived level of knowledge of PA among healthcare professionals in the field of pediatric oncology.

Methodology: Six physicians, 21 nurses, 1 physiotherapist, 1 Childlife specialist, 1 nurse practitioner, and 1 clinical educator attended the POEM seminar and completed baseline and post-seminar surveys.

Results: The results suggest that participants believed that they were more knowledgeable about and more prepared to discuss/counsel PA for CCP&S following the POEM seminar. Furthermore, a greater number of participants reported that they would be inclined to discuss, counsel and/or refer CCP&S to engage in PA after the POEM seminar.

Conclusions: Overall, it appears that POEM educational seminar was effective at increasing PA knowledge among health care professionals. This could lead to a greater effort to recommend PA for CCP&S and thus help to increase PA levels within the pediatric cancer population.

Impact of parent targeted eHealth utilization related to neonatal care during hospitalization and post-discharge on parent and infant health outcomes: A narrative systematic review
Sheren Anwar Siani BSc (BScN candidate)¹, Justine Dol MSc², Marsha Campbell-Yeo PhD NNP-BC RN¹,²,³,⁴
¹School of Nursing, Dalhousie University; ²Centre for Pediatric Pain Research, IWK Health Centre; ³Department of Pediatrics, IWK Health Centre; ⁴Maternal Newborn Program, IWK Health Centre

Background: Improved communication, education, and parental involvement in infant care have been demonstrated to enhance parental well-being and neonatal health outcomes. eHealth defined as the integration of information and communications technology in health care delivery, has the potential to increase parental presence in the neonatal intensive care unit (NICU).

Purpose: To understand if eHealth utilization to support families of high-risk newborn infants in the NICU and/or post-discharge affects health outcomes of infants and their families.

Methods: We systematically searched PubMed, CINAHL, and EMBASE from 1980 to October 2015 using key terms for neonatal, parents, eHealth, and patient education. Criteria of peer-reviewed empirical studies published in English, targeting parents of NICU infants regardless of diagnosis, and eHealth utilization during NICU stay or post-discharge yielded 2,218 studies. Extracted data were synthesized using a narrative approach.

Results: Ten included studies were variable in design: 2 randomized controlled trials, 2 qualitative, 2 observational, and 4 questionnaire-based studies. Five themes emerged: usability and feasibility, parental perceived benefits, infant’s hospital length of stay, knowledge uptake, and predictors of variations in use.

Conclusions: Limited rigour was found among studies. Of those included, eHealth utilization is desired by parents and appears to promote positive change in parental experience in NICU. Actual and perceived benefits of eHealth for parents included easy usability, confidence in infant care, satisfaction and knowledge uptake. Decreased length of stay was the only neonatal outcome reported. Further studies are recommended to investigate the influence of eHealth on parental health-seeking behaviours and on direct neonatal health outcomes.
**Oral Presentations**

**How many steps do kids walk when in enrolled in a summer camp?**

Louise Smith\(^1,2\), Benji Smith\(^1,2\), Michael Christie\(^2\), Logan Jones\(^1\), Patricia K. Doyle-Baker\(^2,3\)

\(^1\)Active Living, \(^2\)Faculty of Kinesiology, and \(^3\)Faculty of Environmental Design, University of Calgary, Alberta.

**Background:** The Heart and Stroke walk about website states children (8-10 years) should reach 12,000-16,000 and youth 11,000-12,000 steps to meet the recommended daily physical activity guidelines.

**Purpose:** to investigate whether children and youth were meeting the Canadian Physical Activity Guidelines through step counts in the Active Living Summer Camps at the University of Calgary, Alberta.

**Methods:** A variety of camps (10) were selected (educational, sport, and arts focused) with a one-week duration and 195 campers were invited to participate (45.6% female). Measured biometrics were inputted into Garmin Vivofits™ (n=188, mean: age 10.75 ± 0.54yrs.; Ht. 145.97 ± 1.93cm; Wt. 38.27 ± 3.15kg and stride length 1.6 ± 0.05m.). Instructors at the start and end of each day recorded total steps taken in-camp and out-of-camp resulting in data over a 24 hour period.

**Results:** Average total steps (24hr) in camps with four days of data were 16,793 ± 5,407; in-camp 10,377 ± 3,282 steps resulted in 6.95 ± 2.58km walked, for out-of-camp hours steps totaled 6,694 ± 3,084. Average total steps (24hr) in camps with three days of data were 15,176 ± 4,721; in-camp 11,442 ± 4,090 steps resulted in 7.06 ± 2.68km walked, for out-of-camp steps totaled 4,738 ± 2,138.

**Conclusion:** The Active Living camps provided a positive venue for physical activity while learning other skills. The campers meet the daily physical activity guidelines over a 24hrs period however they were not quite meeting the guidelines during in-camp hours. An interesting outcome was that although the non-sport camps had less steps in-camp, they had more out-of-camp steps.

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**A systematic review about pediatric pain information shared over Twitter, Facebook, and Instagram**

Michelle E Tougas, Christine T Chambers, Penny Corkum, Anatoliy Gruzd, Julie Robillard, Vivian Howard, Andrea Kampen

**Background:** Social media facilitates information exchange and is often used for communication on health topics. Despite its increasing use, little is known about the type of information about child pain being shared over social media. There are no existing recommendations for systematically searching and analysing social media.

**Purpose:** 1) Adapt systematic review methodology to explore pediatric pain social media interaction; 2) identify and categorize main themes related to pediatric pain, and 3) describe user interactions about pediatric pain across social media platforms.

**Methods:** Twitter, Facebook, and Instagram will be searched for posts about pediatric pain. The final search strategy will be conducted prospectively over two-weeks. Post themes will be categorized. Category frequencies will be analyzed and compared across platforms. Netlytic, a social listening program, will identify themes, keywords, and social networks.

**Results:** A four-day pilot test retrieved 4,263 Twitter posts. To assess the accuracy of the search strategy, 900 of the retrieved posts were randomly selected and screened. From the screened posts, 323 (36%) of the posts were identified for inclusion. The search strategy was determined to be accurate for identifying posts related to pediatric pain. The presentation will report results from the full search strategy, including identified categories, category frequency, and network communications.

**Conclusions:** This research will to illustrate translating systematic review methodology to searching social media, guide understanding of how information about pediatric pain is being communicated, and highlight how social media can be used for improving communication and sharing of information about pediatric pain over social media.
**Exploring gender variant youths’ perceptions and experiences of sexual health education in Nova Scotia**

**Emma Van Rooyen, Dalhousie University**

**Background:** The sexual health (SH) needs of gender variant (gender identity different from societal norms) youth are not specifically addressed by Nova Scotia’s (NS) public school health curriculum. To supplement public school curricula, gender variant (GV) youth access SH information from alternate sources.

**Purpose:** The proposed study will examine GV youths’ perceptions of the SH education taught in NS schools, investigate how GV students access relevant SH education both inside and outside the classroom, and explore possible approaches to meeting the SH education needs of GV youth.

**Methods:** Semi-structured interviews will be conducted with GV youth, ages 16 to 24. Considering population size and research time constraints, interviews will be conducted with 10 participants. To represent urban and rural perspectives, interviews will be distributed between the city of Halifax, NS and the village of New Minas, NS. Data will be analyzed thematically.

**Expected Results:** It is expected that GV youth will report that the SH education they received in NS public schools is insufficient to meet their SH needs. It is also anticipated that the results will provide an overview of the ways GV youth access SH information relevant to their needs, and will point to recommendations for educators and policy makers.

**Conclusions:** Including SH information relevant to GV youth in the NS public school health curriculum may improve sexual health outcomes of GV youth in Nova Scotia. Representation of GV people in the health curriculum may also increase GV youths’ sense of belonging in their school.

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**Giardia and Cryptosporidium isolates from oysters: A potential threat to human health**

**Katie VanLeeuwen¹, Jessica E. Willis¹, J T. McClure² & Spencer J. Greenwood¹**

¹Department of Biomedical Sciences, ²Department of Health Management, Atlantic Veterinary College, University of Prince Edward Island

**Background:** Cryptosporidium and Giardia are protozoan parasites able to colonize mammalian digestive tracts and cause gastroenteritis. Species can be host-specific or have a wide range of hosts. Fecal-oral transmission occurs as infective oocysts and cysts are ingested through contact with a host mammal or with contaminated food or water. The Charlottetown Harbour has contamination risk from agricultural run-off and sewage overflow. Oysters in contaminated water have the potential to trap oocysts and cysts and transmit them to human consumers.

**Purpose:** The research objective was to confirm the presence of Cryptosporidium and Giardia species of human health concern in oysters from the Charlottetown Harbour and to use genetic source-tracking to compare these organisms to potential origins of contamination.

**Methods:** Oysters (n=279) were collected from 10 harbour locations after rain events, and an immunofluorescence assay (IFA) screened for samples containing oocysts or cysts. Polymerase Chain Reaction (PCR) amplified genetic markers for Cryptosporidium and Giardia.

**Results:** From 75 and 43 IFA-positive samples for Cryptosporidium and Giardia, 17 and 2 samples were PCR-positive, respectively. All PCR positives were found at locations close to sewage outflow points.

**Conclusions:** Further progress will involve sequencing of the genetic markers to determine the exact species present, and help confirm the source of contamination, which would be beneficial for efforts to avoid future spread of Cryptosporidium and Giardia. Since shellfishery closures are only based on bacterial testing and not protozoa, such findings could lead to recommendations that immunocompromised individuals avoid consuming shellfish immediately after closures in case oocysts or cysts are still present.
**Oral Presentations**

**Breastfeeding experiences in Nova Scotia: The role of health professionals in supporting mothers facing food insecurity.**

Madeleine Waddington, Mount Saint Vincent University

**Background:** Mothers with lower incomes and less education are less likely to start breastfeeding (BF) (1). These same groups tend to be at risk for food insecurity (FI) (2) and increased health disparities throughout the lifespan (3).

**Purpose:** This research aims to explore the everyday experience of mothers facing FI in making infant feeding decisions, particularly in relation to health professional (HP) support.

**Methods:** In-depth interviews were conducted with 5 mothers from rural Nova Scotia, who recently breastfed (or tried to breastfeed) and had experienced FI, as classified by the Household Food Security Survey Module. Interviews were guided using a critical health literacy perspective and focused on HP BF support and how their experience of FI influenced their BF decisions.

**Preliminary Results:** Most mothers had positive experiences with HPs and felt their support was important to achieving success with BF. Perceptions of HPs as experts may influence mothers’ decisions around infant feeding, however discourses around “breast is best” can contribute to feelings of shame and guilt when BF is unsuccessful. Although almost all participants mentioned cost savings as a key motivation for BF, some described a lack of nutritious food for themselves as a significant BF barrier. Food supports were described as particularly important in helping to alleviate stress around their own food intake and how this affects their baby while BF.

**Conclusions:** HPs can play an important role in supporting BF and enabling mothers to exercise autonomy in their infant feeding decisions. However, food insecure mothers may require unique supports in order to successfully BF.

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**Feasibility and effectiveness of implementing spatial neglect after right hemisphere stroke: A clinical trial**

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**Background:** Spatial neglect is a common attention disorder after right hemisphere stroke and is associated with decreased independence and quality of life. Despite its high prevalence in the stroke population, there is currently no standard of care for the treatment of neglect. Prism adaptation (PA) is a promising rehabilitation technique, however incorporation into clinical care has been limited likely due to the lack of standardized procedures.

**Purpose:** We have developed a computerized PA technique designed to better engage patients and assist clinicians. In this study we aim to evaluate the feasibility and effectiveness of the computerized PA procedure in a typical health care setting.

**Proposed Methods:** Seventy stroke inpatients will be randomly assigned to either the computerized PA procedure or an active control. Patients will complete 10 sessions of their assigned task over the course of two weeks, as well as baseline, post-treatment, and follow-up assessments.

**Hypothesized Results:** We hypothesize that those patients who complete the PA technique will show a greater decrease in neglect severity compared to those in the control condition. Moreover, that those patients who complete the treatment will have better functional outcomes at discharge.

**Conclusion:** We aim to develop a sustainable procedure for clinicians that would increase patient compliance and intensity, while making treatment more enjoyable. A feasible and effective rehabilitation procedure for neglect would have substantial benefits for both patients and our health care system. Patients would experience faster recovery, decreased length of inpatient stay, and increased independence in daily living. These benefits translate into decreased costs for our health care system.
Oral Presentations

Atlantic Canadian high school students and alcohol-related harms: Are there differences across sex, sexual orientation and psychosocial indicators?
Wilson MN, Langille D, Asbridge M, Woolcott C.
Dalhousie University, Halifax, NS.

Background: According to the 2004 Canadian Addiction Survey, over one fifth of drinkers aged 15-24 years experienced at least one alcohol-related harm over the past year. In 2011, Duryea & Frantz found that among college students, the odds of experiencing alcohol-related harms varied by sex and sexual orientation, with bisexual students at highest risk. This study did not control for several psychosocial indicators that are associated with both sexual orientation and alcohol use. These associations have not yet been studied in Canadian high school students.

Purpose: We will fill these gaps in the literature by using data from Atlantic Canadian high school students to determine: i) whether sex and/or sexual orientation are associated with alcohol-related harms, and ii) whether depression, anxiety, school connectedness and parental connectedness alter this relationship.

Methods: We will use data from the 2012 Atlantic Student Drug Use Survey, which measured high school students’ past-year experiences with ten alcohol-related harms. Using heterosexual orientation as the referent category, we will employ negative binomial regression to determine the association between the overall count of alcohol-related harms and sexual orientation, and logistic regression to more closely examine this relationship for each of the five most prevalent harms (e.g. self-injury). All models will be stratified on sex and adjusted for psychosocial indicators.

Anticipated Results: We expect results similar to Duryea & Frantz. We hypothesize that anxiety and depression will strengthen associations, and that high school and parental connectedness will diminish them.

Conclusions: Study findings may be used to inform alcohol harm-reduction programs in Canadian high schools.

Poster Presentations

An interprofessional near peer anatomy teaching experience between nursing and medical students
Patricia Alfaro1, Jonathan Hudon1, Sandie Larouche1, Joel Geoffroy PJC 1,2
1Division of Anatomical Sciences, Department of Anatomy and Cell Biology, 2Centre for Medical Education, Faculty of Medicine,
Ingram School of Nursing, McGill University, Montreal, Quebec, H3A 0C7, Canada

Exploring mindfulness in relation to alcohol and cannabis use
Jessica Barrington, Dr. Karen Brebner, Dr. Angela D. Weaver
St. Francis Xavier University

The benefits of human touch for infants: A systematic review of the literature
Britney Benoit, MScN RN PhD(c)1,2; Katelynn Boerner, BSc PhD(c)3,4; Christine Chambers, PhD RPsych3,4; Marsha Campbell-Yeo, PhD NNP-BC RN 1,2,4,5
1School of Nursing, Dalhousie University; 2Centre for Pediatric Pain Research, IWK Health Centre; 3Department of Psychology and Neuroscience, Dalhousie University; 4Department of Pediatrics, Dalhousie University; 5Women and Newborn Program, IWK Health Centre

Participants’ perceptions of the use of parent-enacted deception in pediatric research
Katelynn E. Boerner; Department of Psychology & Neuroscience, Dalhousie University; Centre for Pediatric Pain Research, IWK Health Centre; Christine T. Chambers; Department of Pediatrics and Psychology & Neuroscience, Dalhousie University; Centre for Pediatric Pain Research, IWK Health Centre; Melanie Noel; Department of Psychology, University of Calgary; Alberta Children’s Hospital Research Institute

Evidence-informed practice-related knowledge, attitudes and practices (KAP2): Describing nursing, pharmacy, occupational therapy, and medicine
Leah Carrier1, BA, Erna Snelgrove-Clarke1, RN, PhD, Krista Ritchie2, PhD, Ron George3, MD, Andrea Murphy4, BscPharm, PharmD, Joan Versnel5, PhD, OT, Marie Matte, PhD, Scott MacPhee1, BSc, BScN, RN, Scott Thieu1, MSc, OT, Matthew Ta3, BSc; Dalhousie University

Think before you compete: Investigating the relationship between female intrasexual competition and mating intelligence
Brittany Cormier and Maryanne Fisher, Saint Mary’s University

Can a 3-day administration of L-Arginine improve vascular health and exercise-mediated blood flow in smokers?
Jalisa den Hartog and Susan Robinson, Dalhousie University, Nova Scotia, Canada
Posters

Poster Presentations

A two-year evaluation of the reach and impact of a YouTube video about needle pain management for parents
Justine Dol1, Christine T. Chambers1,2,4; Marsha Campbell-Yeo1,4; Anna Taddio5; Jennifer Stinson6, Scott Halperin1,4; Jennifer A. Parker7; Kathryn A. Birnie1,4; Line Caes8
Departments of Pediatrics1, Psychology2, & Nursing3, Dalhousie University; IWK Health Centre4; Leslie Dan Faculty of Pharmacy, University of Toronto5; Hospital for Sick Children6;

Parent and teacher understanding of the physical health and wellbeing domain on the Early Development Instrument: Reasons for lower scores in Nova Scotia children
Sarah B. Dunphy, Dalhousie University

Music lessons: Exploring the role and meaning of music among community-dwelling older adults with dementia
Melanie Elliott, MA Candidate, Brock University & Paula Gardner, PhD, Brock University

Influence of frailty on transporters involved in enterohepatic bile acid circulation
Tiandai Gao and Ryan M. Pelis
Department of Pharmacology, Dalhousie University, Halifax, NS

Butyrylcholinesterase activity in the anterior olfactory nucleus in neurodegenerative diseases
Hayam Hamodat, Meghan Cash, Dr. Sultan Darvesh (Dalhousie University)

Offspring of parents with chronic pain: A meta-ethnography of qualitative studies
Kristen S. Higgins1,2, Kathryn A. Birnie1,2, Christine T. Chambers1,2, Anna C. Wilson3, Line Caes4, Alexander J. Clark1,5, Mary Lynch1,3, Jennifer Stinson6,7, Marsha Campbell-Yeo1,2
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6The Hospital for Sick Children, 7University of Toronto

The prevalence of health care service use for mental disorders in Nova Scotia children aged 0 to 18 years, 1997 to 2015
Amos Hundert, MSc Student1,2; Leslie Anne Campbell, PhD1,2; Adrian Levy, PhD1; Alexa Bagnell, MD2,3; Patrick McGrath, PhD1,2,3
1Department of Community Health and Epidemiology, Dalhousie University; 2IWK Health Centre; 3Department of Psychiatry, Dalhousie University

Attitudes and beliefs of health care trainees regarding LGBTQ populations accessing healthcare: Improving patient-provider interactions
Matthew Lee, Elisabet Tasa-Vinyals, Jacqueline Gahagan. Dalhousie University, Halifax NS.

Exploring the needs, access, and understanding of information among culturally and linguistically diverse patients in managing chronic illness – Preliminary Findings
Jane Li B.Sc., M.Sc(A) candidate, Ingram School of Nursing, McGill University; Tracy Nghiem B.Sc., M.Sc(A) candidate, Ingram School of Nursing, McGill University; Sylvie Lambert R.N., Ph.D., Ingram School of Nursing, McGill University; MUHC Research Institute; St Mary’s Research Centre; Andrea Maria Laizner R.N., Ph.D., McGill University Health Centre; MUHC Research Institute; Ingram School of Nursing, McGill University; Christine Maheu R.N., Ph.D., Ingram School of Nursing, McGill University; Princess Margaret Cancer Centre; Karissa Clayberg B.A., M.A., St Mary’s Research Centre

Halogenated disinfection by-product formation by chloride-amplified fenton chemistry
C. Bruce MacDonald, Zhi Shan, Xu Zhang; Cape Breton University

Calm-unity mental health: An exploration of peer support at Canadian universities.
Sara Mackie & Thomas Williams, Dalhousie University

Factors that influence food insecurity in female, lone parent households in Nova Scotia
M. Matthews and B. Anderson, School of Nutrition and Dietetics, Acadia University, Wolfville, NS.

Understanding individual testosterone responses to strength based workouts: A new method to individualize strength training
Connor McGregor, Dalhousie University
Poster Presentations

Dyadic empathy and the sexual and relationship adjustment of couples during the transition to parenthood
Kayla M. Mooney¹, Natalie O. Rosen¹, & Amy Muise* ¹Dalhousie University; *University of Toronto

What I am doing now works: The current awareness of accessible tourism by providers in Halifax, Nova Scotia
Kudakwashe Ndadzungira, Dalhousie University

Biomonitoring for human exposure to volatile organic compounds (VOCs) in matched adults, children and companion animals: Evaluating VOCs biological markers in household pets
Parent M.L., Kim J.S., Guernsey J.R.  Community Health and Epidemiology, Faculty of Medicine, Dalhousie University

Diabetes complications and comorbidities in patients newly diagnosed with diabetes in Newfoundland and Labrador (NL): Gender differences
Richa Parihar and Shabnam Asghari  Faculty of Medicine, Memorial University of Newfoundland and Labrador

Exercise modality and its relationship with global self-esteem and physical self-concept
Jasmine Proulx, Lori Dithurbide, Dalhousie University

University students substance misuse
Jordan Ritchie  Dr. Meg Ternes; Saint Mary’s University

The role of siblings in pediatric pain
Meghan G. Schinkel, BSc.(Hons)¹²; Christine T. Chambers, Ph.D.¹²³; Penny Corkum, Ph.D.¹; & Sophie Jacques, Ph.D.¹
Departments of Psychology and Neuroscience¹ and Pediatrics³, Dalhousie University;  Centre for Pediatric Pain Research, IWK Health Centre³

The (null) association between expectation regarding aging and receiving a mammogram/prostate exam
Malcolm Scott & Dr. Brad Meisner, Dalhousie University

Children’s health decision-making experiences in Tanzania: A scoping review
Anahita Sebti & Brendan Timmins Supervised by Franco A. Carnevale, RN, PhD & Co-Supervised by Madeleine Buck, RN MSc(A) & Lia Sanzone RN, MSc(A) of McGill University Ingram School of Nursing

“Mind over matter”: Parkinson’s disease and health-related behaviours
Christie Silversides, Dalhousie University

Waste not, want not: What is the conceptual feasibility of implementing The Real Junk Food Project in Halifax Nova Scotia?
Ms. Melissa Stewart & Dr. Sara Kirk, Dalhousie University

Attributions, expectations, and pain influence exercise adherence in chiropractic patients with non-specific chronic low back pain (NS-CLBP)
Peter Stilwell BKin, DC, MSc and Katherine Harman PT, MSc, PhD  Dalhousie University

The effects of learned perceptual associations on grasping tasks with binocular and monocular vision
Jacob Swim, David Westwood; Dalhousie University

Child chronic pain and the family: Impact on mothers and fathers
Perri R Tutelman¹², Christine T Chambers, PhD¹²³ ¹Psychology & Neuroscience, Dalhousie University, IWK Health Centre, Canada ²Centre for Pediatric Pain Research, IWK Health Centre, Canada ³Pediatrics, Dalhousie University, IWK Health Centre, Canada

The impact of frailty on cardiac surgery outcomes
Wilson-Pease E, Kephart G, Gainer R, Hirsch GM.; Dalhousie University, Halifax, NS
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