

Health Research Grants Funded Applicants: 2005-2006

1. Understanding How Patient/Health Care Provider Relationships Impact Patients' Attitudes, Behaviours, and Choices

Camilla Holmvall

- ☉ Department of Psychology - Saint Mary's University

Co-applicants:

Lori Francis

- ☉ Dept. of Psychology - Saint Mary's University

Kevin Kelloway

- ☉ Dept. of Management - Saint Mary's University

Peter Twohig

- ☉ Dept. of Gorsebrook Research Institute - Saint Mary's University

This research focuses on Nova Scotia's publicly funded health care system. The research team will look at such issues as long wait times in emergency rooms and for specialist appointments, and the shortage of health care professionals. The goal is not to itemize these problem areas but to raise – and answer – questions about their impact on patients' attitudes and actions. Researchers will draw on psychological theory and highlight a set of potentially important variables (e.g., perceived fairness). The project will examine the impact of current issues in the health care system on patients' decisions about, for example, taking their medication and reporting drug interactions.

2. Neuroprotective, Anti-inflammatory Treatments Minimize Damage after Spinal Cord Injury

Daniel Marsh

- ☉ Dept. of Anatomy & Neurobiology - Dalhousie University

People with spinal cord injury are often young, and thanks to improved chronic care can have a normal life expectancy. However, they often have chronic pain, and bowel, blood pressure, bladder and sexual problems. This research will investigate an acute anti-inflammatory treatment that may lead to recovery of spinal functions if used with chronic nerve axon growth-promoting treatments. The researchers believe that reducing inflammation after injury will preserve neural tissue making it easier to induce damaged nerve axons to regrow across the lesion. The goal? A better quality of life for people who suffer spinal cord injury.

3. Characterization and Function of T and NKT Cells in Innate Immunity

Brent Johnston

- ☉ Dept. of Microbiology & Immunology - Dalhousie University

Co-Applicant:

Thomas B. Issekutz

☉ Dept. of Pediatrics – Dalhousie University

Our immune system provides a critical first line of defense in the control of infections and cancer. The goal of this project is to increase our understanding of the mechanisms involved, with the ultimate objective of using them to enhance immune responses, promote wound healing, control tumours and, in the case of autoimmune disease settings, regulate the inflammatory response. Specifically, the research team will examine the mechanisms that regulate localization and activation of the healing white blood cells T and NKT.

4. A New Nuclear Medicine Method for Evaluation of Brain Metastases

Steven Burrell

☉ Dept. of Diagnostic Imaging - Capital District Health Authority

Co-applicants:

Robert Brownstone

☉ Dept. of Surgery – Capital District Health Authority/Dalhousie University

Gilbert Matte

☉ Dept. of Diagnostic Radiology - Capital District Health Authority/Dalhousie University

David Barnes

☉ Dept. of Diagnostic Radiology - Capital District Health Authority/Dalhousie University

Liam Mulroy

☉ Dept. of Diagnostic Radiology - Capital District Health Authority/Dalhousie University

David Kydd

☉ Dept. of Diagnostic Radiology - Capital District Health Authority/Dalhousie University

George Mawko

☉ Dept. of Diagnostic Radiology - Capital District Health Authority/Dalhousie University

When cancer has spread to the brain, and where it has been treated with surgery or radiation, it is important – but difficult – to know if any residual tumour remains. In this groundbreaking study, researchers from Radiology, Neurosurgery, and Radiation Oncology departments at Capital Health will work together. They will assess the usefulness of 123IMT imaging – a form of nuclear medicine imaging – in determining if treatment was successful. This application of 123IMT (Iodo-alpha-methyl tyrosine) has not been reported in medical literature to date. It could significantly improve health care management for cancer patients in Nova Scotia and beyond.

5. How do Fas ligand and TRAIL contribute to inflammatory diseases like stroke or multiple sclerosis?

Alexander Easton

☉ Dept. of Pathology - Dalhousie University

Chunhai Hao

☉ Dept. of Pathology & Lab. Medicine – Emory University (Atlanta, Georgia)

Co-applicants:

Andrew Issekutz

☉ Dept. of Pediatrics, Microbiology/Immunology – Dalhousie University

Conditions such as stroke and multiple sclerosis are worsened – not improved – by the body's immune responses including the actions of white blood cells. In this project, the researchers hope to gain a better understanding of precisely what happens. They will study Fas ligand and TRAIL, two proteins whose role in endothelial activation – part of the process in which normal cells are damaged – is at the present time unclear. They hope to confirm their observation that Fas ligand increases white cell adhesion and permeability while TRAIL reduces permeability without promoting adhesion. If TRAIL reduces inflammation, as the researchers believe, it may have significant therapeutic potential.

6. When Caregiving Results in Involuntary Retirement: Well-being in the Later Years

Aine Humble

☉ Dept. of Family Studies & Gerontology - Mount Saint Vincent University

Co-applicants:

Janice Keefe

☉ Dept. of Family Studies & Gerontology - Mount Saint Vincent University

Greg Auton

☉ Dept. of Sociology – Acadia University

This project looks at what happens to people when the time they spend caring for others leads them to early – and involuntary – retirement from paid work. How will this affect their well-being – financial and otherwise – in their later years? How do they deal with caregiver burden, loss of work identity, and isolation? How does gender influence their decisions around caregiving, and the effects of these decisions? The research team will use quantitative and qualitative analyses to explore these and other questions. This research is especially pertinent in Atlantic Canada where people do more caregiving than in other provinces. Also, they are often financially unprepared for retirement.

7. Bodies of Sameness in Places of Difference: Lesbian Couples' Birthing in Relationship with Perinatal Nurses

Lisa Goldberg

☉ Dept. of School of Nursing - Dalhousie University

Co-applicants:

Blye Frank

- ☉ Dept. of Medical Education, Faculty of Medicine – Dalhousie University

Joan Evans

- ☉ Dept. of School of Nursing, Faculty of Health Professions – Dalhousie University

Susan Campbell

- ☉ Dept. of Philosophy, Woman's Studies – Dalhousie University

This project will explore the multiple realities embedded in the birth stories of lesbian mothers. Evidence shows that heterosexist and homophobic assumptions are reflected in Nova Scotia's health care system. The researchers hope to improve the situation by more fully informing the practices of perinatal nurses and other health care providers, and by contributing to policy development in a manner that will lead to an inclusive approach. Present attitudes sometimes stop lesbian couples from disclosing health-related information to their caregivers – an increasing problem as the number of gay and lesbian families continues to grow.

8. Co-bedding Twins: A Multi-site Trial

Kathryn Hayward

- ☉ Dept. of Neonatal Intensive Care Unit - IWK Health Centre

Celeste Johnston

- ☉ Dept. of L'Ecole des Sciences infirmieres – McGill University

Co-applicants:

Marsha Campbell-Yeo

- ☉ Dept. of Neonatal Intensive Care Unit - IWK Health Centre

Della Morrison

- ☉ Dept. of Neonatal Intensive Care Unit - IWK Health Centre

Margaret MacDonald

- ☉ Parents of Multiple Births Association

Robin Whyte

- ☉ Dept. of Neonatal Pediatrics – IWK Health Centre

Heather Cake

- ☉ Dept. of Preinatal Follow-up – IWK Health Centre

Jocelyn Vine

- ☉ Dept. of Neonatal and Maternal/Newborn – IWK Health Centre

Twins spend their time before birth in close quarters, growing and developing together. If they are born prematurely, they are usually separated in Intensive Care – moved away from the one who has been a constant presence. This research project raises the question: Would premature twins grow and develop better if they were cared for in the same isolette? In a controlled-trial multi-site study (to be carried out in Halifax and St. John's) researchers will observe such factors as how the twins go from sleeping to waking, how well they use oxygen, and the steadiness of their heartbeats.

9. The OxyContin Problem and the Treatment of Pain: Responses from Pain Medicine, Addictions, and Patient Communities

Emma Whelan

☉ Dept. of Sociology/Social Anthropology - Dalhousie University

Co-applicants:

Mark Asbridge

☉ Dept. of Community Health & Epidemiology – Dalhousie University

Patrick McGrath

☉ Dept. of Psychology, Pediatrics & Psychiatry – Dalhousie University

OxyContin hit the news in July 2001, when local media first reported its illicit use in Cape Breton. Since then, this controlled-release formulation of opioid pain medication has come to be seen as a serious social problem here and in other economically disadvantaged rural areas of North America. This research project will analyze the effects of this perception of OxyContin, its coverage in the news media, and on how the drug is now viewed as a pain medication. Questions posed will include: How has the pain medicine community interacted with the addictions community on this issue? And what effect has there been on patients who rely on OxyContin for pain relief?

10. Effects of obstructive sleep apnea on neurocognitive function

Gail Eskes

☉ Department of Psychiatry – Dalhousie University

Obstructive Sleep Apnea (OSA) is one of the most common sleep disorders in Nova Scotia, affecting 4% of males and 2% of females. Individuals with OSA have repeated breathing pauses due to airway collapse, disrupted sleep, and reduced oxygen flow to the brain at night. This leads to excessive daytime sleepiness, poor cognitive performance in activities such as driving and work, changes in mood, and ultimately reduced quality of life. This, effective treatment of OSA is critical. The current proposal brings together a multi-disciplinary team to study the effectiveness of treatment with continuous positive airway pressure (CPAP, a breathing mask) at night, in helping to restore good sleep quality, and in reversing the cognitive and mood problems. This research will study the long-term consequences of a common, disabling, health problem, with the ultimate goal to identify appropriate treatments and improve the quality of health care and quality of life of Nova Scotians.