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The Story of the Year | April 1, 2014 - March 31, 2015
Prologue

GREETINGS FROM
THE CHAIR OF THE BOARD

The story of year at the Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) is an engaging one, characterized by a deepening commitment to knowledge exchange, collaboration, consultation, and participatory engagement between the Centre, the community, and the province’s healthcare system.

The reports released by the Contextualized Health Research Synthesis Program (CHRSP) this year dealt with a variety of issues, including: health promotion strategies; interventions to prevent agitation and aggression in seniors with dementia; falls prevention in institutional care settings; and the feasibility of troponin point-of-care testing for emergency departments in smaller health centres. Working in collaboration with the provincial health system, community stakeholders, and academic partners, CHRSP has once again produced a series of relevant, timely reports on topics identified as priorities by our province’s health system. CHRSP’s reputation continues to grow nationally as well: this year saw researchers from two other Canadian provinces contact the Centre to explore potential cross-jurisdictional collaboration using the CHRSP methodology.

“...research is a key element of a responsive and effective healthcare system in Newfoundland & Labrador.”

Funding provided this year under three NLCAHR-supported programs will help graduate students and research teams whose localized knowledge and skills have the potential to make a lasting and positive impact on healthcare in our province. The Centre awarded $103,000 under the NLCAHR Awards Program to support research on issues with implications for our healthcare system: from bonus payments and physician retention to cancer survival, and from bariatric surgery outcomes to physiotherapy for post-stroke recovery. Additionally, the Centre administered the government-sponsored Newfoundland and Labrador Healthy Aging Research Program which awarded $108,890 to research projects that will look into some of the healthcare challenges facing our aging population. The Centre also administered the Enhancing Health Care Awards, sponsored by the Department of Health and Community Services, Eastern Health and the Dr. H. Bliss Murphy Cancer Care Foundation, awarding five research grants totalling $260,000 for projects related to improving patient care. Taken together, these funding programs supported a broad range of applied health research, recognizing that research is a key element of a responsive and effective healthcare system in Newfoundland and Labrador.
The Centre’s Research Exchange Groups tell another compelling story about successful capacity-building and public engagement. There are now sixteen Research Exchange Groups with a total combined membership exceeding six hundred members. Participants in these groups include faculty members from across Memorial, health practitioners, community partners, students, and policy makers. To support these groups, the Centre hosted more than fifty meetings and events this year that promoted knowledge exchange and research capacity building on a wide variety of applied health research topics. As an offshoot of this program, in May, 2014, the Centre, with support from the Office of Public Engagement at Memorial, hosted a public lecture on behalf of the Research Exchange Group on Gender, Sexuality, and Health.

In addition to these core activities, the Centre, in partnership with the Canadian Institutes for Health Research (CIHR), organized a team-building workshop in January, 2015 to explore possibilities for local teams of IT/medtech entrepreneurs and healthcare researchers to apply for funding under CIHR’s eHealth Innovation Partnership Program (eHIPP). The eHIPP opportunity aims to support innovative solutions in two priority areas: youth mental health and community-based care for seniors with complex needs. The January workshop was attended by more than eighty participants, including local IT entrepreneurs and university researchers, health system, government, and community representatives. Many valuable connections were forged at this meeting and a number of funding applications are now being planned for submission to CIHR.

My sincere congratulations to the staff of the Centre as well as to the researchers, students, health system stakeholders and community members who have contributed to the Centre’s success this year, whether as funded researchers, as participants in Research Exchange Groups, or as contributors to CHRSP research teams. Your commitment to knowledge exchange and to healthcare improvement in Newfoundland and Labrador is very much appreciated.

Dr. James Rourke, Chair  
Newfoundland and Labrador Centre for Applied Health Research  
Board of Directors
In 1999, the Newfoundland & Labrador Department of Health and Community Services, Memorial University, and the Eastern Regional Health Authority (then known as the Health Care Corporation of St. John’s) recognized the need for an organization that would support applied health research on priority topics, that would help build local health research capacity, and that would mobilize research knowledge for our healthcare system. Since then, the Newfoundland and Labrador Centre for Applied Health Research has worked steadily toward these aims. Through strong partnerships and a commitment to public engagement, the Centre helps build capacity for high-quality applied health research, strives to increase the amount and impact of such research, and facilitates the effective use of the most appropriate research evidence in the province’s healthcare system. Today, applied health researchers, community stakeholders, and health system partners alike recognize the Centre as a valuable local resource: they work with us every day to tackle the challenges of our health system head-on.

As you will see, this year’s annual report provides ample evidence of the ways in which this work is being done. In reflecting on the stories of the past year, a dominant theme emerged: public engagement. Every day, the Centre is fully engaged with its partners in health research collaboration, whether by consulting on research projects under the Contextualized Health Research Synthesis Program (CHRSP), building bridges to connect community stakeholders and research partners through our Research Exchange Groups, or helping applied health researchers to access funding from a variety of sources, including the awards programs we administer.

Drawing on vital partnerships with the province’s four Regional Health Authorities, and the Department of Health and Community Services, CHRSP has, again this year, provided decision support to our healthcare system by working in collaboration with local researchers, national experts, health system practitioners, decision makers, and community organizations. What we learned through our CHRSP studies was widely shared, not only with the knowledge users who worked with us on the project teams, but also through dissemination meetings in which we presented the key findings to professional and community organizations, to decision makers, to other knowledge users, and to healthcare practitioners across Newfoundland and Labrador and across Canada.

This year, CHRSP welcomed a new partner in health system engagement: the province’s Department of Seniors, Wellness, and Social Development. As the Department develops its strategic directions for improved
health and wellness in Newfoundland and Labrador, we look forward to working closely with it to provide decision support that will address its research priorities.

The Centre distributed roughly $472,000 in research funding this year under three programs: the NLCAHR Awards, with some financial support from the School of Graduate Studies and the Office of Research at Memorial; the government-sponsored Newfoundland and Labrador Healthy Aging Research Program; and the Enhancing Health Care in Newfoundland and Labrador Program, funded by the province, Eastern Health, and the H. Bliss Murphy Cancer Care Centre. We thank the students and researchers who applied to these programs and the members of the Peer Review Committees who evaluated their applications. Congratulations to all of those who were funded under these programs: your work will contribute to the advancement of research knowledge that will, over time, both sustain and improve healthcare services in this province.

Last but not least, one of the Centre’s overwhelming successes this year was the expansion of our Research Exchange Groups, a unique capacity-building initiative to foster multi-disciplinary public engagement. In last year’s annual report, we reviewed the contributions of nine active Research Exchange Groups; this year, that number has increased to sixteen. Through these diverse groups, 619 health professionals, students, faculty and community members connect to discuss research in progress and to review the results from completed research projects, to learn about community initiatives, to review healthcare programming, to network, to exchange knowledge, to access funding, and to collaborate on research projects.

Once again, I extend my sincere thanks to our dedicated staff and Board of Directors for their continued hard work. Mainly, though, I thank our partners from the community, from the university, and from the health system for being the real authors of NLCAHR’s continuing story of engagement.

Dr. Stephen Bornstein, Director
Newfoundland and Labrador Centre for Applied Health Research

“One of the Centre’s overwhelming successes this year was the expansion of our Research Exchange Groups.”
Chapter 1
ABOUT US
The story of the Centre

The Newfoundland and Labrador Centre for Applied Health Research

The Newfoundland and Labrador Centre for Applied Health Research (the Centre) was established in 1999 with core funding from the Department of Health and Community Services of Newfoundland and Labrador, Memorial University, and Eastern Health. The Centre is constituted as a research centre within Memorial University under the auspices of the Board of Regents. The Centre, led by a director and a board, is now funded primarily through an annual grant from the Department of Health and Community Services of the Government of Newfoundland and Labrador. The Centre also receives project funding from various granting agencies and essential financial support and administrative services from the Faculty of Medicine at Memorial University.

MISSION
The Centre’s mission is to contribute to the effectiveness of the health and community services system of Newfoundland and Labrador and to the physical, social, and psychological health and well-being of the province’s population by supporting the development and use of applied health research in this province. The Centre works with an inclusive and flexible conception of ‘applied health research’ in a spirit of openness to the widest possible range of disciplinary and methodological approaches. The Centre also seeks to collaborate fully with other local, provincial, regional, and national organizations that have similar objectives.
GOALS
The Centre has three principal goals:
• to help build human capacity and organizational resources to undertake and support high-quality applied health research in Newfoundland and Labrador;
• to increase the amount and impact of high-quality applied health research undertaken on priority research themes in the province; and
• to facilitate the more effective and efficient use of research evidence in the province’s health and community services system.

These goals are achieved through our funding programs, our collaborative activities, our research and knowledge exchange activities (including the Contextualized Health Research Synthesis Program), and our capacity development activities.

GOVERNANCE
The Director, Dr. Stephen Bornstein, manages NLCAHR and reports to the Board of Directors. The NLCAHR Board is responsible for all key policy and strategic decisions. It approves the annual budget, endorses peer review committee recommendations, and determines the overall strategic direction of the Centre. The Board of Directors is chaired by the Dean of the Faculty of Medicine of Memorial University. The Board includes representatives from the Department of Health and Community Services, the Department of Seniors, Wellness, and Social Development, Memorial University, the Newfoundland and Labrador Centre for Health Information, and Eastern Health. The Director sits on the board ex officio.

STAFF 2014-2015
• Stephen Bornstein | Director
• Rochelle Baker | Communications, Partnerships, & Research Exchange Groups Coordinator
• Alyssa Gruchy | Research Assistant (part-time) CHRSP
• Robert Kean | Research Officer, CHRSP
• Amanda Kinsella | Administrative Staff Specialist
• Sarah Mackey | Research Assistant, CHRSP
• Pablo Navarro | Research Officer, CHRSP
• David Speed | Research Assistant, CHRSP
• Tyrone White | Finance Officer, Awards Coordinator, IT Administrator

CHRSP Research Assistant, Stephanie O’Brien left the Centre this year to pursue opportunities aligned with her training as a dietitian. We thank Stephanie for her contributions to the Centre and wish her all the best in her future endeavours. This year, CHRSP Research Officer Rob Kean is working on a part-time basis, dividing his time between the Centre and Eastern Health’s Department of Research where he has taken on a temporary assignment. We acknowledge the valuable contributions of Megan Kirkland, MUCEP, Saad Rahman, ISWEP, Adam Stacey, GradSWEP, and Elliott Bursey, who volunteered his time as a Research Assistant for CHRSP this year.
Chapter 2

THE CONTEXTUALIZED HEALTH RESEARCH SYNTHESIS PROGRAM

The story of our flagship program

CHRSP is an innovative program developed by the Newfoundland & Labrador Centre for Applied Health Research to facilitate and optimize the use of scientific evidence in healthcare decision making. Working in partnership with the health system to identify research priorities for this province, CHRSP synthesizes the best research evidence from around the world and then contextualizes the findings for use right here in Newfoundland & Labrador. As a result of its innovative approach to integrated knowledge translation, CHRSP has achieved an exemplary level of health system engagement, buy-in, and research uptake. Working closely with key partners in the health system, CHRSP supports evidence-informed decision-making, one policy at a time.

HOW CHRSP WORKS

Topics for CHRSP are identified through intensive, iterative consultation with research users in the health system, including policy makers, administrators, and clinicians. This process is supported by CHRSP Champions within the four Regional Health Authorities and the provincial government (the Department of Health and Community Services and the Department of Seniors, Wellness, and Social Development). Health System Leaders (CEOs and Deputy Ministers) prioritize the topics that have been identified and these become the focus for CHRSP studies. For each topic selected, a project team is assembled with two leaders: the academic team leader is a nationally recognized subject expert in the applicable field the health system leader is a DM or CEO from the NL health system. Other team members include: CHRSP researchers; local academic and clinical experts; front-line workers, health system and community consultants.

A COLLABORATIVE APPROACH

The CHRSP Project Team collaborates on each study by:

- reformulating/refining the research question;
- searching for high-quality systematic reviews, meta-analyses, and other relevant research literature;
- critically appraising the literature;
- synthesizing the evidence;
- identifying contextual factors through province-wide consultation and focus groups;
- highlighting the implications of the evidence for local decision makers.

An External Reviewer (also a recognized subject expert) reviews the final report to ensure its validity. The results are then communicated to decision makers in formats and forums designed to maximize their uptake. CHRSP products include full 35-50 page contextualized syntheses (Evidence in Context Reports) as well as brief 10-page evidence overviews (Rapid Evidence Reports).

CHRSP Champions are essential to our growth and success.

Our special thanks to: Bev Griffiths, Larry Alsteen, Mike Doyle, Janet Templeton, Elaine Warren, Krista Butt, Vanessa Mercer-Oldford, Lisa Hoddinott, Anne Lynch, and Carol Brice-Bennett. We acknowledge the dedicated service of Wanda Legge, our long-serving CHRSP Champion from Department of Health and Community Services, now retired. Our thanks also to Tara Power, Policy Analyst, DHCS for stepping in for Wanda during our last round of topic selection.
EVIDENCE IN CONTEXT REPORTS

To date, CHRSP has published the following ‘Evidence in Context’ Reports, (35 to 50-page syntheses):

- Agitation & Aggression in Long-Term Care Residents with Dementia
- Troponin Point-of-Care Testing in Smaller Hospitals & Healthcare Centres
- Falls Prevention in Institutional Healthcare Settings
- Community-Based Service Models for Seniors
- Telehealth for Consultations in Dermatology
- Age-Friendly Acute Care
- Hyperbaric Oxygen Therapy for Difficult Wounds
- Chronic Disease Management
- Youth Residential Treatment Options
- Reuse of Single-Use Medical Devices
- Childhood Overweight & Obesity
- PET-CT in Newfoundland and Labrador
- Options for Dialysis in Rural & Remote NL

RAPID EVIDENCE REPORTS

Introduced in 2012, ‘Rapid Evidence Reports’ (RER) are brief evidence summaries that provide evidence support for healthcare decision makers on an expedited basis. The reports are prepared by our CHRSP researchers in consultation with a national subject expert. The following Rapid Evidence Reports have been published to date:

- Health Promotion Strategies for Healthy Dietary Habits
- Mobile Mental Health Crisis Prevention
- Flu Vaccination for Healthcare Workers
- Safe Patient Handling Programs
- Ambulatory Care Services for Patients with Chronic Heart Failure

SHARING THE CONVERSATION:

CHRSP reports are prepared in consultation with our health system partners on topics that these partners identify as priorities. The best available health evidence is then framed in a locally-relevant way and, as a result, health system uptake of our reports is optimized. This high level of research uptake is very rare when it comes to health evidence and is a unique feature of CHRSP.

Following are some representative samples of what our partners have to say about us. These excerpts are taken from the positive feedback we received when we recently evaluated our 2012 study on Age-Friendly Acute Care:

Western Health: “This report added to the information that we were finding from our own reviews of the research and our data, and continues to support our decision making with respect to: cohorting patients; enhancing our alignment of standards of care, for appropriate inpatients, with the long term care standards; and ongoing professional development.”

Eastern Health: “The one-page and four-page summaries were shared and discussed at the Occupational Therapist (OT) Council, a group that represents all Eastern Health OT programs. The report was useful in validating the need for OT in acute care. Having evidence to support the role of the OT, in particular in discharge planning, is excellent. The report also provided evidence for the importance of interdisciplinary team intervention. A working group has now been established to focus on inter-professional education/collaboration to ensure that healthcare students are learning this important skill.”

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Fall Prevention for Seniors in Institutional Healthcare Settings in NL

“What interventions are most effective in preventing falls and fall-related fractures among older adults in institutional healthcare settings?”

CHRSP’s health system partners asked us to identify and evaluate the best available research-based evidence on fall prevention for older adults in institutional healthcare settings, such as hospitals and residential care facilities. Health system leaders from the province’s four Regional Health Authorities (RHAs) and from within the provincial government indicated that the experience of older adults in institutional settings was a high-priority issue right across the provincial healthcare system. In describing the need to pursue this topic, Western Health officials framed the issue like this:

According to the Canadian Institutes for Health Information, falls are the cause of 57% of all injury-related hospitalizations, and more than three-quarters of all in-hospital deaths in those admitted for an injury. Accreditation Canada has identified a fall prevention strategy as a Required Organizational Practice with the goal to reduce the risk of injuries resulting from falls. Western Health has committed significant resources to the continued dissemination of a fall prevention program to reduce the number of falls in institutional settings and to reduce the severity of injuries resulting from falls. Quality and Risk Management leadership would use the results of this research to improve client outcomes and to enhance program delivery.

To carry out this study, CHRSP personnel assembled a project team that included senior officials from the RHAs, a faculty member from Memorial University’s School of Human Kinetics and Recreation, and the Executive Director of the Seniors Resource Centre of Newfoundland and Labrador. Dr. Vicky Scott, Clinical Associate Professor in the School of Population and Public Health at the University of British Columbia and Senior Advisor on Fall and Injury Prevention for the British Columbia Ministry of Health Services, was our Subject Expert for the project. Dr. Susan Gillam, Western Health’s Chief Executive Officer, served as our Health System Expert. The full CHRSP Project Team is listed below:

- Vicky Scott (Subject Expert), Senior Advisor on Fall and Injury Prevention, BC Ministry of Health Services
- Susan Gillam (Health System Expert), Chief Executive Officer, Western Health
- Patricia Moores, Clinical Occupational Therapist, Labrador-Grenfell Health
Dissemination & Feedback:
The report was disseminated at a meeting/webinar on April 25, 2014. Eighty-six participants attended this dissemination event, many of them professionals working in long-term care facilities across Newfoundland and Labrador. The meeting was also attended by health professionals from right across Canada. Feedback from the event evaluation was overwhelmingly positive and included the following comments:

“Great opportunity for discussion and learning on initiatives that can be used to improve risk from falls/fractures for our Newfoundland and Labrador seniors and long-term care residents.”

“This meeting included a lot of great information and resources! We have been in the process of implementing a falls prevention program within Personal Care Homes which has been challenging; however, we recognize that it is very important since many residents in these facilities are at risk of falls. We will be reviewing the materials provided and following up on the resources shared at this meeting.”

“Happily, I have come away with better knowledge of the evidence. I am even more appreciative that clinical applications were discussed (i.e., I have ideas about what I will do, on a practical level, with this knowledge.) The evidence was presented clearly; it will be easy to share with those staff who are not academically focussed and who may have less understanding of evidence or be less inclined to read research articles.”

“I learned that there is need for a multi-factorial approach and that relying on equipment or certain supplies in isolation is not always the best approach. The meeting also validated the need for more PTs ad OTs in long-term care settings.”
Agitation and Aggression in Long-Term Care Residents with Dementia in Newfoundland and Labrador

"Other than use of physical restraints or prescription of psychotropic medications, what interventions, strategies, and/or practices have proven effective in preventing and managing agitation and aggression in long term care residents with dementia?"

In their initial description of this important topic, health system officials framed this priority issue as follows:

Aggression in residents with dementia poses both safety and quality of care issues for all stakeholders in long-term care (LTC), including residents, their families, nursing staff, allied health professionals, etc. By understanding what triggers aggression and the strategies and interventions that work best to reduce aggression, we can achieve and maintain a safer environment for both residents and staff in LTC.

At the first CHRSP Project Meeting for this study, team members decided that the scope of the synthesis should be expanded to include evidence on the prevention and management of two closely-linked behavioural symptoms of dementia: agitation and aggression. At the same time, because moderate-to-severe dementia is far more prevalent in LTC than in other senior care settings, the team decided to restrict the focus of the synthesis to LTC, rather than including personal care homes or assisted living facilities.

CHRSP personnel assembled a multi-disciplinary project team that was led by Subject Expert Dr. Neena Chappell, Canada Research Chair in Social Gerontology and Professor of Sociology at the University of Victoria.

Members of the full CHRSP Project Team for this study were:

- Neena Chappell, Canada Research Chair in Social Gerontology, Professor of Sociology, University of Victoria (Subject Expert)
- Heather Brown, Vice President, Rural Health, Long-Term Care, and Community Supports, Central Health
- Glenda Compton, Regional Director, Long-Term Care, Eastern Health
- Stephen Bornstein, Director, NLCAHR
- Rob Kean, Research Officer, NLCAHR
- Wilma Greene, Clinical Nurse Specialist, Eastern Health
- Aaron McKim, Long-Term Care Clinical Chief, Eastern Health
- Kelli O’Brien, Vice President, Long-Term Care and Rural Health, Western Health
- Judy O’Keefe, Regional Director, Long-Term Care, Eastern Health
• Susan Stone, Clinical Psychologist, Long Term Care Program, Eastern Health
• Paula Walters, Clinical Nurse Specialist, Eastern Health
• Michelle Whittle, Nurse Practitioner, Long-Term Care, Eastern Health

Dissemination & Feedback:
The report was disseminated at two meetings. The findings were released at a networked meeting/webinar on November 27, 2014 and again at a special meeting of the Research Exchange group on Aging on February 18, 2015. Once again, feedback/uptake from participants in our dissemination events was highly positive. Here are some examples of the comments we received:

“We have included the executive summary in our toolkits for staff and the summary was shared with our clinical team leaders. This is part of a national quality improvement collaborative with CFHI that we are involved in, and results are really positive so far.”

“I will absolutely use the results of this synthesis by trying to encourage staff to incorporate some of the suggestions (from all levels suggested – promising evidence, suggestive evidence, interventions to be used in combination, etc.) in all that they do. In terms of follow-up from these discussions, I think there needs to be a greater focus on how we can work within the systems we have in place to provide more appropriate care for residents experiencing agitation and aggression.”

“The presentation was very good in all the areas you asked participants to rate. One important piece of information I learned was that in Ontario LTC they maintain staffing consistency by imposing an eight staff per resident maximum per month. Perhaps this kind of maximum could be considered for Newfoundland and Labrador’s long-term care facilities.”

Troponin Point-of-Care Testing in Smaller Hospital and Health Centre Emergency Departments in NL

“What do the scientific literature and local knowledge tell us about the clinical effectiveness, feasibility and acceptability of [troponin] point of care testing for emergency departments of smaller hospitals and health centres in Newfoundland and Labrador?”

Health system administrators in NL prioritize equitable access to health services but are challenged to maintain around-the-clock laboratory services for all emergency departments in the province. Testing delays and patient management decisions that are based on incomplete information are problematic for clinicians and potentially dangerous for patients. The Point-of-Care Testing (POCT) CHRSP project was initiated in an effort to look into this priority issue and find
out more about the effectiveness, feasibility and acceptability of point-of-care testing in emergency departments, particularly those in smaller hospitals without 24/7 central laboratories. After reviewing a range of potential point-of-care tests and in consultation with our subject expert and local stakeholders, the CHRSP Project Team limited the focus of this study to the use of troponin point-of-care tests on patients being treated in the emergency rooms of smaller health centres and hospitals in Newfoundland and Labrador for suspected Acute Coronary Syndrome.

The multi-disciplinary Project Team for this study included a large number of rural healthcare professionals and included the following:

- Nitika Pant Pai (Subject Expert), Assistant Professor Department of Medicine McGill, Division of Clinical Epidemiology; Researcher, McGill University Health Centre; Infectious Diseases and Immunodeficiency Service Researcher, Montreal Chest Institute
- Michel Grignon (Health Economist), Director, Centre for Health Economics and Policy Analysis, McMaster University
- Vickie Kaminski (Health System Leader), CEO, Eastern Health
- Stephen Bornstein, Director, NLCAHR
- Beverley Carter, Provincial Director of Pathology and Laboratory Medicine, Department of Health and Community Services
- Gail Downing, Regional Director for Emergency and Paramedicine, Eastern Health
- Michael Jong, VP Medical Affairs, Labrador Grenfell Health
- Sarah Mackey, Research Assistant, NLCAHR
- Pablo Navarro (Project Coordinator), Senior Research Officer, NLCHAR
- Dennis Rashleigh, District Medical Officer, Western Health
- Stephanie Squibb, Senior Medical Officer, Dr. William H. Newhook Community Health Centre
- Janet Templeton, Regional Program Director, Medicine and Ambulatory Care, Eastern Health
- Lynn Wade, Director, Laboratory Medicine, Eastern Health

**Dissemination:**

This report was disseminated at a meeting/webinar held on December 3, 2014. The meeting was co-convened by Dr. Nikita Pant Pai, McGill University, and Pablo Navarro, Senior Research Officer, NLCAHR. The meeting included broad representation from diverse health system stakeholders, including those who work in laboratories and emergency medicine across the provincial healthcare system. The findings were augmented by the insights of the project’s external reviewer, Dr. George Cembrowski, Associate Professor and Director of the Division of Medical Biochemistry at the University of Alberta who shared his experience with point-of-care testing with the group. Feedback from health system stakeholders will be sought when sufficient time has elapsed for uptake of this report’s results.
Strategies for Health Promotion: Healthy Dietary Habits

“What health promotion strategies have been shown to be effective for improving dietary habits in settings and populations like those of Newfoundland and Labrador?”

In requesting this report, decision makers in Newfoundland and Labrador’s health system expressed an interest in maximizing the impact of provincial health promotion initiatives. They recognized that understanding the research-based evidence for the effectiveness of a range of available health promotion strategies would help them attain that objective. Our health system partners chose to have us provide a Rapid Evidence Report on this subject because they needed support for evidence-based decision making on an expedited basis as compared to the lengthier and more comprehensive ‘Evidence in Context Reports’ issued through CHRSP. Rapid Evidence Reports provide decision makers with a summary of the scope and nature of the recent scientific literature on a priority topic.

Our report on Strategies for Health Promotion offered expedited decision support by outlining the strengths and gaps in the literature, reviewing the key points of agreement and disagreement among researchers and offering an outline of key local contextual factors for decision makers to consider when interpreting the results, all within a 30-day timeframe.

The increasing prevalence of chronic disease in Canada in general, and in Newfoundland and Labrador in particular, underscores the importance of health promotion and the determinants of health model. For this report, Pablo Navarro, Research Officer, Contextualized Health Research Synthesis Program (CHRSP) and Dr. Stephen Bornstein, Director of NLCAHR worked with Dr. Jennifer O’Loughlin, Professor, Department of Social and Preventive Medicine, School of Public Health, University of Montreal and Canada Research Chair in the Early Determinants of Adult Chronic Disease to assess the scientific literature on this topic and produce an expedited synthesis.

The resulting Rapid Evidence Report provided a brief summary of the research-based evidence on health promotion strategies and compared health communication efforts with more complex, tailored programs. Our researchers then considered these strategies in the context of Newfoundland and Labrador. In order to make the scope of this report manageable, one particular area of health promotion was studied as an exemplar: health promotion initiatives that aim to increase healthy eating habits. The study’s findings were shared broadly through online communication with a wide provincial network of health system stakeholders. A well-attended dissemination event was held on January 21, 2015, led by Dr. O’Loughlin and by Bev White of Central Health. We continue to consult with stakeholders about uptake of this report and will follow-up with an evaluation once sufficient time has elapsed for the findings to be incorporated into new public health strategies.

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WORKS IN PROGRESS
The following Contextualized Health Research Synthesis Program studies are now in progress by research teams at NLCAHR.

Type 2 Diabetes Prevention and Screening:

“What interventions are likely to be effective in reducing the incidence of Type 2 Diabetes and its medical complications in the adult population of Newfoundland and Labrador?”

Promoting Independence for Persons with Dementia:

“What interventions are most effective in preventing or delaying the admission of people with dementia into long-term care?”

Reducing Acute-Care Length of Stay:

“What does the available research-based evidence tell us about practices that promote the timely and effective discharge of patients admitted to hospitals in NL?”

FORTHCOMING STUDIES
The following topics are planned for the next round of CHRSP studies. All will be prepared as Evidence in Context Reports:

- Reducing Wait Times for Outpatient Services
- Soliciting Patient Feedback
- Nurse-Patient Ratios in Acute Care
Chapter 3

AWARDS PROGRAMS
The story of our support for research

Every year, NLCAHR supports applied health research through its various awards programs. This year, the Centre distributed roughly $472,000 in research funding through three distinct funding opportunities: the government/health system sponsored Newfoundland and Labrador Healthy Aging Research Program, and the Enhancing Health Care in Newfoundland and Labrador Program, and our own NLCAHR Awards Program.

On the following pages, we outline the many projects being undertaken by the students and researchers who were funded under these programs this year. As always, we acknowledge the valuable contributions of the members of the Peer Review Committees who evaluated the many funding applications we received. We also thank all of those who applied for their commitment to advancing applied health research in Newfoundland and Labrador.

Our congratulations to the winners.
RESEARCH ON HEALTHY AGING: THE 2015 NL-HARP AWARDS

This year, seven research projects received a total of $108,980 through the Newfoundland and Labrador Healthy Aging Research Program (NL-HARP), a funding opportunity offered by the Government of Newfoundland and Labrador and administered by NLCAHR to support research that aligns with the Provincial Healthy Aging Framework. Since its inception in 2008, NL-HARP has provided close to $1.1 million in support of research into healthy aging. The following recipients were funded under the 2015 NL-HARP Awards Program:

Project Grants: These grants enable a team of local and national international researchers to be assembled to conduct research on a topic related to healthy aging.

Dr. Marshall Godwin, Professor Family Practice Unit, Director, Primary Healthcare Research Unit, Faculty of Medicine, Memorial University | $30,000
Descriptive analysis of the health and health services utilization of very elderly Newfoundlanders

Dr. Rick Audas, Associate Professor, Health Statistics and Economics, Community Health and Humanities, Faculty of Medicine, Memorial University | $50,000
Chronic pain and aging in Newfoundland and Labrador: a quality of life and healthcare utilization profile

Dr. Roberta Didonato, Dept. of Psychology, Faculty of Science, Memorial University | $20,000
Do visual enhancements of healthcare instructions improve learning and memory performance in older adults?

Dr. Caroline Porritt, Assistant Professor, School of Nursing, Memorial University | $9,840
Developing and testing a dialect-sensitive and culturally-appropriate diabetes educational tool for older adults of rural Newfoundland and Labrador

Dr. Marilyn Porter, Research Professor, Professor of Sociology, Memorial University | $10,000
Grandmothers on the move: older women immigrants and healthy aging

Doctoral Dissertation Awards: This grant category helps doctoral candidates cover the cost of their research and its dissemination.

Jennifer Woodrow, Community Health & Humanities, Faculty of Medicine, Memorial University | $2,000
Osteoarthritis in Newfoundland and Labrador: an examination of prevalence, incidence, comorbidity, financial burden and accessibility to care

Nicholas Snow, Department of Physical Therapy, University of British Columbia | $7,500
Using long-term aerobic exercise to modulate corticospinal excitability and intracortical networks in sedentary older adults

Seed Grants: These grants support the development of research teams in Newfoundland and Labrador capable of obtaining funding from national and international granting agencies in the area of applied health research.
RESEARCH TO IMPROVE PATIENT CARE: THE ENHANCING HEALTH CARE AWARDS

A total of $259,000 was awarded to five recipients of this year’s Enhancing Health Care in Newfoundland and Labrador research funding. This awards program aims to advance the care of patients in our province and was established following the recommendations put forth by the Commission of Inquiry on Hormone Receptor Testing (the Cameron Inquiry). The Enhancing Health Care in Newfoundland and Labrador research fund is valued at $1 million over four consecutive years and is sponsored by: the Department of Health and Community Services - $400,000; Eastern Health - $400,000; and, the Dr. H. Bliss Murphy Cancer Care Foundation - $200,000. Since this research fund was established, $647,500 has been awarded. In this year’s competition, the following grants were awarded:

- Dr. Kara Laing, Associate Professor and Acting Chair of Oncology (Medical Oncology), Faculty of Medicine, Memorial University/Oncologist, Dr. H. Bliss Murphy Cancer Centre, and Dr. Scott Edwards, Clinical Assistant Professor Oncology (Pharmaceutical Sciences), Faculty of Medicine, Memorial University/Oncologist, Dr. H. Bliss Murphy Cancer Centre | $75,000
  *Enhancing knowledge, quality and safety of oral chemotherapy delivery and management in Newfoundland & Labrador*

- Dr. Roger Chafe, Assistant Professor/ Director of Pediatric Research, Faculty of Medicine, Memorial University | $74,990
  *Improving the transition from pediatric to adult care for the childhood cancer survivor*

- Dr. Dana Grzybicki, Quality Systems Research Manager, Eastern Health, and Dr. Stephen Raab, Chief of Laboratory Medicine, Eastern Health/ Professor of Laboratory Medicine, Faculty of Medicine, Memorial University | $44,312
  *Implementation of pathologist teamwork to decrease diagnostic errors*

- Dr. Natalie Bridger, Assistant Professor of Pediatrics, Faculty of Medicine, Memorial University/Pediatrician, Janeway Children’s Hospital and Rehabilitation Centre, and Dr. Mohamed Shehata, Assistant Professor, Faculty of Engineering and Applied Science, Memorial University | $40,000
  *The use of an electronic hand-hygiene monitoring system to improve hand-hygiene compliance: a pilot project*

- Adam Stacey, Graduate Student, Psy.D. Program, Department of Psychology, Memorial University | $24,535
  *The effects of mindfulness training on physician-patient communication*

FUNDING FOR APPLIED HEALTH RESEARCH: THE NLCAHR AWARDS

This year, the Centre awarded $103,000 in funding to eight applicants whose studies will explore a range of issues with implications for our healthcare system. The NLCAHR Awards Program attracted 22 competitive applications for its project grants, development grants, doctoral research, and master’s level research grants. Awards were granted to Memorial University faculty and students in three categories.

Project Grants

Dr. Maria Mathews, Professor of Health Policy/Healthcare Delivery, Community Health & Humanities, Faculty of Medicine | $25,000
The impact of retention bonus payments on physician retention and turnover in Newfoundland and Labrador

Dr. Laurie Twells, Associate Professor, School of Pharmacy (Joint Appointment with Faculty of Medicine), and Dr. Deborah Gregory, Clinical Assistant Professor of Medicine | $25,000
A population-based evaluation of the economic outcomes associated with bariatric surgery in Newfoundland and Labrador

Dr. Shabnam Asghari, Assistant Professor, Primary Healthcare Research Unit, Faculty of Medicine, Memorial University, and Dr. Guang Sun, Professor of Medicine | $24,940.75
Who we are, where we came from, and how we live: factors contributing to a high-risk lipid profile in Newfoundland and Labrador

Doctoral Research Grants

Yun Zhu, Division of Community Health & Humanities, Faculty of Medicine | $8,000
Folate, alcohol consumption and colorectal cancer survival: a Mendelian randomization study

Master’s Research Grants

Christopher Olsen, Division of Community Health & Humanities, Faculty of Medicine | $5,000
An examination of the Interim Federal Health Program in St. John’s, Newfoundland

Jacques Van Wijk, Department of Clinical Epidemiology, Faculty of Medicine | $5,000
Change in risk factor status following diagnosis of incident cardiovascular disease and diabetes, in a Newfoundland cohort

Jennifer Shears, Neuroscience, Faculty of Medicine | $5,000
Optimizing Recovery Post-Stroke: A Comparison of two methods to relearn symmetry when moving from sitting to standing

Lian Shi, Division of Community Health & Humanities, Faculty of Medicine | $5,000
Exploring causal association between smoking, alcohol consumption, and colorectal cancer in Newfoundland: a Mendelian randomization study
Chapter 4

RESEARCH EXCHANGE GROUPS
The story of healthy engagement at the Centre

The Research Exchange Group program at NLCAHR was developed to build capacity and to support collaboration in applied health research. These groups provide an opportunity for researchers, students, decision makers, clinicians, community groups, and members of the public to exchange research knowledge on a given topic related to health. Membership in these groups is open to all. The meetings are accessible by webinar and often include participants from across Canada and around the world. Research Exchange Groups encourage knowledge translation, capacity-building, research team development, collaboration, and the identification of research priorities. The activities of Research Exchange Groups are determined by the participants themselves. Some groups work on funding proposals to develop a program of research. Others invite speakers to present their research or to discuss healthcare programming. Some groups provide faculty support and feedback to students for their post-graduate research; others organize workshops, visiting speakers, and symposia.

No matter how they are organized, all Research Exchange Groups offer the chance for members to build connections with people from a range of disciplines and backgrounds who share their special interests.

This year saw a significant expansion of this program, as awareness of these groups continues to grow in the university and broader health system community. The Centre now hosts sixteen Research Exchange Groups (up from nine groups last year) whose combined membership exceeds six hundred participants. Their many activities are outlined on the following pages.
Research Exchange Groups at NLCAHR cover a broad spectrum of interests. We are currently seeking members for the following new groups, which are either recently established or being planned for the coming year:

- Cancer Care Research
- Harm Reduction & Critical Drug Studies
- Health and the Built Environment
- Military Families’ and Veterans’ Health
- Technology and Health
- Thrombosis, Blood, and Immune Disorders
AGING The Research Exchange Group on Aging is one of the first established at the Centre and one of the largest groups, with 88 registered members. Founded in 2007, this group provides a forum where students, researchers, policy makers and the general public can meet to discuss issues related to healthy aging in Newfoundland and Labrador. The group’s objectives include: building collaborations and partnerships; mentoring students and new researchers; communicating funding and research opportunities; identifying knowledge gaps and needs relevant to aging. Group members come from a variety of disciplines and sectors, including Medicine, Nursing, Social Work, Education, Human Kinetics and Recreation, Psychology, Public Policy, NGOs, the provincial government, and Regional Health Authorities. This year, the group hosted presentations on a variety of topics, including: remote fall detection devices, assistive technologies for seniors, telegerontology for rural and remote communities, age-friendly community capacity building, and an overview of Western Health’s new restorative care program, among others.

AUTISM The Research Exchange Group on Autism has 52 members. The presentations hosted by this group are of interest to people with Autism Spectrum Disorder (ASD) and to their families/caregivers as well as to the research community. This year, the group met with the Arts & Health Research Exchange Group to learn about the neuroscience behind Sensory Art Therapy for children diagnosed with ASD.

THE ARTS & HEALTH With 50 active members, the Research Exchange Group on the Arts and Health includes Memorial University researchers, community activists, and artists who aim to explore how the arts are connected to our health. This year, the group hosted a series of diverse research and programming presentations, including: a research presentation on participatory video and sexual rights for persons with disabilities; preliminary findings from a study to promote artistic activity and integrate an arts program in our medical school; emerging work with the principles of improvisation; the ethics of arts-based research methods; a workshop on drama and improvisational techniques to help children improve their social skills; sensory art therapy for the Autism Spectrum Disorder Population; an interactive tour of the Rooms Provincial Art Gallery; a PhD project that used film and personal narrative to explore the grief associated with end-stage renal disease; and an overview of workshop findings on effective methods for evaluating the community impact of arts-based programming.

BULLYING AND HEALTH The Research Exchange Group on Bullying and Health was founded in September 2013 to bring researchers, faculty, educators, students, practitioners, and policy makers together to discuss applied health research on issues related to bullying and health in Newfoundland and Labrador, whether focussed on the school system, the workplace, the post-secondary experience, health professional bullying or issues of leadership and restorative justice. The goals of this group, which now has 48 members, include creating research partnerships; identifying funding opportunities and research gaps; working towards developing greater overall capacity to conduct research on bullying and health; and promoting the use of research evidence to inform
decisions about public policy on bullying and health in Newfoundland and Labrador. This year’s presentation topics included lectures about bullying & the law in Canada; cyber-bullying myths and facts; an overview of the English School District’s Safe and Caring Schools Policy; factors at home and school associated with cyber bullying; and a presentation about research on violence against teachers.

**CHRONIC DISEASE** The Research Exchange Group on Chronic Disease was founded in January, 2013. Its 41 members include educators, researchers, practitioners, and policy makers who gather to discuss applied health research and policy directions on issues related to chronic disease in Newfoundland and Labrador, whether diabetes, COPD, kidney disease or other chronic conditions that have an impact on the health of our province’s population. Presentations to the group cover a broad range of research interests, from disease prevention to policy frameworks to models of care for patients with chronic disease; this year, the group heard about: a study on physical activity and its impact on cancer; emerging opportunities to enhance patient-oriented research in Newfoundland and Labrador and chronic disease prevention and management programming at Western Health.

**EATING DISORDERS, DISORDERED EATING & BODY IMAGE** This Research Exchange Group is called EDDEBI (Eating Disorders, Disordered Eating, Body Image) to reflect the range and inter-connectedness of issues under study. The 26-member group includes researchers from Biochemistry, Human Kinetics, Community Health and Humanities, and the University Counselling Centre; faculty from Medicine who are clinicians in psychiatry, adolescent medicine, and pediatric endocrinology; Eastern Health clinicians in specialty areas: Clinical Psychology, Eating Disorders and Childhood Obesity and Clinical Dietitians. At this year’s monthly meetings, the group reviewed the many research projects being undertaken by its members on topics that included: the impact of weight on fertility treatment; an evaluation of programming at the Hope Foundation; medical students’ help-seeking behaviours; critical obesity studies; body image research; access to mental health services for children and youth with eating disorders; and a study on stress and emotion regulation in university student athletes.

**HEALTH IMPACTS OF FRACKING**
A new Research Exchange Group on the Health Impacts of Fracking (hydraulic fracturing) was established in February, 2015 to build research capacity in Newfoundland and Labrador on this important public health issue. The 39-member group includes university researchers, health professionals, decision makers, citizens and community group representatives who share an interest in research into the health impacts of hydraulic fracturing, particularly the potential health impacts of this industrial activity on community health in Western Newfoundland and Labrador. At its inaugural meeting, the group agreed to pursue the following objectives: to inform the Government NL’s Independent Panel for the Review of Hydraulic Fracturing prior to that panel’s announcement in October, 2015; to share information and carry out further research into the health impacts of hydraulic fracturing, particularly as these relate to proposed oil
exploration in Western NL; and to explore funding opportunities and collaborative partnerships towards future research.

**GENDER, SEXUALITY, AND HEALTH**

This group of 51 members was established in 2006 as the Research Exchange Group on Women’s Health/ Gender and Health. It facilitates networking among researchers, graduate students, and policy makers who are interested in gender, sexuality, and health research. The group is open to all and meets bi-annually to discuss research projects from a range of academic disciplines. The group includes representatives from government, the healthcare system, academia, and the community at large. On March 5, 2015, Dr. Julia Temple-Newhook presented on the health, well-being, and support needs of transgender children and their families during social transition. On November 12, 2014, Zack Marshall and Gerard Yetman discussed sexual health research methodologies that are designed to engage people who commute across provinces for work, together with the people in their social networks. For its annual Research Talks lecture this year, NLCAHR, on behalf of this Research Exchange Group, hosted a public lecture by gay men’s health activist Mikiki at the Eastern Edge Gallery in St. John’s on the shifting messages around HIV prevention, HIV stigma, and recent studies that link community-wide HIV treatment to community-wide HIV prevention. (Details about this event are included in Chapter 5 - Engagement & Partnerships).

**GLOBAL HEALTH** Global Health is often associated with research in international, and often Low Income Country (LMIC) settings, but global health researchers, practitioners and educators recognize that the field actually transcends borders and is a broader study of the global processes that shape the health of people both at home and abroad. In this light, global health research examines the social and environmental determinants, issues related to health equity, power relations, post-colonialism, migration, globalization and epidemiology, among other things. The new Global Health Research Exchange Group is a collaborative forum for people who are doing research, or who have involvement in practices or programs on any aspect of health or influences on health that resonate beyond the local context in research site or application. The group hopes to explore the potential to develop international partnerships in research, as well as opportunities to develop transdisciplinary research synergies, propose new research and share ongoing work in a global health context. The Research Exchange Group on Global Health has 28 members and is actively recruiting. It will hold its first meeting in June, 2015 to establish its overall objectives.

**HARM REDUCTION AND CRITICAL DRUG STUDIES** The Research Exchange Group on Harm Reduction and Critical Drug Studies has 16 members and is actively recruiting others. Members include researchers, service providers, and active/recovering drug users and the group hopes to identify priority research and policy issues relating to substance use, harm reduction, and addiction treatment/recovery services; to facilitate networking among researchers, service providers, policy makers and drug/service users; to establish an independent
user-run, user-led group in St. John’s, made up of past and present, active and recovering drug users that can provide peer-led consulting and training services for researchers, government agencies, policy makers, and social service agencies that work with people who use drugs; and, ultimately, drawing from the popular drug user activist mantra ‘nothing about us without us,’ the group seeks to include people with lived experience of substance use and/or dependence in every aspect of the policies and programs that affect their everyday lives. The first St. John’s Drug Users’ Group meeting took place on March 11, 2015 and was well-attended. The first Harm Reduction and Critical Drug Studies REG meeting will take place in July 2015.

MENTAL HEALTH The Research Exchange Group on Mental Health has 63 active members and meets monthly to provide a forum for discussions about mental health research in Newfoundland and Labrador. The overall goals of this group are to foster research collaboration on topics related to mental health across a range of academic disciplines; to enable group members to network and connect with others who share their interest in mental health issues; and to work towards developing a greater overall capacity to conduct research on mental health issues in Newfoundland and Labrador. This year, the group hosted a number of well-attended presentations, including: Mark Gruchy of the Canadian Mental Health Association on the new CC4MH initiative (Community Coalition for Mental Health); Lisa Zigler, Project Coordinator, on Navigators and Networks (NAVNET) an initiative that addresses system barriers affecting individuals with multiple and complex needs in St. John’s. Michele Butler and Kerry LeFresne of the NL Centre for Health Information (NLCHI) on data sources available to researchers through the NLCHI; Dr. Peter Cornish, Associate Professor and Director, Memorial University Counselling Centre, on a stepped care model for mental healthcare based on an innovative approach that was developed in the UK.

MILITARY FAMILIES’ AND VETERANS’ HEALTH This new Research Exchange Group now has 18 members and is actively seeking others with an interest in research into the health and well-being of Canada’s military personnel and Canadian veterans. The group plans to hold its first meeting on June 4, 2015 with a presentation by Dr. Heidi Cramm (Queen’s University) who heads Knowledge Translation in the Canadian Institute for Military and Veteran Health Research. Then, on June 5, 2015, Dr. Gail Wideman, the group’s convener, will host a public engagement meeting funded by Memorial’s Office of Public Engagement. This meeting will bring together researchers and military and civilian service providers to discuss potential research collaborations on matters related to health of military personnel, veterans and their families. Personnel from the Military Family Resource Centre, Integrated Personnel Support Centre (Canadian Forces Station St. John’s), Operational Stress Injury Support, and Veterans Affairs have agreed to participate, along with several community-based civilian service providers.

ORAL HEALTH This Research Exchange Group convenes annually to discuss oral health topics of significance in Newfoundland and
Labrador. The primary purpose of the group is to consider existing and potential oral health issues

**RURAL, NORTHERN, AND ABORIGINAL HEALTH** This Research Exchange Group has 53 members who facilitate networking amongst researchers, graduate students, and policy makers who are interested in issues related to rural, northern and aboriginal health. The group exchanges information and ideas about research projects and proposals, potential sources of funding, and opportunities for training and knowledge exchange. Past presentations include: access to healthcare services in Labrador and an overview of the Innu Medical Glossary by Memorial University linguist Dr. Marguerite MacKenzie. The group plans to host an event in 2016 focussing on research into suicide prevention in aboriginal communities.

**TECHNOLOGY AND HEALTH** The Research Exchange Group on Technology and Health is in the planning stage with a view to convening in 2015-2016. This group will aim to identify and promote research that will address the following gaps: the gap between technology procurers and healthcare providers; the need for evaluation of the effectiveness of health technologies, both before and after purchase/implementation; and the need for strategic decision making (i.e., addressing healthcare issues cost-effectively with technology; promoting technology that can serve multiple purposes, provincial healthcare planning, etc.)

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**PRIMARY HEALTHCARE** This new Research Exchange group was established to provide a forum where faculty, students, physicians, and others with an interest in primary healthcare can meet to collaborate on projects, exchange research knowledge, and seek funding opportunities. The group, with 31 members, held three meetings this year. The first was a planning meeting in September, 2014 and the second, in November, 2014, included a presentation by Robert Thompson, Executive Director of the Newfoundland and Labrador Medical Association on plans for primary healthcare reform in the province. In January, 2015, Dr. Kris Aubrey-Bassler provided an overview of the current status of Newfoundland and Labrador’s Primary and Integrated Health Care Innovations Network (PIHCIN) which is one of three initiatives currently operational in Newfoundland under the Strategies for Patient Oriented Research (SPOR) Network and Robert Thompson briefed members about NLMA’s Clinical Stabilization Fund (CSF), a one-time unallocated fund with close to $1 million, most of which is available to support projects related to primary healthcare reform in NL. John Knight provided an update on the NL Centre for Health Information’s role in developing a province-wide EMR (electronic medical record) system.
Research Exchange Groups by the Numbers

Membership in our Research Exchange Groups expanded considerably this year. Here are the numbers:

- Aging - 88
- Autism - 52
- Arts & Health - 50
- Bullying & Health - 48
- Chronic Disease - 41
- Eating Disorders/Body Image – 26
- Health Impacts of Fracking - 39
- Gender, Sexuality & Health - 51
- Global Health - 28
- Harm Reduction & Critical Drug Studies - 16
- Mental Health - 63
- Military Families and Veterans’ Health - 18
- Oral Health - 15
- Primary Healthcare - 31
- Rural, Northern & Aboriginal Health - 53

That’s 619 members.

Each group has an average of 41 members. The number of group meetings hosted at NLCAHR this year? 47
Chapter 5

ENGAGEMENT & PARTNERSHIPS
The story of local, provincial, and national engagement and partnerships

This year, the Centre engaged with community and health system partners at the local, provincial and national levels. The following is an overview of this engagement activity, including events hosted by NLCAHR and our participation in partnerships and collaborations, research projects, meetings and conferences.

EVENTS HOSTED BY NLCAHR

Research Talks: Shifting Discourses in Gay Men’s Sexual Health

Research Talks is a series of free public lectures hosted by NLCAHR to highlight research on topics selected by our Research Exchange Groups. This year, the Research Exchange Group on Gender, Sexuality, and Health asked us to invite a visiting lecturer to St. John’s for a public forum on the sexual health issues facing gay men, particularly as they relate to HIV/AIDS prevention. Mikiki has worked as a Gay Men’s Sexual Health Outreach Worker in Ottawa, as an HIV Educator in Montreal, and he is presently the Poz Prevention Coordinator at the Toronto People with AIDS Foundation. His presentation, “Strategic Positioning: Shifting Discourses in Gay Men’s Sexual Health,” took the form of an interactive forum and public discussion that explored shifting messages around HIV prevention, HIV stigma, and recent studies that link community-wide treatment to community-wide HIV prevention. This well-attended public event was planned to coincide with the 23rd Annual Canadian Conference on HIV/AIDS research that took place in St. John’s over that same week. Our event was featured on CBC Television’s Here & Now as well as being the subject of a feature article in the Telegram newspaper. Feedback from the community was overwhelmingly positive, with one attendee telling us, “I learned about important strategies for LGBTQ interaction with healthcare professionals regarding sexual health that can shift the discussion away from stigmatizing particular behaviours and towards a more respectful dialogue that will contribute to sexual health and well-being.” The event was hosted at Eastern Edge Gallery on May 6, 2014. It was the result of a community-university partnership between NLCAHR, the AIDS Committee of NL, the Research Exchange Group on Gender, Sexuality & Health, and the Make it Better NL Campaign and was supported by Quick Start Funding from Memorial University’s Office of Public Engagement.

Annual Report of the Newfoundland and Labrador Centre for Applied Health Research
Team-Building Workshop: e-Health Innovations Partnership Program

On January 27, 2015, the Newfoundland and Labrador Centre for Applied Health Research hosted a one-day provincial workshop to build collaborative teams with the goal of applying for funding under the e-Health Innovations Partnership Program (eHIPP), a new collaborative funding program offered by the Canadian Institutes for Health Research that was designed to create cost-effective healthcare by co-developing innovative e-health solutions in partnership with Canadian technology companies. The funding is intended to support e-health technologies in two domains: to help support community-dwelling seniors with complex healthcare needs and to address the needs of youth with mental health issues.

Dr. Stephen Bornstein facilitated the workshop, which included presentations by: Dr. Robyn Tamblyn, Scientific Director, CIHR Institute of Health Services and Policy Research who provided an overview of the funding opportunity; Dr. Roger Butler (Eastern Health/Memorial University) who outlined key health journey challenges faced by community-dwelling seniors with complex care needs in Newfoundland and Labrador and outlined his own research on tele-gerontology; and Dr. Peter Cornish (Memorial University Counselling Centre) who provided an overview of health journey challenges in terms of early identification and interventions for youth with mental health conditions and outlined a stepped model of care that would use technology to assist youth with mental health issues.

The workshop welcomed 88 participants, including representatives of provincial technology companies, the healthcare system, government, and community organizations who worked with researchers and students from Memorial University to identify key challenges in patient journeys and to develop ideas for potential e-health innovations that might address these challenges. As a result of the workshop, a number of research teams from Newfoundland and Labrador have submitted applications for funding under the federal e-HIPP opportunity. This workshop was supported by funding from CIHR and from the University of New Brunswick’s Springboard Atlantic Program.
LOCAL & PROVINCIAL PARTNERSHIPS & ACTIVITIES

The Building Healthy Communities Collaborative

Pablo Navarro, NLCAHR’s Senior Research Officer, is Co-Chair of the Building Healthy Communities Collaborative (BHCC), a province-wide, cross-sectoral organization whose membership includes professionals from the health, planning, transportation and recreation sectors. The BHCC promotes and supports the creation of healthier built environments through the integration of research-based concepts, principles and evidence into policies and practices at the municipal, regional and provincial levels in Newfoundland and Labrador.

The major achievement of the BHCC in 2014 was the authorship of the wellness paper "Building Healthy Communities," developed on behalf of the Provincial Wellness Advisory Council. Pablo Navarro and Dr. Catherine Donovan presented this paper to the Minister of Health and Community Services and to the Minister of Seniors, Wellness, and Social Development in September, 2014. The paper provided an overview of the provincial built environment, its impact on health and wellbeing, and the health outcomes of interventions designed to improve those outcomes. The paper also identified and described potential levers for affecting change, as well as possible strategies for creating healthier built environments in Newfoundland and Labrador.

In 2014, the BHCC also completed its Healthy Canada By Design (HCBD) project, funded by the Coalitions Linking Action and Science for Prevention (CLASP). The HCBD project supported partnership between community planners and health professionals, as well as collaborative actions involving decision-makers, researchers and community stakeholders. The activities of the Centre’s partnership with the HCBD project are outlined in a supplement of the Canadian Journal of Public Health dedicated to the HCBD CLASP initiative (page eS59). In April, 2014, Pablo Navarro and Dr. Catherine Donovan (Faculty of Medicine) presented on the HCBD project at the Chronic Disease Prevention Alliance of Canada’s annual conference in Ottawa. Mary Bishop (CBCL Ltd.). Co-Chair of the BHCC, presented at the Canadian Public Health Association National Conference in Toronto, May, 2014. In July 2014, Pablo Navarro also attended the 2014 Canadian Institute of Planners/Atlantic Planners Institute Conference “People Matter,” to discuss the NL initiative with public planners and to learn about pan-Canadian strategies for building healthier communities.
In December, 2014, the BHCC partnered with the Atlantic Planners Institute-NL Chapter to host “Collaboration in Action,” a one-day workshop held at Memorial University. The December 12 workshop, coordinated by Pablo Navarro and Indra Krishnan, a graduate student at Memorial University, included presentations and small-group activities that focused on research, practice and policy on healthy built environments in Newfoundland and Labrador. Participants shared information about their accomplishments and challenges over the past year, learned about new tools and emerging research, and discussed opportunities for scaling up successful innovations. The event was hosted by NLCAHR in partnership with the Newfoundland and Labrador Branch of the Atlantic Planners Institute and the Building Healthy Communities Collaborative (BHCC).

Additionally, throughout 2014, Pablo and Indra have been working on a report that will outline a set of indicators that could be used to design healthy built environments and that could be implemented on the Province’s Community Accounts platform.

**NL Centre on Aging Working Group**

The Centre continues to support the planning process for the establishment of a provincial centre or institute on aging, and is working with a sub-group of our Research Exchange Group on Aging towards this initiative. This year, the working group helped arrange the appointment of Dr. Benjamin Zendel as Canada Research Chair on Aging in Rural Communities and Small Towns, working within the Division of Community Health & Humanities at Memorial University’s Faculty of Medicine.

**Expert Working Group on Public Engagement**

Stephen Bornstein continued to serve on this group whose purpose is to provide advice for the implementation of Memorial’s Public Engagement Framework, to address challenges in university-public engagement, and to explore public engagement opportunities and best practices. The Expert Working Group includes people from within Memorial and from the community who are leaders in university-public engagement. This year, the group is developing the Memorial University Strategy Document for Civic Engagement and Social Innovation to help develop and support partnerships and programs that promote social innovation, strengthen our democracy, and enrich our communities.

**Faculty of Medicine Senior Management Committee**

Dr. Bornstein serves on the Memorial University Faculty of Medicine’s Senior Management Committee. This group includes senior administrators in the Faculty of Medicine: associate deans, assistant deans, chairs, and several staff administrators. The Management Committee meets monthly to provide advice to the dean on matters of strategic planning, development, management and control of resources towards attainment of
the mission of the Faculty of Medicine and to foster communication among faculty disciplines, programs and divisions.

**ARNNL Public Policy Advisory Committee**
In 2014, Rob Kean, CHRSP Research Officer, served on the Public Policy Advisory Committee of the Association of Registered Nurses of Newfoundland and Labrador. This Committee meets regularly to discuss issues of health-related public policy and its impacts on the nursing profession in the province. In 2015, Rochelle Baker, Coordinator of Communication, Partnerships, and Research Exchange Groups, will serve as the Centre’s representative on this Committee.

**Provincial Wellness Advisory Council**
Pablo Navarro is a member of the Provincial Wellness Advisory Council whose membership includes broad representation from non-government agencies, professional associations and government departments who provide guidance to the Department of Seniors, Wellness and Social Development, through the Minister, in the development of the Provincial Wellness Plan. The Government of Newfoundland and Labrador continues to work with and look to the Provincial Wellness Advisory Council for its expertise and guidance on the continued implementation and evaluation of the Provincial Wellness Plan. The Council also provides strategic advice on wellness issues.

**NATIONAL PARTNERSHIPS & ACTIVITIES**

**National Network of Centre Directors in Health Services and Policy Research**
Stephen Bornstein serves as Co-Chair of the Network of Centre Directors in Health Services and Policy Research. The Network brings together the leaders of twelve research centres from across Canada that specialize in health services and policy issues. This group meets six times a year (in person or by teleconference) to discuss common challenges and opportunities and to undertake collaborative projects. Funding for the Network is provided by a grant from the Institute of Health Services and Policy Research of CIHR.

**Canadian Agency for Drugs and Technologies in Health (CADTH)**
The Centre continues its productive partnership with CADTH at the local level, through consultation with CADTH’s provincial liaison officer, and nationally, through participation in CADTH’s annual conferences. Stephen Bornstein participates in CADTH’s Health Technology Assessment (HTA) Exchange, a network of sixteen Health Technology Assessment producers established in accordance with Canada’s Health Technology Strategy. This network coordinates the gathering of evidence and policy advice regarding health technologies to support the needs of the federal, provincial, and territorial jurisdictions. The Exchange uses an open, inclusive and flexible model that builds on current capacity and grows as pan-Canadian capacity builds.

**Canadian Rural Health Research Society**
In October, 2014, Stephen Bornstein was appointed as Chair of the Board of the Canadian Rural Health Research Society (CRHRS), an organization that facilitates research and knowledge translation aimed at understanding and promoting health in rural and remote Canada.
National Alliance of Provincial Health Research Organizations (NAPHRO)
Stephen Bornstein is a member and Co-Chair of NAPHRO, a voluntary association of Provincial Health Research Organizations. NAPHRO provides a forum to share ideas, communicate lessons learned, and define opportunities for collaboration with respect to issues and challenges confronting the health research enterprise across the country. The Alliance meets formally twice a year, in person and by teleconference, to share information and identify potential opportunities for working collaboratively on common issues.

Additionally, Pablo Navarro sits on the NAPHRO Impact Assessment Group. This group includes representatives from each of the provincial health research funding organizations and CIHR and has been developing and implementing tools that assess the bibliometric and econometric impacts of provincial health research funding. These tools are intended to inform decision makers and research communities about the returns on research funding investments at the academic level and in terms of their benefits for Canadian society at large.

Canadian Forum of Health Research Funders
The Centre continues its membership in this national forum which includes all members of NAPHRO plus the key national-level health funding agencies (CIHR and CFHI) and the nation’s major health charities.

Canadian Cochrane Centre (CCC)
Stephen Bornstein is the local campus representative for the Canadian Cochrane Centre, an organization devoted to cultivating evidence-based decision-making by promoting the use and accessibility of Cochrane Reviews. The CCC supports and offers high-quality training to those interested in using and producing Cochrane Reviews.

McMaster University Optimal Aging Portal Expert Advisory Committee
Stephen Bornstein is a member of this committee whose purpose is to identify, prioritize, and evaluate issues relevant to those interested in optimal aging, seniors and their caregivers, researchers, clinicians, and policy makers who access this portal.

Canadian Health Services and Policy Research Alliance (CHSPRA)
The Centre’s Director serves on the executive of this new national organization that was developed under the leadership of CIHR’s Institute for Health Services and Policy Research (IHSPR). CHSPRA involves partners, stakeholders, health services/policy research leaders with the aim of bringing greater collaboration and coordination to health services policy research activity and investment in Canada and optimizing the relevance and impact of HSPR investments in high-priority areas of pan-Canadian interest. This Alliance provides an important vehicle for advancement of the Pan-Canadian Vision and Strategy for Health Services and Policy Research. Dr. Bornstein co-chairs CHSPRA’s committee on training initiatives.
## MEETINGS, CONFERENCES AND EVENTS

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Location</th>
<th>Description</th>
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<tbody>
<tr>
<td>Institutes of Health Services Policy Research Priorities Forum/ Workshop</td>
<td>April 1, 2014 Toronto</td>
<td>The Centre’s Director attended the IHSPR Priorities Forum for partners, policy leaders, citizens and representatives of the IHSPR community to develop the inaugural pan-Canadian Vision and Strategy for Health Services and Policy Research.</td>
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<tr>
<td>National Alliance of Provincial Health Research Organizations (NAPHRO) Bi-Annual Meeting</td>
<td>April 2-3, 2014 Toronto</td>
<td>Stephen Bornstein attended this meeting of the Alliance to discuss opportunities for working collaboratively on common issues.</td>
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<tr>
<td>2014 Canadian Agency for Drugs and Technology in health (CADTH) Symposium</td>
<td>April 6-8, 2014 Gatineau</td>
<td>Stephen Bornstein was a speaker/facilitator for the workshop “Opportunity (Cost) Knocks! Getting the Most out of HTA Resources” at the 2014 CADTH Symposium, the tenth pan-Canadian forum organized by the Canadian Agency for Drugs and Technologies in Health. This year, the symposium’s theme was: <em>The Realities of Health Care Decision-Making: Evidence, Values, and Collaboration.</em></td>
</tr>
<tr>
<td>Chronic Disease Prevention Alliance of Canada (CDPAC) Conference 2014</td>
<td>April 8-11, 2014 Ottawa</td>
<td>Pablo Navarro and Dr. Catherine Donovan (Faculty of Medicine) provided a presentation about the activities of the Provincial Wellness Advisory Council/ Building Healthy Communities Collaborative at the fifth Pan-Canadian integrated chronic disease prevention conference. The theme this conference was “New Partnervs and New Approaches for Chronic Disease Prevention.” Participants explored how individuals, organizations, strategies and sectors can act collaboratively to promote healthy living and prevent chronic disease in Canada.</td>
</tr>
<tr>
<td>CHRSP Dissemination Event: Fall Prevention for Seniors in Institutional Healthcare Settings</td>
<td>April 25, 2014 St. John’s</td>
<td>NLCAHR hosted a webinar/ face-to-face meeting to disseminate results of a CHRSP study on falls prevention. Report authors Rob Kean and Dr. Vicky Scott (attending by webinar) outlined the report findings; Stephen Bornstein facilitated and Rochelle Baker coordinated the meeting.</td>
</tr>
<tr>
<td>Research Talks Public Lecture</td>
<td>Strategic Positioning: Shifting Discourses on Gay Men’s Sexual Health</td>
<td>May 6, 2014 St. John’s</td>
</tr>
<tr>
<td>Town of Grand Falls Windsor: Rural Healthcare Round Table</td>
<td>May 8-9, 2014 Grand Falls-Windsor</td>
<td>Stephen Bornstein was invited to discuss CHRSP projects that have implications for rural healthcare during this roundtable, which provided an opportunity to showcase the work of Memorial University’s Faculty of Medicine in supporting quality healthcare for citizens in rural Newfoundland and Labrador.</td>
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<tr>
<td>Event</td>
<td>Date/Location</td>
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<tr>
<td>Forum of Health Research Funders</td>
<td>May 15, 2014 Ottawa</td>
<td>The Centre’s Director attended this meeting to provide the national forum with an update on NAPHRO activities; the meeting also included a presentation on Big Data/Data Access as well as an overview of the Strategy for Patient Oriented Research (SPOR) Engagement Framework.</td>
</tr>
<tr>
<td>Provincial Wellness Advisory Council Meeting</td>
<td>June 18, 2014 St. John’s</td>
<td>Pablo Navarro attended this meeting and provided an overview of the activities of the Building Healthy Communities Collaborative.</td>
</tr>
<tr>
<td>2014 Canadian Institute of Planners/Atlantic Planners Institute Conference “People Matter”</td>
<td>July 8-12, 2014 Fredericton</td>
<td>Pablo Navarro attended this conference on behalf of the Building Healthy Communities Collaborative/Healthy Canada By Design-CLASP initiative. The conference included a number of workshops and presentations that illuminate pan-Canadian initiatives to bring health and wellness into community planning.</td>
</tr>
<tr>
<td>Strategy for Patient Oriented Research (SPOR) Research Team Meeting</td>
<td>September 2-3, 2014 St. John’s</td>
<td>Stephen Bornstein attended this meeting of members of Memorial University Faculty of Medicine’s Primary Healthcare Research Unit’s SPOR NL research team network.</td>
</tr>
<tr>
<td>National Centre Directors’ Network Meeting</td>
<td>September 3, 2014 Teleconference</td>
<td>The Centre's Director met with this group of national health research centre directors to identify common projects through collaboration with other centres in Canada. The Network provides pan-Canadian information-sharing and partnership opportunities for health research.</td>
</tr>
<tr>
<td>PriFor 2014: The Primary Healthcare Partnership Forum</td>
<td>September 4-5, 2014 St. John’s</td>
<td>Stephen Bornstein and Pablo Navarro attended the sixth annual Primary Healthcare Partnership Forum “Innovating and Integrating Healthcare”.</td>
</tr>
<tr>
<td>Meeting with the Minister of Health &amp; Community Services/Seniors, Wellness and Social Development for Newfoundland and Labrador</td>
<td>September 17, 2014 St. John’s</td>
<td>Pablo Navarro and Dr. Catherine Donovan (Faculty of Medicine) presented a wellness paper to the Minister of Health and Community Services/Seniors, Wellness and Social Development for Newfoundland and Labrador. The wellness paper provided an overview of the built environment, its impact on health and wellbeing and the health outcomes of interventions designed to improve those outcomes. The paper also identified and described potential levers for affecting change, as well as possible strategies for creating healthier built environments in Newfoundland and Labrador.</td>
</tr>
<tr>
<td>Cochrane Risk-of-Bias Training Session</td>
<td>October 3, 2014 St. John’s</td>
<td>All members of the CHRSP research team had a training session to learn more about the Canadian Cochrane Collaboration’s recommended tool for assessing the risk of bias in included studies.</td>
</tr>
<tr>
<td>7th International Symposium on Safety and Health in Agricultural &amp; Rural Populations: Global Perspectives</td>
<td>September 19-22, 2014 Saskatoon</td>
<td>Stephen Bornstein brought greetings to this international symposium as Chair of the Canadian Rural Health Research Society (CRHRS). At the symposium, he presented on Evidence in Context as it relates to Occupational Health and Safety Research; presented on the use of registries for surveillance and prevention of occupational disease; facilitated a Plenary Session on the intersection of immigration and agricultural work on farmworker health and chaired the CRHRS Annual General Meeting.</td>
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<tr>
<td>Event Description</td>
<td>Date/Location</td>
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<tr>
<td>Atlantic Summit on Healthcare and Drug Cost Sustainability</td>
<td>October 29-30, 2014 Charlottetown</td>
<td>Stephen Bornstein attended this summit, which brought together senior leaders from across health system and research sectors to explore opportunities for collaboration in sustainably managing drug costs and enhancing health access in the Atlantic region.</td>
</tr>
<tr>
<td>Fall 2014 Forum of Health Research Funders Meeting</td>
<td>November 5, 2014 Ottawa</td>
<td>The Centre’s Director attended this meeting of health research funding organizations. The agenda included: Patient Engagement; Assessing Value and Impact of Research; and the Changing Landscape of Research Funding in Canada.</td>
</tr>
<tr>
<td>2014 National Alliance of Provincial Health Research Organizations (NAPHRO) Fall Executive Meeting</td>
<td>November 6-7, 2014 Ottawa</td>
<td>Stephen Bornstein attended this meeting of national health research organizations. The agenda included a review of NAPHRO’s activities towards convening national dialogues, developing partnerships, and promoting a collaborative environment in which federal, provincial and non-profit organizations work together to advance health research across Canada.</td>
</tr>
<tr>
<td>CHRSP Dissemination Event: Agitation and Aggression in Long-Term Care Residents with Dementia</td>
<td>November 27, 2014 St. John’s</td>
<td>NLCAHR hosted this webinar/face-to-face meeting to disseminate results of a CHRSP study on non-pharmacological interventions that will prevent/manage agitation and aggression in long-term care residents with dementia. Report authors Dr. Neena Chappell and Rob Kean outlined the report findings; Stephen Bornstein facilitated and Rochelle Baker coordinated the meeting.</td>
</tr>
<tr>
<td>CHRSP Dissemination Event: Troponin Point of Care testing in Smaller Hospital and Health Centre Emergency Departments</td>
<td>December 3, 2014 St. John’s</td>
<td>NLCAHR hosted this webinar/face-to-face meeting to disseminate results of a CHRSP study on troponin point-of-care testing. Report authors Dr. Nitika Pant Pai and Pablo Navarro and External Reviewer Dr. George Cembrowski outlined the report findings; Stephen Bornstein facilitated and Rochelle Baker coordinated the meeting.</td>
</tr>
<tr>
<td>Collaboration in Action</td>
<td>Fall 2014 Workshop to promote Healthy Built Environments</td>
<td>December 12, 2014 St. John’s</td>
</tr>
<tr>
<td>Premier’s Health Summit</td>
<td>January 14, 2015 St. John’s</td>
<td>Stephen Bornstein and Pablo Navarro attended this summit/provincial discussion provincial plans to identify key healthcare priorities for Newfoundland and Labrador.</td>
</tr>
</tbody>
</table>
OTHER ENGAGEMENT ACTIVITIES

In 2014-2015, the Centre’s Director served as a peer reviewer on the following committees:

- Ontario Health Services Research Fund
- Research funding program of the FRQS (Fonds de Recherche du Québec Santé)
- Banting Post-Doctoral Fellowships
- Canadian Medical Association Career Awards
- The Justice Emmett Hall Memorial Foundation Student Essay Competition

The Centre’s Director is currently a collaborator with fellow researchers on several research projects:

- a Manitoba Workers’ Compensation Board study, in collaboration with the Institute for Work & Health (Toronto), on the use of contextualized research synthesis in the field of occupational health and safety;
- an Atlantic Health Promotion Research Centre study in Labrador, entitled Kungatsiajuv: Supporting the Healthy Smiles of NunatuKavut Children to contribute to a better understanding of the oral health of aboriginal children;
- a study on the health effects of asbestos, funded through the Research and Development Corporation Industrial Research and Innovation Fund;
- a WorkSafe BC study: Tracking Occupational Diseases—a analysis of approaches for the Canadian context;
- a Social Sciences and Humanities Research Council Partnership Grant led by Dr. Barbara Neis of SafetyNet: On the Move: Employment-Related Geographical Mobility in the Canadian Context.
Chapter 6

FINANCIAL REVIEW

The story of our fiscal year

<table>
<thead>
<tr>
<th>Operating Funds</th>
<th>BUDGET</th>
<th>SPENT</th>
<th>REMAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Benefits</td>
<td>$399,930</td>
<td>$364,730</td>
<td>$35,200</td>
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<tr>
<td>Operating Expenditure</td>
<td>$17,000</td>
<td>$15,279</td>
<td>$1,721</td>
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<td>Hosted research conferences and meetings</td>
<td>$6,500</td>
<td>$5,909</td>
<td>$591</td>
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<td>Travel/Representation</td>
<td>$8,301</td>
<td>$5,425</td>
<td>$2,876</td>
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<td>CHRSP Consultants</td>
<td>$23,000</td>
<td>$22,702</td>
<td>$298</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td>$454,731</td>
<td>$414,045</td>
<td>$40,686</td>
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</table>

<table>
<thead>
<tr>
<th>Flow-Through Funds</th>
<th>BUDGET</th>
<th>SPENT</th>
<th>COMMITTED &amp; PLANNED</th>
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<tbody>
<tr>
<td>Master’s</td>
<td>$20,000</td>
<td>$15,000</td>
<td>$5,000</td>
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<tr>
<td>Doctoral</td>
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<td>$8,000</td>
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<tr>
<td>Student Subtotal</td>
<td>$28,000</td>
<td>$23,000</td>
<td>$5,000</td>
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<tr>
<td>Project Grants</td>
<td>$75,000</td>
<td>$74,941</td>
<td>$59</td>
</tr>
<tr>
<td>Development Grants</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Research Grants Subtotal</strong></td>
<td>$75,000</td>
<td>$74,941</td>
<td>$59</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>$103,000</td>
<td>$97,941</td>
<td>$5,059</td>
</tr>
</tbody>
</table>

**Funding sources:**

- Memorial University Faculty of Medicine: $378,400
- Department of Health & Community Services, Government of Newfoundland & Labrador: $11,100
- Roll-over from previous fiscal year: $46,601
- Payment for NL-Healthy Aging Research Program administration: $18,000
- Payment for Enhancing Healthcare in NL Awards administration: $18,130
- Funding from Memorial University Office of Research: $12,500