

Health Research Grants Funded Applicants 2001-2002

The list below is a summary of the funded 2001 Health Research Grants applicants.

Fall-Prevention Program for Seniors

Douglas Sinclair

Department of Emergency Medicine, Dalhousie University and the Queen Elizabeth II Health Sciences Centre

Every week, seniors throughout Nova Scotia suffer falls that leave them injured - and that threaten their very independence. The Quick Response Program of the QEII's Emergency Department and Home Care Nova Scotia will put in place a comprehensive program to prevent falls. All seniors who come to the Emergency Department as the result of a fall will be eligible to take part. The goal: healthier seniors and reduced hospital stays.

Combating Aggression in the Workplace

Stephen Perrott

Department of Psychology
Mount Saint Vincent University

This project will examine the type and amount of violent and hostile behavior faced by police officers, nurses and teachers. It will look at the pressures these front-line workers often face and ultimately at measures to reduce their stress and enhance their job satisfaction, physical health and psychological well-being.

Eating Problems and Alcoholism in Women

Sherry Stewart

Department of Psychology
Dalhousie University

Research has revealed a significant link between binge drinking and binge eating in women. This study will explore that link by working with a sample of Nova Scotia women who are in treatment for alcohol-related problems. The objective is to better understand the connection between these two serious health issues and to develop a model that will help women work toward gradual, manageable and realistic goals.

Hepatitis C Database

Susan Kirkland

Department of Community Health and Epidemiology
Dalhousie University

"HepLink" involves researchers from Dalhousie University, a Hepatitis C specialist, and the Provincial Medical Officer of Health. It will study what health services individuals with Hepatitis C need and use to lay a foundation to help with prevention, treatment and support programs. Hepatitis C currently affects more than 3,000 Nova Scotians; this number is on the increase.

Inventory Database for Platelets

John Blake
Department of Anesthesia and Department of Industrial Engineering
Dalhousie University

Platelets, the blood cells necessary for clot formation, are sometimes unavailable for emergency use because they have a shelf life of only five days and then must be discarded. This project plans to increase the supply of life-saving platelets for Nova Scotians by using techniques derived from the business world including retail giant WalMart and auto manufacturer General Motors to more effectively manage inventory.

Reducing Teen Pregnancy

Donald Langille
Department of Community Health and Epidemiology
Dalhousie University

Teen pregnancies are higher in Nova Scotia than many other provinces. This project will measure teen pregnancy rates in various communities in the province and determine the financial costs involved. It will also examine the role of community factors such as education and employment. Prevention is the ultimate goal.

Health Care for All?

Lori Curtis
Department of Community Health and Epidemiology
Dalhousie University

This research project will look at health care service in Nova Scotia and ask some tough questions that have important implications for policy development. Are the wealthy being over-served, as earlier studies have hypothesized? Are the poor receiving inadequate care? If these assumptions are true, what can be done to eliminate barriers and provide efficient, cost-effective health care for all?

Diagnosing Myofascial Pain Syndrome

Linda McLean
School of Physiotherapy
Dalhousie University

This painful disorder is linked to spending lots of time at a computer. However, making a diagnosis has proven difficult and, hence, embarking on a course of treatment is delayed. The goal of this project is to develop a diagnostic tool that will study muscle

activation behavior to identify and distinguish myofascial pain from other disorders. This research will also begin to shed light on the underlying cause of the syndrome.

African Nova Scotians, Sexuality and Cancer

Lorna Butler
School of Nursing
Dalhousie University

The purpose of this study is to explore sexual identity and sexuality as a dimension of health for African Nova Scotians living with cancer, particularly cancer of the breast or prostate. The goal is to look at two frequently unconsidered factors - sexuality and ethnicity - in attempting to improve quality of life. The study will use participatory action research in which knowledge generated from people's own experience is on a par with medical knowledge.

Reducing the Risk of Stroke

Wayne Putnam
Department of Family Medicine
Dalhousie University

Anticoagulation is an effective and widely used therapy that can reduce the risk of stroke for patients with atrial fibrillation. This study will combine a number of data-collection methods to explore two questions: Why is anticoagulation so successful? And are there valid reasons why some physicians and/or patients decide against it?

Delays in Diagnosis and Treatment for Cancer of the Bowel

Paul Veugelers
Department of Community Health and Epidemiology
Dalhousie University

If this common cancer is caught early, 90 percent of patients live five years or longer; treated later and that number drops to eight percent. This study will examine the reasons for life-threatening delays, determine whether the problem is worse for patients living further away from hospitals, and develop strategies to enhance early detection. This is particularly important since Nova Scotia has no population-screening program for bowel cancer.

Community Help for Elder Abuse

Joan Harbison
Maritime School of Social Work
Dalhousie University

Nova Scotia has a high proportion of older people living in rural areas, where isolation and limited services can add extra stress to caregivers, sometimes leading to elder abuse or neglect. Evidence shows that community-based services, including informal and volunteer services and seniors' organizations can - and do - provide help. The study

will document how this takes place, thereby filling a gap in the knowledge base for the planning of appropriate health services.

Evaluating Treatments for Sleep Apnea

Margaret Rajda
Department of Psychiatry
Queen Elizabeth II Health Sciences Centre

This project brings together experts from sleep medicine, clinical neuropsychology and oral and maxillofacial surgery. The goal: to examine treatments for Obstructive Sleep Apnea Hypopnea Syndrome (OSAHA), a disabling disorder that results in reduced oxygen flow to the brain. Researchers will compare the effectiveness of surgical intervention to the more-established use of breathing masks.

Telephone Counselling for Cancer Patients

Barbara Downe-Wamboldt
School of Nursing
Dalhousie University

Cancer causes intense psychological distress for people living with the disease, and this study will focus on telephone counselling as a means of help. Existing research shows that one-to-one counselling - whether by phone or in person - can be of great assistance. The study will explore the role of the phone as a way to reach patients who could not come to clinics or hospitals for help.

Qualityoflife.com

Elizabeth Townsend
School of Occupational Therapy
Dalhousie University

For a 10-month period, a team from Dalhousie University's School of Occupational Therapy will look at continuing and post-graduate on-line education. The study will be unique in its policy-level focus, and its findings will help Nova Scotia to recruit and keep health professionals in rural areas where web-based education can reduce professional isolation.

Antidepressants -- Who Should Choose?

David Gardner
Department of Psychiatry
Dalhousie University

Existing research shows that patients who select their own antidepressant drugs are much less likely to stop taking them prematurely. This study is the first of four steps to get patients more involved in the decision-making process. Researchers will survey both patients and doctors to determine what patients need to know in order to select an appropriate antidepressant.

Warfarin in Reducing the Risk of Stroke

David Anderson,
Division of Hematology
Queen Elizabeth II Health Sciences Centre

This study will determine whether the blood-thinner sodium warfarin is effective in reducing the risk of stroke for Nova Scotians with atrial fibrillation. Researchers will identify and follow 1,280 patients for a minimum of one year to determine how they are being treated and whether they are benefiting from therapy.

Poverty, Policy and the Health of Maritime Children

Shelley Phipps
Department of Economics
Dalhousie University

This research project will investigate the findings of a national study that found Maritime children less healthy than children in other parts of Canada. The reason, the earlier study hypothesized, was partly our high incidence of long-term poverty and economic stress.

When to Diagnose Cleft Lip and Palate?

Kathleen Russell
Department of Dental Clinical Services
Dalhousie University

Most often, cleft lips and palates are diagnosed when a baby is born, although it is sometimes possible to know about them as early as 13 to 14 weeks of pregnancy. This study will determine whether a diagnosis before birth is of any benefit. It isn't possible, currently, to correct a cleft prior to birth, but an early diagnosis may help facilitate providing information and counseling.

Telehealth and Telemedicine

David Persaud
School of Health Services Administration
Dalhousie University

Nova Scotia is in a unique position to take a leading role in research and policy in the growing field of telehealth and telemedicine. This research project will develop and use a framework for assessing the costs and consequences of two telehealth programs already established here: tele-dermatology and tele-psychiatry.

Strength Training and Aging

Rene Murphy
School of Recreation Management and Kinesiology and Centre of Lifestyle Studies
Acadia University

This study aims to extend current knowledge about the effects of a home-based strength-training program on age-related changes in muscle mass, strength, functional independence and immune function. The findings will have an impact on health promotion policy and should translate into a better quality of life for older Nova Scotians, as well as reduced costs to the health care system.

Comparing Gestational Diabetes Tests

Anthony Armson
Department of Obstetrics and Gynaecology
IWK Health Centre

The Canadian Diabetes Association has recommended replacing the glucose tolerance test previously used to diagnose diabetes in pregnancy with another test. This study will compare the two tests, with the goal of ensuring that women in Nova Scotia with gestational diabetes are identified and given appropriate treatment.

Liver Disease and Drug Metabolism

Christopher Sinal
Department of Pharmacology
Dalhousie University

The long-term goals of this study are to contribute to the more effective treatment of liver disease, to increase the effectiveness of drug therapy for patients with liver disease, and to reduce unwanted drug toxicity. The researchers hope to further our understanding of the mechanisms that contribute to bile acid metabolism in the liver and to study the effect of bile acids on the activity of enzymes critical for the metabolism of drugs.

Understanding Polycystic Ovarian Syndrome (PCOS)

Michael Wilkinson
Department of Obstetrics and Gynaecology and Department of Physiology and Biophysics
Dalhousie University

PCOS is a hormonal disorder affecting tens of thousands of Nova Scotia women, not just during their mature reproductive years but increasingly in adolescence. This study will look at two recently discovered hormones (leptin and resistin) and attempt to determine their role in PCOS symptoms. This is Nova Scotia's first research project on this disorder, which is associated with obesity and can lead to infertility, menstrual problems, increased risk of heart disease and diabetes.

Laser Scanning for Melanoma

Richard Langley
Division of Dermatology
Dalhousie University

Nova Scotia has Canada's highest incidence of melanoma -- the most deadly form of skin cancer. Early detection can raise survival rates dramatically, but the surgical

diagnostic methods available today are less than ideal. This study will consider the effectiveness of a new instrument, a laser confocal microscope, that is capable of imaging living tissue at the cellular level -- and helping in the fight against melanoma.

Type 2 Diabetes and Cardiovascular Disease

Lawrence Title
Division of Cardiology
Queen Elizabeth II Health Sciences Centre

This study will focus on Type 2 (adult onset) diabetics in an attempt to improve prognosis for patients who have undergone coronary bypass surgery or balloon angioplasty procedures. Unfortunately, diabetics often do poorly after such procedures because their coronary narrowing re-occurs -- most likely due to high blood sugars. The study will determine whether better control of blood sugars at the time of the procedure followed by the use of a powerful new anti-diabetic drug (pioglitazone) can help.

New Therapies for Kidney Transplantation

Kenneth West
Department of Medicine
Dalhousie University

Dr. West and his research team have recently shown that dendritic cells -- the immune system cells that seek out and attack transplanted kidneys -- must change the shape of their cell skeleton in order to do so. This new research study will explore how this process actually works and how it happens. It will ultimately lead to new therapies for preventing the rejection of kidney transplants.

New Therapy for Collagenous Colitis

Theresa Peterson
Department of Medicine and Department of Pharmacology
Dalhousie University

A drug called pentoxifylline has led to remarkable improvement for eleven Nova Scotians who had failed to respond to the usual treatments for collagenous colitis. This study will investigate the role of pentoxifylline as an important new therapeutic agent for treating collagenous colitis and other forms of inflammatory bowel disease.

Cell Replacement Therapy for Parkinson's Disease

Ivar Mendez
Neural Transplantation Laboratory
Dalhousie University

Drug therapy provides partial relief from Parkinson's symptoms including tremors and slowness in movement, but it has unwanted side effects and loses its effectiveness with time. This study focuses, instead, on cell replacement, and specifically on finding an

alternative to using fetal cells. Researchers will study rodents to determine whether cells grown in culture can be used to replace cells destroyed by the disease.

Studying the Bones of Hearing

Manohar Bance
Department of Surgery
Dalhousie University

Hearing loss, even if it is mild, has a great impact on the quality of life. This study will work toward developing a better inner-ear prosthesis to reconnect the bones needed in hearing. In a laboratory setting that will be unique in Canada, researchers will study microvibrations of the bones using a highly sensitive instrument called a laser Doppler vibrometer. They will work with human cadaveric ears and with computer models.

Controlling Intestinal Inflammation

Andrew Stadnyk
Department of Pediatrics
IWK Health Centre

Diseases of the intestine know no age barriers -- from prematurely-born infants suffering necrotizing colitis to seniors approaching the one-century mark. This study will work toward preventing or reversing intestinal illness by gaining an understanding of the events common to its various forms. The study, a collaboration between a scientist and a pediatric gastroenterologist, seeks to discover how blood cells manage to cross the intestinal tissues and, thereby, cause destruction.

Computer-Controlled Work Pacing -- and Pain

Anne Fenety
School of Physiotherapy
Dalhousie University

Who sets the pace? The computer or the employee? Computer-based work is rapidly expanding in Nova Scotia and with it comes a steady increase in muscle and joint complaints, muscle strain and neck and shoulder pain. This research team believes the problems may be connected to how people sit on the job and may be aggravated when the work pace is set electronically. They will test the effect of computer-controlled work pacing using a sample of call centre employees.

Enhancing Understanding of Brain Health and Mental Well Being in Francophone Seniors and their Caregivers Living and Working in Rural Nova Scotia

Bianca Horner
Department of Psychiatry
Dalhousie University