

LAWSON HEALTH RESEARCH INSTITUTE

Annual Report

2021



Through mental health research, we are committed to improving the well-being of Veterans and their families.



Mrs. Kyle MacDonald and Mr. John Franklin grew up in proud Canadian military families. Inspired by their fathers who bravely served our country, Kyle and John have honoured these decorated men – their heroes – by making a commitment to the ongoing care of Canada's Veterans and members of the Canadian Armed Forces.

Their gift of \$1 million will support both the unique needs of Veterans who make their home at Parkwood Institute and fund research critical to advancing treatments for men and women who have experienced operational stress injuries, such as post-traumatic stress disorder, as a result of their military service.

Kyle and John's generosity will touch the lives of those heroes who serve Canada, and their families, supporting their wellness and recovery.

In recognition of their gift, St. Joseph's has proudly named this space the MacDonald/Franklin Operational Stress Injury Research Centre.

CAPTAIN SAMUEL A. MACDONALD

Captain Samuel A. MacDonald began his military service in London, Ontario. He was a Captain in the local Royal Canadian Regiment and served Canada in the Korean War.

COLONEL WILLIAM J. FRANKLIN

Colonel William J. Franklin's military career spanned 45 years, including service in both World War I and II. From 1945-1960 he was the Sergeant-in-Arms of the House of Commons and also served as Honorary Colonel of his Regiment.



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List of Abbreviations

ARCN	Academic, Research, and Clinical Network	IDEaS	Innovation for Defence Excellence and
ASCN	Australasian Services Care Network		Security
CAFVMHS	Canadian Armed Forces Members and	IMHR	Institute for Mental Health Research
	Veterans Mental Health Follow-up Survey	LCol	Lieutenant Colonel
CAF	Canadian Armed Forces	Maj	Major
CAMH	Centre for Addiction and Mental Health	MEG	magnetoencephalography
CBD	cannabidiol	NATO	North Atlantic Treaty Organization
CIFAR	Canadian Institute for Advanced Research	NIDA	National Institute on Drug Abuse
CIHR	Canadian Institutes of Health Research	NSERC	Natural Sciences and Engineering
CIMVHR	Canadian Institute for Military and Veteran		Research Council of Canada
	Health Research	OSISS	Operational Stress Injury Social Support
CIPSRT	Canadian Institute for Public Safety	OSI	operational stress injury
	Research and Treatment	PET	positron emission tomography
CMHA	Canadian Mental Health Association	PTSD	posttraumatic stress disorder
Col	Colonel	R2MR	Road to Mental Readiness
COVID-19	coronavirus disease	RCMP	Royal Canadian Mounted Police
DCIEM	Defence & Civil Institute of Environmental	REDCap	Research Electronic Data Capture
	Medicine	Retd	retired
DND	Department of National Defence	ROI	return on investment
DRDC	Defence Research and Development	RTG	Research Task Group
	Canada	Sgt	Sergeant
FAAH	fatty acid amide hydrolase	UN-CN	United Nations Committee on Narcotic
fMRI	functional magnetic resonance imaging		Drugs
FTE	full-time equivalent	USARIEM	US Army Research Institute of
FY	fiscal year		Environmental Medicine
Gen	General	VAC	Veterans Affairs Canada
HCWs	health care workers	VECTOR	Veterans Cannabis Therapy Outcomes
HiMARC	Heroes in Mind, Advocacy and Research		Registry
	Consortium	VRWM	Virtual Reality Wellbeing and Mastery
iCBT	internet-based cognitive behavioural		
	therapy		

Welcome

MacDonald Franklin OSI Research Centre

VISION

Our vision is to be a national and global leader and enabler that bridges research and clinical excellence to promote recovery from operational stress injuries (OSIs) in Veterans and their families.

MISSION

Our mission is to conduct innovative research in a collaborative environment and translate this knowledge to clinical practice to improve the mental health and well-being of Veterans and their families.

CORE ACTIVITIES

We embrace our strategic priorities as foundational to advancing research and innovation capabilities within the Veteran and military mental health interdisciplinary community. To advance each of the strategic priorities and increase its impact, we will operate through three fundamental activities: 1) Research and Innovation Excellence, 2) Education, and 3) Knowledge Mobilization.

Director's Statement

At the MacDonald Franklin OSI Research Centre, we maintained our vision to be a national and international leader in research on military and Veteran mental health. No one could have imagined that we would still be in the middle of a pandemic. Our Research Centre has adapted well to remote work, and the research is being recognized nationally and internationally. We continue to build alliances with national and international organizations with the goal of improving the lives and well-being of Veterans and their families.

I am very proud of our research team and the work they have done over the past year. We successfully launched our COVID longitudinal Veteran Well-Being study in 2020, with data collection still ongoing, which demonstrated the mental health impact of the pandemic on Veterans. The pandemic has forced innovation in healthcare, and our national study demonstrated that given the choice, most Veterans would choose virtual care even after the pandemic is over. Our national study will continue to provide valuable insights into the well-being of Veterans and their spouses in an effort to ensure Veterans and their families are supported.



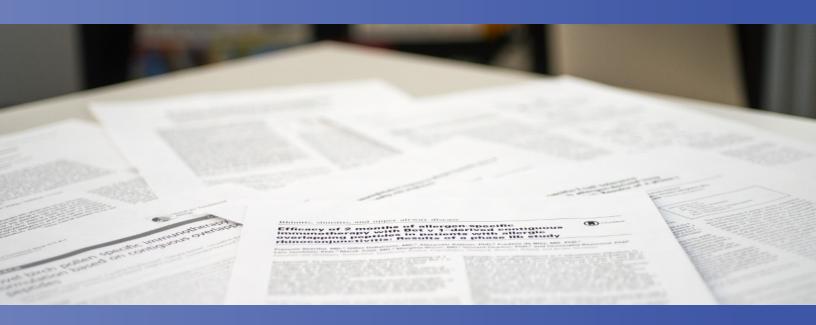
I am truly grateful for the generous support from Kyle Mac-Donald and John Franklin through the St. Joseph's Health Care Foundation. Their continuous gift to support the Research Centre through the St. Joseph's Health Care Foundation is making an impact in the lives of Veterans and will continue to do so for years to come

Sincerely,

J Don Richardson, MD, FRCPC

Scientific Director of the MacDonald Franklin OSI Research Centre

Research Excellence. Highlights of New Projects for 2021



Annual Report 2021 Project Highlights



The Roles of Personality and Resiliency in Veteran Mental Health

Canadian Armed Forces (CAF) Veterans encounter unique challenges associated with their service. Exposure to deployment-related experiences places them at high risk for developing symptoms of mental health disorders, including symptoms of PTSD, depression, and anxiety. Understanding risk factors associated with mental health disorders in CAF Veterans is imperative for military organizations to implement strategies to enhance their well-being. Researchers have identified some risk factors, including history of childhood trauma, age, gender, and education. However, it is plausible that individuals' personality traits may serve as influential risk or protective factors for CAF Veterans' mental health. For example, high levels of openness and trait resiliency may serve as protective factors against adverse mental health outcomes, whereas high neuroticism may be a risk factor. Research is urgently required to evaluate the role of traits as risk and protective factors for Veteran mental health. Thus, our research team is evaluating 1) whether six broad personality traits (openness, agreeableness, emotionality, honesty-humility, conscientiousness, extraversion) predict levels of depression, anxiety, and PTSD among Veterans; 1b) whether resiliency serves as an intermediary in the relation between personality and mental health; 2) whether relations between combat exposure and PTSD are stronger for those higher in maladaptive traits and weaker for those higher in adaptive traits.

Funding: Veterans Affairs Canada Veteran and Family Well-Being Fund; Robert S. & Mary Gay, Donald, James and Helen (Taylor) Gay Endowed Research Fellowship in Veterans Care



Literature Review and Scale Development on Psychological Safety in the Military (Task 59)

Feeling safe, whether at an individual or organizational level, is vital within military communities. To evaluate the psychological safety of an organization, steps are needed to better understand dimensions of psychological safety, existing practices and procedures taken to evaluate psychological safety, and additional considerations relating to the acceptability and feasibility of implementing a measure of psychological safety in military contexts. The goals of this research project are to: (1) conduct a meta-analysis and systematic review of the literature on psychological safety in military and para-military environments; (2) synthesize findings into a report of current evidence and practices; (3) develop a preliminary self-report measure assessing psychological safety in the military with feedback on feasibility and acceptability from our Veteran advisory council; and (4) integrate findings into a comprehensive report with actionable recommendations to the Scientific Authority.

To conduct a systematic review of the literature, we tested a series of search strategies across five databases (OVID-PsycIN-FO, OVID-Medline, PsycTESTS, SCOPUS, and ProQuest Dissertation & Theses). After removal of duplicates, over 10,500 records were identified in the literature. As of December 2021, our team has completed screening title and abstracts against inclusion and exclusion criteria, with 471 records retained for full-text screening.

Funding: Canadian Institute for Military and Veteran Health Research (CIMVHR)

Validation of the Mental Health Continuum – Short Form Among Canadian Armed Forces Personnel

Compared to the general Canadian population, military members exhibit higher prevalence of depressive disorders, anxiety disorders, and PTSD. However, there is a paucity of research investigating the extent to which military members experience positive mental health. Validation of positive mental health measures, including the Mental Health Continuum – Short Form (MHC-SF) is necessary to determine whether well-being can be assessed in a valid and reliable manner among Canadian Armed Forces (CAF) military members. The purpose of this research was to assess the internal consistency reliability, convergent validity, factor structure, and measurement invariance of the MHC-SF among CAF regular and reserve force military members. Data were drawn from the nationally-representative 2013 Canadian Forces Mental Health Survey conducted by Statistics Canada. A random sample of 8200 CAF military personnel completed the CFMHS, representing 64400 regular and 4460 reserve force CAF personnel. Findings provided support for the reliability, convergent validity, factorial validity, and measurement invariance of the MHC-SF among both regular and reserve force military samples. Therefore, researchers and clinicians can reliably implement the MHC-SF as a tool to assess, interpret, and predict military members' psychological, social, and emotional well-being.



PTSD Treatment Algorithms

Given the prevalence of posttraumatic stress disorder in military populations and the heterogeneities in treatment approaches, the MacDonald Franklin OSI Research Centre is conducting a three-part project towards building consensus in the assessment and treatment of PTSD. The PTSD Treatment Algorithms studies seek to: (1) Conduct a comprehensive scan of available treatment approaches for military-related PTSD via meta-analysis and systematic review to determine the efficacy and appropriateness of treatments options based on clinical and population characteristics; (2) Engage Operational Stress Injury clinics across Canada to identify prescribing patterns and practices of clinicians treating PTSD; and (3) Incorporate evidence from both the meta-analysis and prescription patterns in developing a consensus model to guide treatment of military-related PTSD, with particular emphasis on treatment-resistant PTSD.

The protocol and methodologies for the meta-analysis has been registered via PROSPERO, and published as a peer-reviewed manuscript in the Journal of Medical and Internet Research (JMIR) - Research Protocols. As of December 2021, the meta-analysis and systematic review has reached the data extraction stage following review over 12,000 titles and abstracts and over 1470 full-text articles. We expect the meta-analysis to include data from several hundred studies using various psychotherapies, pharmacotherapies, and alternative and emerging therapies to treat military-related PTSD. The prescription patterns survey has received full ethics approval in English, and will be translated in French for an anticipated phased roll-out starting in Spring of 2022.

Internet-based Cognitive Behavioural Therapy (iCBT) for Veterans

The pandemic has transformed mental healthcare, creating more demand for services that can be delivered remotely via the internet. Research in the areas of internet-delivered psychotherapies is still relatively novel. A particularly promising approach is the delivery of internet-based cognitive behavioural therapy (iCBT), which has been found to be effective in the treatment of PTSD, depression, and anxiety in the general population. Yet, given the differences in trauma exposure, presentation of symptoms, treatment preferences, and response to treatment, it remains unclear whether the effectiveness of iCBT for military and Veterans populations would be comparable to those of the general populations. The goal of the current meta-analysis is to substantiate and evaluate the evidence of effectiveness of iCBT for military and Veteran populations compared to control conditions (waitlist, treatment-as-usual, and active alternative interventions). The scope of the review encompasses internet/digital/tele/mobile adaptations of CBT treatments in military and Veteran populations, and explores the suitability, acceptability, and effectiveness of these treatments to identify challenges and considerations for the adoption and delivery of iCBT treatments.

Research Portfolio Updates



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Project	Problem to Solve	Intended Outcome and Update
Personalized pharmacotherapy using pharmacogenetics in Veterans seeking treatment for mental health	Examine how an individual's genetics will affect the body's response to different medications, including those used in PTSD.	Improve the treatment outcomes of CAF members and Veterans with symptoms of PTSD using a multidisciplinary approach with pharmacogenetics testing, clinical assessments, and biomarker analysis to determine treatment pathways. Study design in progress
Effects of cannabidiol on PTSD	Currently, the evidence is poor on whether cannabidiol (CBD) (active ingredient in cannabis) can reduce symptoms of PTSD (and associated anxiety and depression) in Veterans with PTSD.	A clinical trial will be conducted to test whether CBD is effective at reducing symptoms of PTSD in Veterans diagnosed with PTSD. Study design in progress
Improving the Road to Mental Readiness (R2MR) program in operational contexts	Currently, little is known about CAF members' perceptions of and satisfaction with mental health and resilience training.	Findings from our analysis will identify key themes and areas of enhancement for the R2MR program from the perspective of a CAF member. This will allow the CAF to further tailor its resilience program to strive towards optimizing intended outcomes and improving trainee satisfaction. Manuscript submitted Follow-up study undergoing ethics approvals
Prescribing patterns of OSI psychiatrists	Currently, the overall prescribing patterns of psychiatrists treating PTSD at OSI clinics are unknown.	This will provide information on common and unique patterns of prescriptions intended to treat PTSD across OSI Clinics in Canada. This will facilitate the adoption of standardized practices and further consensus-building among psychiatrists treating CAF Veterans. Undergoing ethics review
Standards of reporting in PTSD psychotherapy clinical trials	Clinical trials where a medication is investigated for PTSD typically have comprehensive details about their methodology. Clinical trials where psychotherapy is investigated may not uphold the same degree of detail in their published methodology. This makes it challenging to understand whether the effectiveness or ineffectiveness is due to the intervention or due to the methodology employed.	This systematic review will report on how well all previously published psychotherapy clinical trials for PTSD describe their methodology. This will have implications on how much confidence we should have in previously published findings and will provide recommendations for future trials. Analysis

Project	Problem to Solve	Intended Outcome and Update
Understanding moral injury using Statistics Canada datasets	We do not know how common and severe moral injury is in active and released CAF personnel. The risk and protective factors for moral injury are largely unknown.	Understand how common moral injury is on a population level that is generalizable to the entire CAF. Understand risk factors, protective factors, and capture the magnitude of other adverse mental health outcomes following moral injury. One manuscript published Two manuscripts submitted
Understanding predictors: Recovery from military- related PTSD from both an individual and family perspective using qualitative and quantitative analysis	Current conceptions of recovery from military-related PTSD rely on quantitative tools or clinician surveys, often categorizing PTSD diagnoses as present or not. There is a need to more comprehensively define recovery from PTSD in a manner that provides realistic expectations for treatment trajectory and prognosis.	Identify a deeper, more nuanced definition of recovery from military-related PTSD. Manuscript published
Understanding recovery: An examination of functional and health- related quality of life in military-related PTSD in recovery	There is a need for an objective definition of recovery based on client's treatment stage, with input from sources of social support during recovery.	Understand the progression of PTSD throughout the treatment process. Evaluating the relative impact of physiological, affective, behavioural, and cognitive experiences in shaping narratives of recovery. Analysis complete; manuscript in preparation
Moral Injury Outcome Scale Development	Existing assessments that measure moral injury have been poorly designed. This makes it challenging to measure the presence and severity of moral injury accurately.	Development of a scale that can be used in research and clinical settings that accurately measures moral injury. Manuscript submitted Scale validation underway in other samples
Meta-analysis comparing pharmacotherapy and psychotherapy for military-related PTSD	It is currently challenging to identify the right treatment for an individual with PTSD. Additionally, outcomes of different types of treatment (e.g., pharmacotherapy, psychotherapy) on PTSD outcomes have not been systematically synthesized and analyzed over the past decade.	Identify relative efficacy of pharmacotherapy and psychotherapy approaches in treating military-related PTSD. Also identify factors that may influence treatment outcomes. Data extraction in progress

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Project	Problem to Solve	Intended Outcome and Update
The roles of personality and resiliency in Veteran mental health	It is unknown whether personality differences may be predictive of the severity of PTSD, depression, and anxiety in Veterans with an OSI.	We predict that adaptive or "positive" personality traits will result in higher levels of resiliency, which will in turn lead to reduced symptoms of depression, anxiety, and PTSD. We will test whether the exposure to combat experiences will lead to increased PTSD, but only for those who are higher in maladaptive traits and lower in adaptive traits.
The mental health impact of exposure to child soldiers	The mental health impacts of encountering children recruited and used as soldiers are currently unknown. We do not know whether this type of deployment-related experience contributes to moral injury.	Manuscript in progress Understand the lived experiences of military personnel with exposure to this potentially morally injurious encounter. Data collection in progress
Link between deployment experiences, moral injury, PTSD, and depression	The associations between deployment experiences, PTSD, and depression are not always clear. We hypothesize that moral injury may mediate the relation between certain types of deployment exposures and PTSD/depression symptoms.	Confirm whether moral injury influences the relation between stressful deployment experiences and PTSD/depression. Data analysis in progress
Treatment Outcomes Dataset	Long-term symptom and functional outcomes in Veterans undergoing psychiatric care for PTSD are unknown.	Assess co-morbidity, symptom severity, and treatment outcomes using longitudinal clinical data that spans two years of treatment. This will contribute to our understanding of long-term outcomes and predictors of recovery in military-related PTSD. Analysis in progress
Well-being scale validation	Positive mental health may be independent from mental illness. However, a common scale that measures positive mental health has not been validated for use in Veterans. This means that there is a risk that this scale may not measure positive mental health in Veterans accurately.	Assess whether the Mental Health Continuum Short Form, a commonly used measure of positive mental health, is appropriate for use in the Veteran population Manuscript published Project closed

Project Moral distress and well-being in health care workers during the COVID-19 pandemic	Problem to Solve The COVID-19 pandemic may have imparted significant moral injury and moral distress onto health care workers, particularly those who experienced moral-ethical challenges at work. The impact, long-term outcomes, and mechanisms of symptom trajectories related to moral injury and distress are currently unknown.	Intended Outcome and Update By understanding the impact and predictors of moral injury in health care workers, we may be able to better recognize, treat, and prevent moral injury across different occupations, including military personnel, health care workers, and first responders. Two manuscripts published Two manuscript in progress Analysis in progress
Well-being of Veterans and Veteran spouses during the COVID-19 pandemic	It is currently unknown how the COVID-19 pandemic has impacted the well-being of Veterans and their families.	Elucidate the psychological effects of the pandemic on Veterans and their spouses. Results can be used to ensure Veterans and their spouses are well-supported during this difficult time to best prepare for similar emergencies should they occur in the future. Two manuscripts published Two manuscript in progress Analysis in progress
VECTOR Project	To track and monitor the outcome of Veterans' use of therapeutic cannabis.	This study uses a 3-phase approach that will inform the development and implementation of the Veterans Cannabis Therapy Outcomes Registry (VECTOR). Study design in progress
The impact of loneliness and moral injury on suicide in treatment-seeking Veterans	It is possible that Veterans who experience moral injury are more at risk of experiencing loneliness and suicide than Veterans without moral injury. However, the link is still unclear.	Provide evidence as to whether loneliness and suicide are exacerbated in those who have moral injuries. May have implications for early interventions and treatment. Analysis in progress
Expert consensus building for psychiatric treatment of treatment-resistant PTSD	Prescribing patterns for treatment-resistant PTSD are currently unknown. There is a lack of standard practice and consensus on the treatment provisions for treatment-resistant PTSD.	Develop consensus-based pharmacotherapy guidelines for treatment-resistant PTSD in Canada. Study design in progress
Internet-based CBT: Systematic review & meta- analysis	Virtual psychotherapy, including internet-based cognitive behavioural therapy (iCBT) is an emerging model of treatment delivery; however, evidence for the effectiveness and efficacy of such treatment is weak.	Understand the relative effectiveness of iCBT for military and Veteran populations, and identify factors that may optimize their use and efficacy. Manuscript submitted

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Project	Problem to Solve	Intended Outcome and Update
Beliefs about		•
	Veterans' beliefs about confidentiality	Experimental and observational studies will
confidentiality and	in mental health treatment settings	identify and characterize CAF Veterans' beliefs
attitudes toward	and their tendencies to disclose moral	about confidentiality within a mental health
disclosure of moral	injury are currently unknown. Given	treatment context. Findings will elucidate
injuries	evidence that many military members	the extent to which perceived confidentiality
	and Veterans do not seek mental	may influence decisions on whether to seek
	health treatment when it is needed, it	mental health treatment, and on whether to
	is important to identify the extent to	disclose traumatic details of perceived moral
	which confidentiality beliefs serve as	transgressions to mental health professionals.
	barriers to treatment-seeking.	Manuscript in preparation
		Additional data collection in progress
Using advanced analytics	Clinician notes hold rich data	Determine if machine learning can be used
to identify features	on patient status and treatment	to identify suicidal ideation, moral injury,
of suicide ideation,	outcomes; however, manually	patterns of comorbidity, and predict treatment
moral injury, patterns	reviewing clinician notes for nuanced	trajectories amongst a cohort of treatment-
of comorbidity, and	patterns of data is labour intensive and	seeking CAF members and Veterans.
predictors of treatment	challenging.	Analysis in progress
outcomes		, ,

Path to Sustainability. Overview of New Research Grants

(as of December 31, 2021)

7 GRANTS

\$154,250

Principal Investigator

Total Value

\$1,378,616

Collaborator/Co-Investigator

Total Value



Principal Investigator Role

Psychological Safety

Literature Review and Scale Development on Psychological Safety in the Military. Funding Source: Canadian Institute for Military and Veteran Health Research (CIMVHR). Principal Investigator. \$58,695.

Pharmacogenetics

Personalized pharmacotherapy using pharmacogenetics in Veterans seeking treatment for mental illness. Funding Source: Department of Psychiatry Seed Fund, Western University. Principal Investigator. **\$24,835.**

Personality and Resilience

The roles of personality and resiliency in Veteran mental health. Funding Source: Veteran and Family Well-being Fund, Veterans Affairs Canada. Principal Investigator. \$42,250.

Loneliness in Veterans

The impact of loneliness and moral injury on suicide in treatment-seeking Veterans. Funding Source: Veterans Affairs Canada. Principal Investigator. **\$28,470.**

Co-Investigator Role

Child Soldiers and Moral Injury (Pilot)

The Mental Health Impact of Exposure to Child Soldiers - Qualitative Pilot. Funding Source: Centre for Addiction and Mental Health (CAMH) Foundation. Co-Investigator. \$130,000.

Child Soldiers and Moral Injury (Full)

The Mental Health Impact of Exposure to Child Soldiers - multiphase initiative. Funding Source: Veteran and Family Well-being Fund, Veterans Affairs Canada. Collaborator. \$1,060,000.

Monitoring Outcomes of Cannabis Use

Veterans Cannabis Therapy Outcomes Registry (VECTOR). Funding Source: Veteran Affairs Canada. Collaborator. \$188,616.

Publications, Presentations, and Dissemination - 2021

Peer-Reviewed Journal Articles

Plouffe, RA., Liu, A., Richardson, JD., & Nazarov, A. (accepted). Validation of the Mental Health Continuum – Short Form Among Canadian Armed Forces

Personnel. Health Reports.

Litz, BT., Plouffe, RA., Nazarov, A., Murphy, D., Phelps, A., Houle-Johnson, S., Frankfurt, S., & Zerah, G. (submitted). **A** psychometric evaluation of the Moral Injury Outcome Scale. *Psychological Assessment*.

Fikretoglu, D., Thompson, M., Hendriks, T., Nazarov, A., Michaud, K., Born, J., Sudom, K., Belanger, S., Jetly, R. (in press). Conducting research during the COVID-19 pandemic: The Op LASER study. Health Promotion and Chronic Disease Prevention in Canada Journal. Advance online publication.

Plouffe, RA., Nazarov, A., Forchuk CA., Gargala, D., Deda. E., Le, T., Bourret-Gheysen, J., Jackson, B., Soares, V., Hosseiny, F., Smith, P., Roth, M., MacDougall, AG., Marlborough, M., Jetly, R., Heber, A., Albuquerque, J., Lanius, R., Balderson, K., Dupuis, G., Mehta V., & Richardson JD. (2021). Impacts of morally distressing experiences on the mental health of Canadian health care workers during the COVID-19 pandemic. *European Journal of Psychotraumatology*, 12:1.

Roth, M., King, L., Richardson, JD. (2021). **Depression** and Anxiety as Mediators of PTSD Symptom Clusters and Pain in Treatment-Seeking Canadian Forces Members and Veterans. *Military Medicine*. *Advance online publication*.

Zhang J, Emami Z, Safar K, McCunn P, Richardson JD, Rhind SG, Da Costa L, Jetly R, Dunkley BT. (2021). Teasing apart trauma: neural oscillations differentiate individual cases of mild traumatic brain injury from post-traumatic stress disorder even when symptoms overlap. *Transl Psychiatry* 11, 345.

Brown, A., Millman, H., Easterbrook, B., Heber, A., Park, R., Lanius, R., Nazarov, A., Jetly, R., Stanley-Aikens, R., Sanderson, C., Hutchins, C., Darte, K., Hall, A., Bremault-Phillips, S., Byerlay, C., Smith-MacDonald, K., Meehan, M., Cameron, R., Doak, D., Oakley, T., Nicholson, A., Pichtikova, M., Smith, P., Mulligan, A., & McKinnon, M.C. (2021). Working together to address sexual misconduct in the Canadian Armed Forces. *Journal of Military, Veteran and Family Health. Advance online publication.*

Plouffe, RA., Easterbrook, B., Liu, A., McKinnon, MC., Richardson, JD., & Nazarov, A. (2021). **Psychometric evaluation of the Moral Injury Events Scale in two Canadian Armed Forces samples.** *Assessment. Advance online publication.*

Fikretoglu, D., Easterbrook, B., Nazarov, A. (2021). **Fidelity** in workplace mental health intervention research: **A narrative review.** *Work & Stress. Advance online* publication.

D'Agata, MT., Granek, JA., Holden, RR., Nazarov, A. (2021). The relation between self-concealment and self-reported mental health symptoms in a sample of Canadian Armed Forces personnel. *Military Behavioral Health*, 9, 190-197.

Protocol Manuscripts

Liu, J.J.W., Nazarov, A., Easterbrook, B., Plouffe, R.A., Le, T., Forchuk, C., Brandwood, A., St. Cyr, K., Auger, E., Balderson, K., Bilodeau, M., Burhan, A.M., Enns, M.W. Smith, P., Hosseiny, F., Dupuis, G., Roth, M., Mota, N., Lavoie, V., & Richardson, J.D. (2021). Four decades of military posttraumatic stress: Protocol for a meta-analysis and systematic review of treatment approaches and efficacy. *JMIR Research Protocols*. http://dx.doi.org/10.2196/33151

Liu JJW, Nazarov A, Plouffe RA, Forchuk CA, Deda E, Gargala D, Le T, Bourret-Gheysen J, Soares V, Nouri MS,

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Hosseiny F, Smith P, Roth M, MacDougall AG, Marlborough M, Jetly R, Heber A, Albuquerque J, Lanius R, Balderson K, Dupuis G, Mehta V, Richardson JD (2021). **Exploring well-being of healthcare workers during the COVID-19 pandemic: A prospective longitudinal study protocol.** *JMIR Research Protocols.* http://dx.doi.org/10.2196/32663.

Abstracts

Plouffe, RA., Nazarov, A., Forchuk, C. A., Soares, V., Le, T., Deda, E., MacDougall, A., Marlborough, M., Balderson, K., Hosseiny, F., Smith, P., & Richardson, JD. (2021, October).

The age of COVID-19: Impacts of moral distress on Canadian healthcare workers. Poster to be presented at the Canadian Psychiatric Association's 71st Annual Conference, virtual.

Richardson, JD., St. Cyr, K., Forchuk, CA, Liu, J., Plouffe, RA., Le, T., Gargala, D., Deda, E., Soares, V., Hosseiny, F., Smith, P., Dupuis, G., Roth, M., Bridgen, A., Marlborough, M., Jetly, R., Heber, A., Lanius, R., & Nazarov, A. (2021, October). Well-being of Canadian Veterans during the COVID-19 pandemic: Cross-sectional results from the COVID-19 Veteran well-being study. Poster to be presented at the Canadian Psychiatric Association's 71st Annual Conference, virtual.

Nazarov, A., Plouffe, R., Forchuk, C., Richardson, JD. (2021, October). **Beliefs about confidentiality and attitudes toward disclosure of moral injuries.** Paper presented at the Canadian Psychiatric Association's 71st Annual Conference, online.

Easterbrook, B., Plouffe, R.A., Houle, S., Liu, A., McKinnon, M., Ashbaugh, A., Richardson, JD., Nazarov, A. (2021, October). Risk factors for the development of moral injury in Canadian Armed Forces personnel. Paper to be presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Richardson, JD., St. Cyr, K., Forchuk, C. A, Liu, J., Plouffe, R, A., Le, T., Gargala, D., Deda, E., Soares, V., Hosseiny, F., Smith, P., Dupuis, G., Roth, M., Bridgen, A., Marlborough, M., Jetly, R., Heber, A., Lanius, R., & Nazarov, A. (2021, October). Well-being of Canadian Veterans during the COVID-19 Pandemic: Cross-sectional results from the COVID-19 Veteran Well-Being Study. Abstract to be presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Plouffe, RA., Nazarov, A., Forchuk, CA., Deda., E., Soares, V., Le, T., Gargala, D., MacDougall, AG., Marlborough, M., Balderson, K., Hosseiny, F., Smith, P., & Richardson, JD. (2021, October). Impacts of morally distressing experiences on the mental health of Canadian health care workers during the COVID-19 pandemic. Paper to be presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Liu, J., Nazarov, A., Plouffe, RA., Le, T., Forchuk, CA., Brandwood, A., Levy, Y., Auger, E., Balderson, K., Bilodeau, M., Burhan, A., Enns, M., & Richardson, JD. (2021, October). The effectiveness of psychotherapy and pharmacotherapy for posttraumatic stress disorder in military populations: A meta-analysis & systematic review. Paper to be presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Plouffe, RA., Nazarov, A., Houle, S., Phelps, A., Murphy, D., Dell, L., Hosseiny, F., & Litz, B. (2021, October). **Crossnational development and validation of the Moral Injury Outcome Scale.** Paper to be presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

St. Cyr, K., Liu, J., Cramm, H., Nazarov, A., Hunt, R., Forchuk, CA., Deda, E., & Richardson, JD. (2021, October). A mixed methods approach to understanding recovery from military-related posttraumatic stress disorder:

Veteran and family perspectives. Abstract presented at the Annual Forum of the Canadian Institute for Military and Veteran Health Research.

Nazarov, A., Plouffe, RA., Forchuk, C., Trahair, C., Richardson, JD. (2021, October). **Beliefs about Confidentiality and Attitudes toward Disclosure of Moral Injuries.** Paper presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Nazarov, A., Brandwood, A., Forchuk, C., Merchant, M., Fraser, B., Pavlovic, N., Richardson, JD., Granek, J. (2021, October). Improving Mental Health and Resilience Training: Feedback from Canadian Armed Forces Personnel. Paper presented at the Canadian Institute for Military and Veteran Health Research Virtual Forum.

Plouffe, RA., Easterbrook, B., Liu, A., McKinnon, MC., Richardson, JD., & Nazarov, A. (2021, November).

Research Grants

Psychometric evaluation of the Moral Injury Events
Scale in two Canadian Armed Forces and Veteran
samples. Paper to be presented at the virtual International
Society for Traumatic Stress Studies conference.

Plouffe, RA., Nazarov, A., Forchuk, CA., Soares, V., Le, T., Deda, E., MacDougall, A., Marlborough, M., Balderson, K., Hosseiny, F., Smith, P., & Richardson, JD. (2021, May).

The age of COVID-19: Impacts of moral distress on

Canadian healthcare workers. Paper presented at the virtual London Health Research Day, Lawson Health Research Institute conference.

Annual Report 2021 Publications

Publications, Presentations, and Dissemination (previous years)

Peer-Reviewed Journal Articles

Richardson, JD., Ketcheson, F., King, L., Forchuk, CA., Hunt, R., St. Cyr, K., Nazarov, A., Shnaider, P., McIntyre-Smith, A., & Elhai, J.D. (2020). **Sexual dysfunction in male Canadian armed forces members and veterans seeking mental health treatment.** *Military Medicine*, 185, 68-74.

Nazarov, A., Fikretoglu, D., Liu, A., Richardson, JD., & Thompson, M. (2020). **Help-seeking for mental health issues in deployed Canadian Armed Forces personnel at risk for moral injury.** *European Journal of Psychotraumatology*, 11, 10.1080/20008198.2020.1729032.

Forchuk, C., Nazarov, A., Hunt, R., Davis, B., St Cyr, K., & Richardson, JD. (2020). The influence of depression-PTSD comorbidity on health-related quality of life in treatment-seeking veterans.

European Journal of Psychotraumatology, 11, 1748460. 10.1080/20008198.2020.1748460

Richardson, JD. (2020). **The diary of an operational stress injury clinic psychiatrist during the COVID-19 pandemic.** Journal of Military, Veteran, and Family Health, 6, 87-90. 10.3138/jmvfh-CO19-0002.

Zhang, J., Richardson, JD., & Dunkley, BT. (2020). Classifying post-traumatic stress disorder using the magnetoencephalographic connectome and machine learning. *Scientific Reports*, 10(1), 5937. 10.1038/s41598-020-62713-5.

Battaglia, A., Protopopescu, A., Boyd, JE., Lloyd, C., Jetly, R., O'Connor, C., Hood, HK., Nazarov, A., Rhind, SG., Lanius, RA., & McKinnon, MC. (2019). The relation between adverse childhood experiences and moral injury in the Canadian Armed Forces.

European Journal of Psychotraumatology, 10, 10.1080/20008198.2018.1546084.

Fikretoglu, D., Liu, A., Nazarov, A., & Blackler, K. (2019). A

group randomized control trial to test the efficacy of the Road to Mental Readiness (R2MR) program among Canadian military recruits. *BMC Psychiatry*, 19(1), 1-14. 10.1186/s12888-019-2287-0.

Forbes, D., Pedlar, D., Adler, AB., Bennett, C., Bryant, RA., Busuttil, W., Cooper, J., Creamer, MC., Fear, NT., Greenberg, N., Heber, A., Hinton, M., Hopwood, M., Jetly, R., Lawrence-Wood, E., McFarlane, AC., Metcalf, O., O'Donnell, ML., Phelps, A., Richardson, JD., Sadler, N., Schnurr, PP., Sharp, ML., Thompson, JM., Ursano, RJ., Van Hooff, M., Wade, D. & Wessely, S. (2019).

Treatment of military-related post-traumatic stress disorder: Challenges, innovations, and the way forward. *International Review of Psychiatry*, 31(1), 95-110, 10.1080/09540261.2019.1595545.

Nicholson, AA., Densmore, M., McKinnon, MC., Neufeld, RWJ., Frewen, PA., Théberge, J., Jetly, R., Richardson, JD., & Lanius, RA. (2019). Machine learning multivariate pattern analysis predicts classification of posttraumatic stress disorder and its dissociative subtype: a multimodal neuroimaging approach. *Psychological medicine*, 49(12), 2049-2059. 10.1017/S0033291718002866.

Richardson JD., Thompson, A., King, L., Ketcheson, F., Shnaider, P., Armour, C., St. Cyr, K., Sareen, J., Elhai, JD., & Zamorski, MA. (2019). **Comorbidity patterns of psychiatric conditions in Canadian armed forces personnel.** *The Canadian Journal of Psychiatry*, 64(7), 501-510. 10.1177/0706743718816057.

Richardson, JD., Ketcheson, F., King, L., Forchuk, CA., Hunt, R., St. Cyr, K., Nazarov, A., Shnaider, P., McIntyre-Smith, A., & Elhai, JD. (2020). **Sexual Dysfunction in male Canadian Armed Forces Members and Veterans Seeking Mental Health Treatment.** *Military Medicine*, 185(102), 68-74. 10.1093/milmed/usz163.

Richardson, JD., King, L., St. Cyr, K., Shnaider, P., Roth, ML., Ketcheson, F., Balderson, K., & Elhai, JD. (2019). Depression and the relationship between sleep disturbances, nightmares, and suicidal ideation in treatment-seeking Canadian Armed Forces members and veterans. *BMC Psychiatry*, 18(1), 1-8. 10.1186/s12888-018-1782-z.

Rehman, Y., Sadeghirad, B., Guyatt, GH., McKinnon, MC., McCabe, RE., Lanius, RA., Richardson, JD., Couban, R., Sousa-Dias, H., Busse, JW. (2019). **Management of post-traumatic stress disorder: A protocol for a multiple treatment comparison meta-analysis of randomized controlled trials.** *Medicine*, 39, e17064.

Yeterian, J.D., Berke, D.S., Carney, J,R., McIntyre-Smith, A., St. Cyr, K., King, L., Kline, N.K., Phelps, A., Litz, B.T., & Members of the Moral Injury Outcomes Project Consortium. (2019). **Defining and Measuring Moral Injury: Rationale, Design, and Preliminary Findings From the Moral Injury Outcome Scale Consortium.** *Journal of Traumatic Stress*, 33(3), 363-372. 10.1002/jts.22380.

King, L., Ketcheson, F., St Cyr, K., Marlborough, M., & Richardson, JD. (2020). Factor structure of deployment experiences and relations to mental health disorders among treatment-seeking Canadian Armed Forces personnel and veterans. *Psychological Trauma: Theory, Research, Practice, and Policy,* 12(4), 413. 10.1037/tra0000493.

Paul, MA., Love, RJ., Jetly, R., Richardson, JD., Lanius, RA., Miller, JC., MacDonald, M., & Rhind, SG. (2019). Compromised sleep and blunted nocturnal salivary melatonin secretion profiles in military-related posttraumatic stress disorder. *Frontiers in Psychiatry*, 10, 882. 10.3389/fpsyt.2019.00882.

Davis, BD., Sedig, K., & Lizotte, DJ. (2019). **Archetype-Based Modeling and Search of Social Media.** *Big Data and Cognitive Computing*, 3(3), 44. 10.3390/bdcc3030044

Rehman, Y., Sadeghirad, B., Guyatt, GH., McKinnon, MC., McCabe, RE., Lanius, RA., Richardson, JD., Couban, R., Sousa-Dias, H., Busse, JW. (2019). **Management of post-traumatic stress disorder: A protocol for a multiple treatment comparison meta-analysis of randomized controlled trials.** *Medicine*, 98(39), e17064. 10.1097/

MD.000000000017064.

Ketcheson, F., Cyr St, K., King, L., & Richardson, J. D. (2018). **Influence of PTSD and MDD on somatic symptoms in treatment-seeking military members and Veterans.** *Journal of Military, Veteran and Family Health*, 4(2), 101-109.

Abstracts

Dickey, C., Richardson, JD. **Mental Health and Wellbeing While Facing COVID-19** (May 2020). Hosted by Talent, Learning and Engagement, Western Human Resources (virtual).

Richardson, JD., Teasell, R., Sharma, V. Covid-19/ OCD/ Perinatal Psychiatric Disorders (October 2020). Hosted by MHPA (virtual).

Nazarov, A. Well-being of Veterans during the COVID-19 Pandemic: a Canadian Perspective. (October 2020). Panel presentation at the Military Psychology Summit During COVID-19. Event hosted by APA Division 19: Society for Military Psychology (virtual).

Nazarov, A. **Moral Injury - an Overview.** (October 2020). Invited presentation at the CIMVHR 2020 Symposium Series. Event hosted by CIMVHR (virtual).

Richardson, JD., Forchuk, C., Plouffe, R., Le, T., Soares, V., Nazarov, A. Well-Being of Veterans during the COVID-19 Pandemic. (November 2020). Podium presentation at the 2020 London Joint Mental Health Research Day, London, ON (virtual).

Nazarov, A., Forchuk, C., Plouffe, R., Le, T., Soares, V., Richardson, JD. Moral Distress and Well-Being in Health Care Workers during the COVID-19 Pandemic. (November 2020). Podium presentation at the 2020 London Joint Mental Health Research Day, London, ON (virtual).

Forchuk, C. Nazarov, A., Plouffe, R., Trahair, C., Richardson, JD. **Beliefs about confidentiality and attitudes toward disclosure of moral injuries.**(November 2020). Poster presented at the 2020 London Joint Mental Health Research Day, London, ON (virtual).

Richardson, JD. Well-being of Veterans and Veteran families during the COVID-19 Pandemic (November 2020). Infographic presentation at the Five Eyes Mental Health Research Innovation Collaborative Virtual Meeting.

Annual Report 2021 Publications

Vasudev, K., Alolayan, M., Ionson, E., Watt, C., Speechley, M., Richardson, D., Forchuk, C., Lanius, R., Vasudev, A. Alternative Treatments for Post-Traumatic Stress Disorder – A Preliminary Analysis of An Ongoing Randomised Controlled Trial. (November 2020) Poster presentation at the International Society for Traumatic Stress Studies (virtual).

Nazarov, A. **Unpacking moral injury: current understanding, gaps, and future directions** (December 2020). Invited presentation at the PIR-Mental Health: Research Imaginarium Series.

Boland, H., D'Agata, M., Granek, J., Nazarov, A. A
Reward-based Approach to Improve Workplace
Well-being Awareness and Behaviours. (October, 2019)
Poster presented at the CIMVHR Forum 2019, GatineauOttawa, QC.

Boland, H., D'Agata, M., Granek, J., Nazarov, A., Jaz, A. (2019). A Reward-Based Approach to Improve Workplace Well-Being Awareness and Behaviours. Paper presented at NATO-HFM-302 Symposium, Berlin, Germany. Unclassified.

Granek, J., Nazarov, A., D'Agata, M., Bae, J., Boland, H., Kirollos, R., Guest, K., Bailey, S. (2019). Leveraging Technologies to Complement the Road to Mental Readiness (R2MR) Training Program. Paper presented at NATO-HFM-302 Symposium, Berlin, Germany. Unclassified.

Granek, J., Nazarov, A., Fraser, B., Boland, H. Optimizing Mental Health and Resilience by Leveraging Technology in Training for Canadian Armed Forces Personnel. (October, 2019) Poster presented at the CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Hunt, R., Forchuk, C., Cramm, H., Nazarov, A., Forchuk, C., St. Cyr, K., Ketcheson, F., Deda, E., Davis, B., Richardson, JD. **Understanding Functional Quality of Life in Veterans Diagnosed with Post Traumatic Stress Disorder in Recovery.** (October, 2019). Podium Presentation. CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Ketcheson, F., St Cyr, K., King, L., Richardson, JD. **Association between PTSD and MDD and severity of somatic symptoms in treatment-seeking Veterans.**(October, 2019). Poster presented at CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Oakley, T., King, L., Ketcheson, F., Richardson, JD. Gender differences in clinical presentation among treatment-seeking veterans and Canadian Armed Forces (CAF) personnel. (October, 2019) Podium Presentation CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Oakley, T., King. L., Ketcheson, F., Richardson, JD. **The relationship between deployment, gender and mental health in treatment-seeking veterans.** (October, 2019) Poster presented at CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Richardson, JD., Hunt, R., Nazarov, A., Davis, B., St. Cyr, K., King, L. Suicidal Ideation in Treatment-seeking Canadian Armed Forces Veterans: The use of advanced analytics. (October, 2019). Podium Presentation. CIMVHR Forum 2019, Gatineau-Ottawa, QC.

Richardson, JD., Ketcheson, F., King, L., Forchuk, C., Hunt, R., St. Cyr, K., Nazarov, A., Schneider, P., McIntyre-Smith, A., Elhai J. D. **Sexual Dysfunction in Male Treatment-Seeking Canadian Armed Forces Members and Veterans.** (April, 2019) Poster presented at London Health Research Day, London, ON.

Richardson, JD., Nazarov, A., Hunt, R., Forchuk, C.

Predictors of Recovery from Military-related Posttraumatic Stress Disorder in Treatment-seeking

Veterans. (October, 2019). Podium Presentation. CIMVHR
Forum 2019, Gatineau-Ottawa, QC.

Richardson, JD., Nazarov, A., Hunt, R., Forchuk, C., King, L., St. Cyr, K. Predictors of Recovery from Military-related Post-traumatic Stress Disorder in Treatment-seeking Veterans. (November, 2019) Poster presented at the ISTSS Annual Meeting 2019, Boston, MA.

Richardson, JD., Nazarov, A., St. Cyr, K., Ketcheson, F., King, L., Hunt, R., Forchuk, C., Elhai, J. **PTSD and Associated Risk factors in Treatment-seeking Veterans & Canadian Armed Forces Veterans.**(September, 2019). Podium Presentation. Canadian Psychiatric Association, Quebec City, QC.

Statement of Priorities

The MacDonald Franklin OSI Research Centre was built on current ongoing partnerships, as well as the pursuit of new collaboration amongst relevant key stakeholders, including the health care sector, industry, government, and academia.



The Research Centre operates through three fundamental activities:

Research and Innovation Excellence

Promoting research excellence in the area of OSIs is central to the mission of the Research Centre. The research output of the Research Centre is reliant upon its ability to foster expertise within the field of OSIs, with an emphasis on PTSD. The Research Centre is positioned to have a pivotal role in advancing academic research and innovation to advance clinical care and client outcomes.

Education

The creation of the Research Centre will continue a tradition of excellence in educating current and future clinicians and researchers. The Research Centre will engage in education initiatives by facilitating capacity building and training opportunities across a variety of disciplines, partners and stakeholders.

Knowledge Mobilization

To ensure knowledge is continuously shared both within our network and beyond, knowledge mobilization activities are central to the Research Centre. The Research Centre will emphasize the dissemination of research findings at both the local and national network of clinics to improve patient outcomes and promote recovery.

Progress on Priorities



Research and Innovation Excellence

As we acknowledge passing the three-year mark of operations, the MacDonald Franklin OSI Research Centre remains focused on pursuing research innovation and excellence using our vision, mission and core activities as guiding principles. Throughout 2021, our incredibly talented and growing research team was successful in obtaining multiple grant and fellowship opportunities. As we continue to focus on our research, including publications and presentations locally, nationally and internationally, our team is continuously reviewing and refining processes to achieve maximum research outputs.

The Research Centre continues to faciliate its outreach to students and trainees in the fields of computer science and the STEM disciplines. Our students range from those who are starting out with their undergraduate studies to PhD candidates, as well as medical trainees completing their residency. Their participation in research studies related to their field of interest not only benefits the Centre, but provides real-life research training for project development and execution, as well as for presentation and manuscript preparation skills. We take seriously the opportunity entrusted to us to prepare the next generation of researchers with a focus on mental health research that will provide treatment and interventions for the Veteran population and their families.

The ongoing pandemic continues to limit in-person meetings; however, this has not limited our opportunities to present at numerous local, national, and international conferences. We have also been actively and deliberately focusing on manuscript production to disseminate our research findings. The growing list of publications in highly regarded peer-reviewed journals are an encouraging testament to our years of mental health research for veteran care.

List of Events for Education and Knowledge Sharing

2021

May 11	Lawson Health Research Day	London, ON (virtual)
May 18	Ontario Personal Support Worker Association Wellness Town Hall	Toronto, ON (virtual)
May 27	Dallaire Foundation - Invited Talk	Virtual
May 31	Postdoctoral Research Week, Western University	London, ON (virtual)
June 15, 24	Open Door / ASCN International Webinar	Virtual
June 16	International Webinar series on Military, Veteran and Families Wellbeing	Virtual
June 17	Five Eyes Mental Health Research Innovation Collaborative Meeting	Virtual
September 4, 6,	Canadian Institutes for Military and Veteran Health Research (CIMVHR)	Virtual
13, 27	Virtual Symposium Series	
September 15-16	Australasian Conference on Traumatic Stress (ACOTS)	Virtual
October 13	Canadian Psychiatric Association	Virtual
October 25	London Joint Mental Health Research & Innovation Day	Virtual
November 3	International Society for Traumatic Stress Studies - 37th Meeting	Virtual
November 25	Parkwood Institute Research - Open House	Virtual

Research Consortium Meetings

September 27, 2021 London, ON (virtual)

March 23, 2021 London, ON (virtual)

Representation and Community Involvement

Dr. Richardson	Member, Five Eyes Centres of Excellence in Military and Veteran Mental Health Group
Di. Hiorialason	
	Chair, CANIUK Collaborative Consortium
	Member, Mental Health Advisory Group, Veterans Affairs Canada
	Member, Academic, Research, and Clinical Network (ARCN) of the Canadian Institute for Public
	Safety Research and Treatment (CIPSRT)
Dr. Nazarov	Member, Health Sciences Research Ethics Board, Western University
	Co-Chair, Moral Injury Community of Practice, Centre of Excellence for PTSD
	Member, ARCN, CIPSRT

Annual Report 2021 Progress on Priorities

Trainee Development

We continued to provide research opportunities to graduate and undergraduate students, as well as to medical residents. Partnering with the Department of Psychology and Department of Psychiatry at Western University provided access to top students who joined our team for partial fulfillment of their educational requirements.

PhD Students Bethany Easterbrook McMaster University **Masters Students** Cassidy Trahair Western University **Undergraduate Students** Alyssa Zhu University of Waterloo Dominic Gargala Western University **Medical Residents** Andrew Brigden Western University Tricia Mohan Western University Thomas Wasiuta Western University

Strategic Partnerships

Building new strategic partnerships, while maintaining robust connections with our existing partners has been a high priority for the Research Centre. Our partnerships foster collaboration and innovative thinking - allowing us to deliver high-quality, multidisciplinary research findings to the Veteran community.

Partners and collaborators:

- Bellwood Health Services
- Boston University
- Calian Health
- CAMH
- Canadian Institute for Military and Veteran Health Research (CIMVHR)
- Centre of Excellence for Chronic Pain
- Centre of Excellence on PTSD and Related Mental Health Conditions
- Combat Stress UK
- Dallaire Institute
- Defence Research & Development Canada
- Department of National Defence
- Heroes in Mind, Advocacy and Research Consortium (HiMARC)
- Homewood Health

- IBM Canada
- McMaster University
- Operational Stress Injury Social Support (OSISS)
 Program
- St. Joseph's Health Care OSI Clinic
- Phoenix Centre, Australian Centre for Posttraumatic
 Mental Health
- Queen's University
- Queen's University Belfast
- Ryerson University
- · University of Toronto
- Veterans Affairs Canada
- Western University



Celebrating Success. Awards & Achievements



Dr. J Don Richardson was promoted to Full Professor in the Department of Psychiatry, Western University.

Dr. Jenny Liu received the **CIHR Fellowship - INSPIRE: Increasing Students' Pathways to Information, Resilience, and Empowerment**. This program seeks to address the worsening mental health impacted by the pandemic by building resilience capacity in individuals and communities. It will be piloted with students and adapted for other populations, including Veterans, first responders, and front-line healthcare.

Dr. Rachel Plouffe received the Robert S. & Mary Gay, Donald, James and Helen (Taylor) Gay Endowed Research Fellowship Award.

Dr. Natalie Ein received the Western Postdoctoral Fellowship.

Dr. J Don Richardson was awarded the Department of Psychiatry Research Award at Western University.

Drs. Rachel Plouffe and **Jenny Liu** both received the **top 10** ranked distinction by popular vote during the 2021 **Postdoctoral Research Forum 3MR competition**.

Dr. Anthony Nazarov received the Defence Research & Development Canada (Department of Defence) **Teamwork Award,** as part of his contribution to the mental health research related to Operation LASER.

Dr. Rachel Plouffe was appointed to the **editorial boards** of the journals **Personality and Individual Differences** and **Current Psychology**.

Dr. Rachel Plouffe was selected as a **co-editor** of a special issue "**Exploring the dark side of personality beyond the Dark Triad**" in the journal Acta Psychologica.

Dr. Jenny Liu was selected as an editor to the journal Frontiers in Psychiatry.

Moving Forward.

Roadmap for the Future

Improving awareness among Veteran community and public

A marketing plan was developed to guide our marketing strategy with the aim of promoting our research activities. The Lawson Health Research Institute Media and Communications Department's policies and procedures provided overarching guidance. To date, we have successfully launched active social media platforms - a Facebook page, Twitter account, and LinkedIn business account. A website was also launched under the Lawson Health Research Institute banner (https://www.lawsonresearch.ca/osi). We have partnered with the Business Marketing program at Fanshawe College and anticipate promising outcomes from the team of students that will work with us to augment our efforts.

Collaborations with OSI clinics and clinicians

We have connected with clinicians interested in clinical research and continue to build relationships with clinical researchers. Our *Research Digest* was launched in September 2020 with an initial circulation of 150 subscribers. It is a monthly email digest of research, which includes curated articles, activities, and current information related to Veteran and military well-being.

Increasing research capacity

The Research Centre saw significant growth in staffing for 2020. Presently, we have 12 research staff, 6 visiting scientists and scholars, and a number of graduate students, undergraduate students, and volunteers. The additional staff directly impacted our productivity despite the effects of the pandemic. We continue to expand the staff roster with at least one post-doctoral associate, a research assistant, additional computer science students and volunteer medical students working on projects for the Research Centre. The addition of two computer science students in 2020 added a dimension of efficiency and enabled us to effectively track recruitment efforts through social media for our projects and most importantly, improve data integrity and research replicability.

Focus on output and knowledge translation

The Research Centre successfully adapted to COVID-related stay-at-home orders by hosting virtual research consortium and advisory council meetings for the first time. There was a strong representation of members and participants at each meeting. Remote access offered the opportunity to participate for those who may not have been able to do so for in-person meetings. We continued to build partnerships and have made a connection with the Centre of Excellence for PTSD. This connection facilitates knowledge translation and mobilization activities related to our longitudinal research examining the impact of the COVID pandemic on Veterans. Work with international collaborators also continued to 2021, which afforded our team opportunities to more widely disseminate research findings through publications and conference presentations. The growth seen in our staff and research project portfolio promises an active year for scientific output in 2022.

Annual Report 2021 Research Team

The Research Team

(as of December 2021)



J Don Richardson, MD, FRCPC

Scientific Director

Dr. Richardson is the Scientific Director of the MacDonald Franklin OSI Research Centre and Medical Director of St. Joseph's OSI Clinic. He is a Full Professor in the Department of Psychiatry, Schulich School of Medicine and Dentistry at Western University and Assistant Clinical Professor (adjunct) in Psychiatry and Behavioural Neurosciences at McMaster University. He also holds the distinguished title of Research Fellow with the Canadian Institute for Military and Veteran Health Research (CIMVHR). Dr. Richardson is one of the foremost experts on military-related PTSD and has more than two decades of experience in the assessment and treatment of CAF members and Veterans with PTSD and other OSIs. Resulting in over 50 published peer-reviewed articles and book chapters, Dr. Richardson has conducted research in multiple areas of military and Veteran mental health, including risk factors for PTSD and suicidal ideation, health care utilization, treatment outcomes, and the impact of PTSD on quality of life.



Anthony Nazarov, PhD, PMP Associate Scientific Director

Dr. Anthony Nazarov is a clinical neuroscientist with a research focus on PTSD, moral injury, and social cognition. Dr. Nazarov has extensive expertise in conducting military and Veteran mental health research, and has received funding from Veterans Affairs Canada, Department of National Defence, and CIHR. Prior to joining the Lawson Health Research Institute, Dr. Nazarov was a Defence Scientist at Defence Research and Development Canada, Department of National Defence, investigating psychological resilience and mental health in Canadian Armed Forces personnel. Dr. Nazarov is interested in using experimental and survey methodologies to explore the interplay between psychological trauma, moral transgressions, and well-being. Specifically, he is interested in understanding how we can better identify, treat, and prevent moral injury and related OSIs.



Luciana Brown, MBA Research Coordinator

Luciana Brown joined the team in October 2019 as the Research Coordinator with Lawson Health Research Institute for the MacDonald Franklin OSI Research Centre. Luciana completed her executive MBA in 2015 and holds a post-baccalaureate diploma in Management, both from Athabasca University, Faculty of Business. She completed her Bachelor of Administrative Studies degree at York University in 2003. Luciana has many years of senior administrative and project management experience in Canada and the Middle East, and has worked in varied environments, including teaching and community hospitals, government organizations and research settings.



Rachel Plouffe, MSc, PhD
Postdoctoral Associate

Dr. Rachel Plouffe is currently a Postdoctoral Associate with the MacDonald Franklin OSI Research Centre and Western University. Rachel completed her Master of Science and PhD degrees at Western University in the Personality and Measurement Psychology program. Her PhD research examined the impact of personality traits and exposure to violence in childhood on partner and participant levels of physical and psychological intimate partner violence. As a Postdoctoral Associate at the MacDonald Franklin OSI Research Centre, Rachel is interested in developing valid and reliable psychometric measures to assess levels of moral injury in Veterans and military members, as well as identifying contributing factors and outcomes associated with moral injury.



Jenny Liu, PhD Postdoctoral Associate

Dr. Jenny Liu is a Postdoctoral Associate with the MacDonald Franklin OSI Research Centre and Western University. Jenny completed both her Masters and PhD in psychology at Ryerson University. She also holds appointments with the Toronto Western Hospital-Krembil Research Institute and the Daphne Cockwell School of Nursing, Ryerson University. Jenny's background is in psychological science, and her scholarship activities bridge research in stress and resilience with community-based applications. In her work, Jenny explores the intersecting biophysiological, psychological, and socio-cultural determinants of health and resilience using mixed methods approaches and quantitative modelling.



Natalie Ein, PhD Research Associate

Dr. Natalie Ein is a Research Associate with the MacDonald Franklin OSI Research Centre. Natalie completed her Masters and PhD at Ryerson University in the Psychological Science program. Natalie's background is in stress-related intervention research, including methodological reviews (meta-analyses, systematic reviews), mixed method designs, and psychophysiology.



Kate St. Cyr, MSc, PhD Candidate Research Associate

Kate St. Cyr has been with St. Joseph's OSI Clinic team since 2009, working as a researcher and program evaluation support officer. After completing a BA in Anthropology at McMaster University and an MSc in Public and Population Health in 2008 at Simon Fraser University, she relocated from BC to London, ON, where she found work with the Middlesex London Health Unit and, ultimately, the OSI Clinic at the Parkwood Institute. Once the MacDonald Franklin Research Centre was opened in 2018, Kate migrated from the OSI Clinic to begin her role as a research associate with the Research Centre. In her current role, Kate is involved in all stages of the research process, from the development of research studies to data analysis to writing and the dissemination of final products. Kate's research interests include treatment outcomes and determinants of health, particularly as they relate to military personnel and Veterans; and vicarious trauma.



Maede Nouri, MSc Research Associate and Data Analyst

Maede Nouri is a data scientist holding two master's degrees in Statistics and Computer Science. She completed her MSc in Computer Science at Western University in 2020. Her research focused on employing machine learning techniques to identify the prevalence of different chronic diseases given varying patient characteristics and a pre-existing set of chronic conditions. After graduation, she worked as a research analyst at the Department of Civil and Environmental Engineering to downscale NetCDF data over Lake Winnipeg using general circulation model output. She is currently a research associate/data analyst at the MacDonald Franklin OSI Research Centre. In her work, she uses statistical and machine learning algorithms to preprocess, analyze, and make more sense of data about Veterans. Outside of work, she follows her passion in fitness and photography.



Callista Forchuk, MSc Research Assistant

Callista Forchuk has been working at the MacDonald Franklin OSI Research Centre at Parkwood Institute since 2018. She holds a BA in psychology, and MSc in Personality and Measurement from Western University. Callista has published on the relation between PTSD and depression comorbidity with quality of life, and the relations between PTSD symptoms and sexual dysfunction. Currently, Callista is involved in research examining the longitudinal impact of the COVID-19 pandemic on Veteran and spouse well-being, and on moral distress in health care workers, as well as research examining the role of confidentiality in mental health help-seeking and disclosure of morally injurious events.

Annual Report 2021 Research Team



Tri Le Research Assistant

Tri Le was a volunteer at the MacDonald Franklin OSI Research Centre at the Parkwood Institute in 2019 and in 2020, he joined the team as Research Assistant. He holds a BHSc in Health Sciences from Western University and a Post-Graduate Certificate in Gerontology from Fanshawe College. Tri has experience conducting various research projects in London, ON, for organizations, such as the McCormick Dementia Services – Day Program, Ontario Telemedicine Network, and Rise Asset Development. He is passionate about research concerning the mental health and well-being of the elderly. Currently, he is assisting the team with examining the longitudinal impact of the COVID-19 pandemic on Veteran and spouse well-being, and on moral distress in health care workers.



Vanessa Soares, MD Research Assistant

Vanessa Soares joined the team in February 2020. She completed her HBSc in Biology at the University of Toronto and her Medical Degree from the Medical University of the Americas in the Caribbean. Vanessa has spent most of her clinical experience focused on psychiatry in various hospitals in both the US and Canada. She previously worked at McMaster University through the Offord Centre as a Research Assistant in pediatric psychiatry.



Ilyana Kocha Research Assistant

Ilyana Kocha started volunteering with the MacDonald Franklin OSI Research Centre in May 2021 before joining our team as a Research Assistant. She holds a BA in Anthropology and Psychology from Western University, and a BPR in Public Relations from Humber College. She's interested in studying and promoting outreach and access to mental health services.



Dominic GargalaResearch Assistant & Computer Science Intern

Dominic Gargala joined the MacDonald Franklin OSI Research Centre in August 2021 as a computer science intern. He holds a BSc from Western University in Medical Science & Biology and is currently pursuing a BSc in Computer Science. Dominic has experience working in research as a web application developer through the Department of Biology at Western University. He is interested in utilizing computer technologies and tools to assist in the data collection, transformation and storage of various datasets for the Research Centre.



Julia Gervasio Research Assistant

Julia is a current PhD student in the department of Psychology at Ryerson University. She received her MA in Psychological Science from Ryerson University and BSc. (Hons.) from the University of Toronto. Julia's areas of research include resilience, disordered eating, and investigating individual differences in stress physiology.



Kristine Tauschek Administrative Assistant

Kristine studied Health Care Administration at Fanshawe College and has over 20 years of experience working within health care and higher education sectors. In the role of Administrative Assistant, Kristine is the central contact for a range of MacDonald Franklin OSI Research Centre administrative functions.



Alyssa Zhu Research Assistant & Computer Science Intern

Alyssa is a third-year student at the University of Waterloo pursuing a BCS (Bachelor's of Computer Science). Joining the MacDonald Franklin OSI Research Centre in May 2021 as a Research Assistant, she is interested in contributing to the Research Centre's research efforts through data science.

Visiting Scholars and Scientists



Brent Davis, PhD Visiting Scientist

Brent Davis has been working with the MacDonald Franklin OSI team since March 2019. He holds a BSc in the Biochemistry of Immunity and Infection from Western University. He is currently pursuing a PhD in Computer Science at Western University as a member of the Insight and Phi Labs. His research interests are in applying and integrating AI / Machine Learning systems to complex problem areas in health. His role at the Research Centre is akin to a Data Scientist – he works to clean, transform and analyze data that is relevant to the Research Centre. His current work with the Research Centre focuses on using advanced technology, such as Watson, to perform analytics on data that assists the research team.



Bethany Easterbrook, MSc, PhD Student Clinical Psychology PhD Student and Visiting Scholar

Bethany Easterbrook is entering her second year as a Ph.D. student in the Psychology Research & Clinical Training at McMaster University, supervised by Drs. Margaret McKinnon and Anthony Nazarov. She obtained an undergraduate degree in Kinesiology from University of Toronto and a Master's degree in Health Research Methodology from McMaster University. She has previous research experience in a variety of settings, including military mental health, pediatric surgery, manual therapy, disability policy, and schizophrenia. Bethany's current research focuses on moral injury and PTSD in military, Veteran, and public safety personnel populations. Specifically, she is interested in examining which military experiences and mental health outcomes independently increase the risk of developing a moral injury within the military and Veteran population.



Deanna Walker, PhD Candidate Psychology PhD Candidate and Visiting Scholar

Deanna Walker is a fourth-year doctoral candidate in Clinical Science and Psychopathology at Western University. She completed her Master of Arts degree at Carleton University in 2017. Her research interests at the MacDonald Franklin OSI Research Centre are focused on the intersection between psychological trauma and well-being, including factors impacting mental health outcomes associated with PTSD. In addition to her research interests, she has extensive experience in providing psychological services within trauma-focused populations, including working with first responders, Veterans, and trauma-related disorders.

Medical Residents

Thomas Wasiuta, MD

Psychiatry Resident and Visiting Scholar

Dr. Wasiuta is a resident psychiatrist with the Schulich School of Medicine. He has an undergraduate degree in neuroscience from the University of Toronto and completed his medical doctorate training at Western University. He has experience working with first responders, Veterans, and Canadian Armed Forces members with PTSD and other OSIs. Dr. Wasiuta has a research interest in studying novel therapeutic approaches to PTSD treatment. He continues his training with the Schulich Psychiatry program in London, Ontario.

Tricia Mohan, MD

Psychiatry Resident and Visiting Scholar

Dr. Tricia Mohan is a second-year resident in Psychiatry at Western University. She graduated with a Bachelor of Arts in French from Yale University. After taking a detour into legal studies and practicing as a lawyer for a few years, she completed her medical degree at Western University. She is interested in matters of education and assessment. She is also passionate about psychotherapy and qualitative research.

Graduate Students



Cassidy Trahair

MSc Student

Cassidy acquired her undergraduate degree in psychology in 2019 at Western University. She is currently obtaining her MSc at Western University and is completing her thesis at the MacDonald Franklin OSI Research Centre. Her thesis investigates beliefs about confidentiality and attitudes towards disclosure of moral injury in individuals with experience in the Canadian Armed Forces. Cassidy has previous research experience in the personality and developmental domain. Her research interests also include help-seeking behaviours and issues related to the underutilization of mental health care.

Volunteers and Undergraduate Trainees

Bailey Wolfs Jay Ding Suriya Ragu Chayanika Tyagi Jessica Zhang Samdarsh Saroya

Clara Baker Juwon (Joan) Omar Valerie Kulakouski

Dac Hung Nguyen Karmen Tse Eliza Khan Neha Raina

Acknowledgments

We would like to acknowledge Heather Tales (Director of Veteran Care), and Bev van der Heide (Coordinator of London OSI Clinic), and Omer Vandevyvere (Coordinator of Greater Toronto Area OSI Satellite Clinic) for their support of our research, and the ongoing commitment and contribution of OSI Clinic staff collaborators:

Lisa King Michelle Marlborough

Felicia Ketcheson Ken Balderson Erisa Deda Tania Oakley Maya Roth Jennifer Safadi

Craig Stewart

We with to extend a heartfelt thank you to the Veteran community, their family members ,and their fellow Veterans who have supported our research by participating in studies and sharing information about our projects among your social networks.

Departures

We would like to acknowledge the contribution of the following team members and trainees who have left the Research Centre in 2021. We wish you the best in your future research and clinical endeavours.

Jesse Bourret-Gheysen

Research Assistant

Alec Brandwood Research Assistant

Jennifer Shatsky

Volunteer

Andrew Bridgen Medical Resident

Tania Al-Jilawi

Volunteer

Advisory Council

Current Members

(as of December 2021)



Catherine Baillie Abidi, PhD

Director of Research & Learning, Dallaire Institute
Adjunct Professor, Department of International Development Studies, Dalhousie University
Adjunct Professor, Department of International Development Studies, Saint Mary's University

Dr. Catherine Baillie Abidi joined Dalhousie University's Dallaire Institute for Children, Peace and Security in 2018 and has extensive experience researching, publishing and teaching in the areas of peace and conflict, children affected by armed conflict, and international humanitarian law. As the Director of Research & Learning, Catherine oversees multiple research projects exploring the interconnections between peacekeeping, gender, child protection and moral injury, with the primary focus of protecting children affected by conflict and the security sector actors who engage with them. Catherine is also an Adjunct Professor in the Departments of International Development Studies at both Dalhousie and Saint Mary's University.



Ken Balderson, MD, CM, FRCPC

Psychiatrist, St. Joseph's OSI Clinic, Greater Toronto Site Adjunct Professor, Department of Psychiatry, Western University

Dr. Ken Balderson is a psychiatrist working full-time at the Greater Toronto Site of St. Joseph's OSI Clinic, where he has worked since January 2018. Previously he worked at St. Michael's Hospital with an acute care focus, and was part of the leadership team in the Department of Psychiatry. He also has extensive experience in psychiatric outreach. His research involvement has included a role as co-investigator of studies exploring the risk of suicide after hospital discharge and looking at the impact of SARS on health care personnel.



Rod Balsom, PhD

Clinical Lead, St. Joseph's OSI Clinic

Dr. Balsom obtained his PhD in clinical psychology from Western University. He is registered with specialization in Adult Clinical, Behavioural Medicine and Forensic Psychology. Over his career, he has worked in the Crisis Intervention and Forensic area. Currently, he is Clinical Lead of the OSI Clinic at Parkwood Hospital site of St. Joseph's Health Centre in London, Ontario. As part of a multi-disciplinary team, he specializes in the treatment of individuals and their families suffering from PTSD and/or other difficulties arising from military service. Current research interests include the impact of moral injury on recovery from PTSD and the relationship between personality and the onset of, and recovery from, PTSD in military and first-responder populations.



Colette Currin, CCAC

National Director, Military, Veterans and First Responders for the Edgewood Health Network

Colette Currin is the National Director of Military, Veterans and First Responders for the Edgewood Health Network, Canada's largest provider of Mental Health, Addiction and Trauma treatment. Colette's focus is on building relations and facilitating dialogue regarding the specific challenges and treatment needs of these segments by working in partnership with healthcare professionals and referents to support clients struggling with mood, anxiety, trauma, addiction and concurrent disorders. Colette is also a Certified Mental Health and Addiction Counsellor working as a clinician at Bellwood Health Services in Toronto delivering inpatient, outpatient, family and online programs and counselling services. A determined advocate for change at the individual, family and social level, Colette believes that recovery is a return to the true potential inherent in each and every one of us. As a nature lover and outdoor enthusiast, Colette hopes to one day to complete the Bruce Trail together with her partner Bill and their dog Finn.



Mark Daley, PhD

Vice-President, Research at the Canadian Institute for Advanced Research (CIFAR) Faculty member, Vector Institute

Professor, Departments of Computer Science; Biology; Epidemiology & Biostatistics; Electrical & Computer Engineering; Mathematics; and Statistics & Actuarial Science, Western University

Mark Daley is the Vice-President, Research at the Canadian Institute for Advanced Research (CIFAR) and a Professor in six departments at Western University (Computer Science; Biology; Epidemiology & Biostatistics; Electrical & Computer Engineering; Mathematics; and Statistics & Actuarial Science). He is also appointed as a faculty affiliate at The Vector Institute for Artificial Intelligence and an associate scientist at the Lawson Health Research Institute. Daley chairs the board of Compute Ontario and serves on the Ontario Research Fund Advisory Board and the board of directors of IC/ES. He is also co-founder of CanCOVID, an expert network of Canadian COVID-19 researchers, clinical collaborators, and health-care professionals. He was Associate Vice-President (Research) of Western University from 2015–2019 and in 2019 was appointed Western University's Special Advisor to the President on Data Strategy.



Marco Di Cola

Director, Harbour Grace Holdings Inc

With a passion for business, politics and history Marco is graduate of the University of Western Ontario and holds an Honours B.A. As someone who thrives on challenges, Marco has welcomed several career changes over the past 25 years that have pushed him outside of his comfort zone and challenged him to reinvent himself. Marco began his career in the banking sector and held multiple Sales and Service roles for Canada Trust and later TD Canada Trust (TSX:TD), where he was recognized with Top Performance awards. While working with TD Canada Trust, he coached and mentored dozens of professionals who have gone on to lead outstanding careers and have reached executive level positions. Marco's outstanding track record in banking opened the door in the mid-2000's to an exciting career in the technology industry. He enthusiastically accepted the challenge of working for Phoenix-Interactive Design Inc., a progressive software company in London, Ontario who was making a big push on a global scale in self-service software solutions for the banking industry. A few years after accepting a role as Sales & Account Manager for some of the world's leading banks, he was promoted to Vice President, Global Software Business Development. At Phoenix, who was later acquired by Diebold Nixdorf (NYSE: DBD), Marco was responsible for acquiring some of their largest bank clients and was recognized with Outstanding Achievement Awards. A few years after his mentor Kyle MacDonald sold Phoenix to Diebold Nixdorf, he accepted his greatest and most fulfilling challenge yet in her newest endeavour, Harbour Grace Holdings Inc. As Director of Programs & Partnerships, Marco works with the executive management team and has multiple responsibilities including IT services, charter yacht sales management, and pursuing the philanthropic goals of the corporation's owners which includes building partnerships with leading charitable organizations such as the David Foster Foundation, the St. Joseph's Foundation and academic institutions such as Ivey Business School.



LCol (Retd) Stéphane Grenier

Mental Health Innovator

When it comes to mental health, Stéphane Grenier walks the talk. He was recently appointed to the Order of Canada and awarded an honorary Doctor of Laws degree by the University of Guelph and Humber College for his contributions to the field of workplace mental health. Stéphane's riveting keynotes are not only thought-provoking, but also lead to tangible action and sustainable change for those leaders who are prepared to rethink how they support their people. His autobiography, After the War: Surviving PTSD and Changing Mental Health Culture, tells his story from the day he landed in the midst of the Rwandan genocide, through his journey of changing mental health culture in the Canadian military, developing national Guidelines for Peer Support with the Mental Health Commission of Canada, all the way to creating Mental Health Innovations (MHI); a consultancy that leads innovative and sustainable change in organizations to enhance the mental health of their people. Today, he and his business partners develop non-clinical mental health interventions as a complement to traditional clinical care for private and public sector organizations, as well as for provincial health care systems. Stéphane's vision is a world where people no longer face barriers to good mental health.



LCol (Retd) Alexandra Heber, MD, FRCPC, CCPE

Chief Psychiatrist, Veterans Affairs Canada

She has over 30 years of experience in mental health, first as a nurse, then as a psychiatrist. After a decade in Toronto coordinating the Women's Program in the Clinic for HIV-Related Concerns at Mount Sinai Hospital, and working on an Assertive Community Treatment Team, Dr. Heber started working as a civilian psychiatrist for the Canadian Forces in 2003, then enrolled in the military in 2006. She deployed to Afghanistan as the Psychiatrist in Charge of the Canadian Forces Mental Health Services for Task Force Afghanistan in 2009. After retiring from the military, she accepted the position of inaugural Chief of Psychiatry for Veterans Affairs Canada (VAC), where she became the VAC lead author on the 2017 CAF-VAC Joint Suicide Prevention Strategy. She has published and presented nationally and internationally on PTSD in the military and veteran population, and has designed two online courses on PTSD for health care professionals. Her current research interests include: suicide prevention, the military-civilian transition experience, effects of cannabis on mental health, outcome measurement in mental health treatment, and the effects of military sexual trauma.



Col (Retd) Rakesh Jetly, MD, FRCPC

Former Chief Psychiatrist, Canadian Armed Forces

Dr. Rakesh Jetly is the former chief psychiatrist for the Canadian Armed Forces. He occupied various roles such as mental health advisor to the surgeon general and has academic appointments at Dalhousie University (Halifax) and Ottawa. In addition, he has been selected as the inaugural chair in military mental health at the IMHR (Institute for Mental Health Research). He began his military career as a general duty medical officer and flight surgeon and deployed to the middle east and Rwanda. After his post graduate training at the University of Toronto in psychiatry he deployed twice to Kandahar, Afghanistan. Col Jetly has an interest in operational mental health with a focus on PTSD and has worked within Canada and with allies (NATO) to advance the field. Occupational and workplace mental health are also specific areas of interest. Research and academic interests are varied and include suicide prevention, nabilone as a treatment for PTSD-related nightmares, neurofeedback and pharmacogenomics. Current international collaborations include a lecture series on Morality and Mental Health as well as chairing Research Task Groups (RTG) Leveraging Technology in Mental Health and Personalized Medicine. An imminent study is one looking at the safety and efficacy of cannabis in the treatment of PTSD.



Maj Gen (Retd) Glynne Hines

Former Director of Consultation, Command and Control, NATO, Brussels OSI Special Section of the Royal Canadian Legion

Veteran co-chairman of the Minister of Veterans Affairs Mental Health Advisory Group

Glynne Hines enjoyed a 41-year career in the Canadian Armed Forces. He initially joined the Army Reserve in 1970 as a gunner in Brantford, Ontario. Upon transfer to the regular forces, he underwent training as naval officer, serving onboard destroyers, supply ships and submarines, In 1982, he transferred to the air force as a communications engineer, ultimately serving in Kingston Ontario, Anchorage Alaska, Winnipeg Manitoba, Baden Germany, Goose Bay Labrador, and of course, Ottawa. He deployed in the first Gulf War as communications commander, Canadian Air Task Group Middle East and to Sarajevo as Chief, Combined and Joint Communications for the NATO Stabilization Force. Prior to his retirement, his final posting was as the Director of Consultation, Command and Control at NATO Headquarters in Brussels. He remained in Brussels as the civilian director of NATO's battlefield intelligence sharing enterprise until 2014. Upon return to Canada, he joined other, like-minded Veterans, to try to help fellow-Veterans of his era and younger, and their families, particularly those suffering from mental health issues. He is a member of the founding executive of the OSIs Special Section of the Royal Canadian Legion and since 2016 has served as the Veteran co-chairman of the Minister of Veterans Affairs Mental Health Advisory Group.



Lisa King, MSc

Program Evaluation and Research Officer, St. Joseph's OSI Clinic, Parkwood Institute

Lisa King has worked as a Researcher/Program Evaluation and Support Officer (PESO) at St. Joseph's OSI Clinic since 2014. She holds a B.A. in Psychology and a MSc in Neuroscience from the University of Western Ontario. Her published research primarily examines how factors such as gender, sleep disturbance, social support, deployment experiences, and comorbidity relate to PTSD, depression, and anxiety among military personnel and Veterans. She's currently interested in better understanding the breadth of trauma experienced by non-deployed Veterans, and the effectiveness of novel group therapies for treating military-related mental health conditions.



Laryssa Lamrock

Family Peer Support Coordinator, Operational Stress Injury Social Support (OSISS) Program

Laryssa Lamrock is the Strategic Advisor, Families, for the Centre of Excellence on PTSD and also has extensive experience in the field of family peer support with OSIs, such as anxiety, PTSD and depression. She has had numerous speaking engagements involving mental health awareness specific to OSIs, peer support and her lived personal experiences. A few of the most noteworthy have been the National Conference on PTSD, an appearance before the House of Commons Standing Committee on Veterans Affairs and the Healing the Family Forum at the Canadian Embassy in Washington D.C. She has also participated on a number of Committees including the National DND-VAC-RCMP Mental Health Advisory Committee and the National OSI Family Ad Hoc working group. Laryssa strongly believes in the importance of education and support for families of military members, Veterans and first responders living with OSI. Along with her professional experiences, Laryssa is truly a military family member as she is the daughter, spouse and mother of formerly or currently serving Canadian Armed Forces members. Her personal experiences in supporting a loved one with OSI and her own journey with depression drives her passion for representing and advocating for families of those with OSI in hopes of helping make their journey a little easier.



Ruth Lanius, MD, PhD
Professor, Western University

Harris-Woodman Chair in Mind-Body Medicine, Western University

Ruth Lanius, MD, PhD, Professor of Psychiatry is the director of the PTSD research unit at the University of Western Ontario. She established the Traumatic Stress Service and the Traumatic Stress Service Workplace Program, services that specialized in the treatment and research of PTSD and related comorbid disorders. She currently holds the Harris-Woodman Chair in Mind-Body Medicine at the Schulich School of Medicine & Dentistry at the University of Western Ontario. Her research interests focus on studying the neurobiology of PTSD and treatment outcome research examining various pharmacological and psychotherapeutic methods. She has authored more than 150 published papers and chapters in the field of traumatic stress and is currently funded by several federal funding agencies. She regularly lectures on the topic of PTSD nationally and internationally. She has recently published a book 'Healing the traumatized self: consciousness, neuroscience, treatment' with Paul Frewen.



Polliann Maher

Family Peer Support Coordinator, Operational Stress Injury Social Support (OSISS) Program

Polliann Maher is a Family Peer Support Coordinator with OSISS. She started volunteering with the program in 2009 and was employed with the program since 2011. Polliann took part in the Vocational Rehabilitation program through Veterans Affairs Canada in 2009 and went back to school to successfully complete her Community Service worker diploma. She has been part of the development and facilitation of the Psycho-education workshops for Family members in collaboration with the OSI Clinic at Parkwood Hospital. The research from these workshops was presented in a poster presentation at CIMVHR in 2018 in collaboration with the staff from the OSI Clinic. Polliann is passionate about promoting Mental Well-being within the Military and Veteran community and was part of the Military Family Resource Centre Board of Directors for 6 years. Polliann is the spouse of a retired Veteran that was has been diagnosed with PTSD since 1999, mother to two adult sons and brings several years of lived experience as a caregiver, spouse, mother and peer support coordinator.



Margaret McKinnon, PhD, CPsych

Associate Chair of Research, Psychiatry and Behavioural Neurosciences, McMaster University Associate Professor, McMaster University Senior Scientist, Homewood Research Institute

Dr. Margaret McKinnon is a clinician-scientist who serves as the Homewood Chair in Mental Health and Trauma in the Department of Psychiatry and Behavioural Neurosciences at McMaster University. Work in Dr. McKinnon's laboratory focuses on identifying the neural and behavioural correlates of PTSD and trauma-related illnesses and on translating this knowledge to the development and testing of novel treatment interventions aimed at reducing the cognitive and affective sequelae of these conditions. Dr. McKinnon has a special interest in military, Veteran and first responder populations, and has worked with these groups clinically and in her research program.

Annual Report 2021



Candice M. Monson, PhD
Professor, Ryerson University
Director of Clinical Training at Ryerson University

Candice M. Monson, Ph.D., is a Professor of Psychology at Ryerson University in Toronto, ON. Dr. Monson is one of the foremost experts on traumatic stress and the use of individual and conjoint therapies to treat PTSD. She has published extensively on the development, evaluation, and dissemination of PTSD treatments more generally. She has been funded by the U.S. Department of Veterans' Affairs, U.S. National Institute of Mental Health, U.S. Centers for Disease Control and Prevention, U.S. Department of Defense, and the Canadian Institutes of Health for her research on interpersonal factors in traumatization and individual- and conjoint-based interventions for PTSD. Recognizing her distinguished contributions as a clinical psychologist and educator, she is a Fellow of both the American and Canadian Psychological Associations, a Beck Institute Scholar, received the Canadian Psychological Association Trauma Psychologist of the Year Award in 2013, was named the Outstanding Mentor by the International Society of Traumatic Stress Studies in 2014, and was inducted into the Royal Society of Canada in 2016. She has co-authored 7 books, including Cognitive Processing Therapy: A Comprehensive Manual and Cognitive-Behavioural Conjoint Therapy for PTSD, and has published over 150 publications. Dr. Monson is well-known for her efforts in training clinicians in evidence-based assessments and interventions for PTSD.



LCdr (Retd) Ken Osborne
Director, Licensing and Accreditation, Law Society of Ontario
Commissioner, Ontario Soldier's Aid Commission

Kenneth Osborne served in the Canadian Forces for 24 years. Enrolling initially as a Training Development Officer, he was selected for the Military Legal Training Program in 1999. Attending Queen's University, Faculty of Law, Mr. Osborne articled with the firms Cassels, Brock and Blackwell and Greenspan, White in Toronto. He was called to the Bar in Ontario in 2004. As a lawyer with the Office of the Judge Advocate General, his key posts included roles with NATO, the Canadian Forces Legal Advisor, the Strategic Joint Staff, and as a Deputy Judge Advocate at various bases across Canada. He is a Veteran of peacekeeping operations in Bosnia-Herzegovina and combat operations in Afghanistan. Deploying to Afghanistan on two occasions, he served as the lawyer to Canada's Special Operations Task Force, and subsequently deployed as a legal mentor in a rule of law capacity with the US Forces. For service as a legal mentor in Afghanistan, and notably in regard to his dedication in supporting rule of law capacity initiatives at the Dawood National Military Hospital in Kabul in 2010, he was awarded the United States Meritorious Service Medal. Released from the Canadian Forces in 2016, he is employed with the Law Society of Ontario as the Director, Licensing and Accreditation, responsible for the licensing and accreditation activities that support the legal professions in Ontario. In 2017, Mr. Osborne was appointed by the Lieutenant Governor of Ontario as a Commissioner in the province's Soldiers' Aid Commission. Mr. Osborne resides in Niagara Falls, Ontario with his spouse Alison.



David Pedlar, PhD Scientific Director, Canadian Institute for Military and Veteran Health Research (CIMVHR)

Dr. David Pedlar is the scientific director of the Canadian Institute of Military and Veteran Health Research and professor in the School of Rehabilitation Therapy at Queens University. He has dedicated his career to advancing the care and well being of Canadian Armed Forces (CAF) Veterans. After working as a clinician, he spent fifteen years as the national director of research for Veterans Affairs Canada. He has held the positions of adjunct professor at the Faculty of Nursing at the University of Prince Edward Island and the Faculty of Medicine at Dalhousie University. In 2015, he received his second Fulbright Scholar Award as the visiting research chair in military social work at the University of Southern California where he continues as an international affiliated faculty at the Center for Innovation and Research on Veterans & Military Families. For his work in military and Veteran health, Dr. Pedlar has received a number of honours and awards. His research interests include improving military to civilian transition and enhancing Veteran well-being in the life after military service.



Shawn Rhind, PhD

Defence Scientist, Defence Research and Development Canada (DRDC) Associate Professor, University of Toronto

Dr. Shawn Rhind earned his doctorate in Immunobiology from the University of Toronto. He completed an NSERC Postdoctoral Fellowship with the Defence & Civil Institute of Environmental Medicine (DCIEM) and US Army Research Institute of Environmental Medicine (USARIEM), examining biomolecular interactions between neuro-endocrine-immune systems under severe physiological stress and environmental extremes and their impact on health and performance. Today, Dr. Rhind is a senior Defense Scientist in the military Operational Health Group at DRDC Toronto and an Associate Professor at the University of Toronto, where he leads an integrative – molecular to systemic – translational research team. His research spans basic laboratory science to human clinical trials, and is currently focused on elucidating the biological basis and therapeutic interventions for combat-related psychological and physical trauma, including PTSD and battlefield care after traumatic shock and brain injury.



Maya Roth, CPsych

Psychologist, St. Joseph's OSI Clinic, Greater Toronto Site Associate Member of the Yeates School of Graduate Studies, Ryerson University Associate Scientist, Lawson Health Research Institute

Dr. Maya Roth is a Clinical Psychologist at the St. Joseph's OSI Clinic – Greater Toronto Site. She is also an Associate Member of the Yeates School of Graduate Studies at Ryerson University, and an Associate Scientist with the Lawson Health Research Institute. Dr. Roth is a passionate advocate for evidence-based treatment of military-related PTSD and OSIs. She has presented and published in this area, and has also provided evidence-based treatment for PTSD workshops to clinicians.



Patrick Smith, PhD

CEO, Centre of Excellence on Post-Traumatic Stress Disorder and Related Mental Health Conditions

Dr. Patrick Smith began his tenure as CMHA's National CEO in April 2016. With a PhD in Clinical Psychology, he came to CMHA from Renascent - one of Canada's leading providers of abstinence-based, residential addictions treatment – where he was also CEO. Dr. Patrick Smith is the CEO for the Centre of Excellence on Post-Traumatic Stress Disorder and Related Mental Health Conditions in Ottawa, Canada. As its first CEO, Dr. Smith provides strategic leadership in the establishment and growth of the Centre of Excellence. Prior to joining the Centre of Excellence, Dr. Patrick Smith was the National CEO of the Canadian Mental Health Association (CMHA). With a PhD in Clinical Psychology, he came to CMHA from Renascent - one of Canada's leading providers of abstinence-based, residential addictions treatment - where he was also CEO. Prior to this, he was the Vice President, Research, Networks and Academic Development at the BC Mental Health and Addictions Services of the Provincial Health Services Authority in British Columbia from 2005 to 2010, and was founding Head of UBC's Addiction Psychiatry Program. From 1997 to 2005, Patrick was the Vice President of Clinical Programs at the Centre for Addiction and Mental Health (CAMH), and was Head of the Addiction Psychiatry Division at the University of Toronto. He received his PhD in 1991 from the University of Nebraska and did his internship and NIDA (National Institute on Drug Abuse) postdoctoral fellowship at the Yale University School of Medicine from 1990-1992. He was also a Fulbright Scholar at the University of Canterbury in Christchurch, New Zealand. In addition to his clinical and research background, Patrick's primary focus for much of his work has been mental health and addictions recovery and health systems planning and development. As a founding member of the Canadian Executive Council on Addictions, Patrick represented Canada as a delegate to the United Nations Committee on Narcotic Drugs (UN-CND) in both 2004 and 2009 and co-chaired the development of Canada's National Addictions Treatment Strategy.

Former Members

Christine Basnett, MSW, RSW

Jason Carr, PhD Michelle Marlborough, MD, FRCPC Sgt (Retd) Edith St-Jean, CD Clinical Social Worker, St. Joseph's OSI Clinic, Parkwood Institute

Psychologist, St. Joseph's OSI Clinic, Parkwood Institute
Psychiatrist, St. Joseph's OSI Clinic, Parkwood Institute
Coordinator, OSI Social Support (OSISS) Program

Advisory Council Meetings

March 16, 2021 London, ON (virtual)
October 25, 2021 London, ON (virtual)



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