SUCCESSFUL APPLICANTS OF THE PEI HEALTH RESEARCH PROGRAM TODATE

July 2006 Competition

Principal Investigator: Dr. Robert Hurta

Department of Biology

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Blueberry and Cranberry 'Bioactives': effects on prostate cancer cells

Time Period: 36 months
Amount Funded: \$92.750

<u>Summary</u>: The objective of the research is to provide eveidence of the health benefits that may be derived by the consumption of cranberries and blueberries with regards to cancer. The long range goals are to understand the biological effects of extracts isolated from cranberries and blueberries on human health

Principal Investigator: Mae Gallant, RN

School of Nursing

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: "Exploration of the nurse-client partnership in the context of diabetes

mellitus illness management"

<u>Time Period</u>: 12 months Amount Funded: \$31,584

<u>Summary</u>: The objective of the research is to understand the nature of nurse-client partnership in the context of chronic illness management, using diabetes mellitus as the prototype illness.

December 2005 Competition

Principal Investigator: Dr Jennifer Taylor

Department of Family and Nutritional Sciences

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Development and Implementation of a Comprehensive Evaluation of Nutrition

Policies for Elementary Schools

<u>Time Period</u>: 12 months <u>Amount Funded</u>: \$5,000

<u>Summary</u>: The objective of the research is to discover what the effect of school nutrition policy in PEI elementary schools is on foods available at school, student eating behaviors and

prevalence of overweight and obesity. The research will also look at what lessons are learned

from key stake-holders regarding factors facilitating or acting as barriers to policy

implementation

August 2005 Competition

Principal Investigators: Dr. Frederick Kibenge

Professor of Virology

Department of Pathology & Microbiology

Atlantic Veterinary College

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Birnavirus Replication Machinery

<u>Time Period</u>: 33 months Amount Funded: \$33,060

<u>Summary</u>: The objective of the research is to discover the characterization of the RNA polymerase of birnavirus, a unique viral RNA polymerase. Enzymes made by viruses to facilitate their multiplication in infected cells are ideal targets for antiviral drugs because they are not needed in the cell's life cycle. Drugs that specifically inhibit such enzymes are expected to have a high safety margin. Our long-term goal is to gain a detailed understanding of the mechanisms governing specific and efficient virus RNA replication so key steps may be exploited in antiviral strategies.

November 2004 Competition

Principal Investigators: Dr. Robert Hurta

Department of Biology

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Cranberry bioactives, atherosclerosis and vascular smooth muscle cell biology

<u>Time Period</u>: 33 months Amount Funded: \$76,548

Summary: The objective of the research is to discover whether eating cranberries is beneficial to health and can prevent or slow the development of atherosclerosis (hardening of the arteries) which is the main cause of heart disease and stroke. Nutrition (or perhaps more appropriately, poor nutrition associated with a high fat diet) plays an important role in atherosclerosis. One strategy to control or prevent heart disease is to improve dietary intake. Fruits/vegetables are known to contain a number of factors that may stop or slow the development of atherosclerosis. This research will look at the use of cranberries in the diet to slow or stop atherosclerosis development in rabbits fed high cholesterol diets.

May 2004 Competition

Principal Investigators: Dr. Jennifer Taylor

Associate Professor, RD

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Development of Healthy Eating Policies in Prince Edward Island Elementary &

Consolidated Schools

<u>Time Period</u>: 12 months <u>Amount Funded</u>: \$5,000

<u>Summary</u>: The overall aim of the proposed research is to gain a deeper understanding of the school healthy eating policy development process from the perspective of elementary and consolidated school teams which have been involved in the development of healthy eating policies since the fall of 2003. They aim to identify factors within and outside the school and community environment that act as potential enablers or barriers in the development of district level healthy eating policies.

November 2003 Competition

Principal Investigators: Colleen MacQuarrie, Ph.D

Assistant Professor Psychology Department

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Discovering Primary Prevention Pathways

Time Period: 21 months

Amount Funded: \$34,970

<u>Summary</u>: This proposal will use qualitative methods to answer the question of how the process of prevention evolves for individuals. The focus is on people living with chronic

diseases.

May 2003 Competition

<u>Principal Investigators</u>: Dr. Linda Van Til

Epidemiologist

Health and Social Services

P.O. Box 2000

Charlottetown, PE C1A 7N8

Project Title: Methodology Development for Screening Utilization Indicators

<u>Time Period</u>: 24 months Amount Funded: \$ 48.450

<u>Summary</u>: The health indicators for comparisons of health and health services need to have standard, validated definitions. One of the indicators identified is Pap Screening. This research will provide a description of how accurately a national survey measures screening rates, when compared to a provincial screening program database. This will provide screening programs with better information to assess the effectiveness of programs to increase screening, as well as to provide researchers using the survey data with a quantified basis for future work.

Principal Investigators: Donna Murnaghan, RN, MN, PhD(c)

Associate Professor School of Nursing

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Taking Action to Enhance Health Behaviours in Teens: A School-Based

Approach

Time Period: 36 months

Amount Funded: \$105,000

<u>Summary</u>: The purpose of this proposal is to design a comprehensive, school based health strategy focussing on physical activity, healthy eating and not smoking. Using an evidence based approach to understanding key variables of significance for promoting healthy behaviours, the outcome of the research will be a theory based strategy that is suitable for intermediate level student population and will provide a menu of options that are suitable for contextual differences and addressing multiple behaviours.

November 2002 Competition

Principal Investigators: Debbie MacLellan, MSc., RD

Kathy Gottschall-Pass, PhD, RD

Department of Family and Nutritional Sciences

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Nutrition Knowledge Among Adults in Prince Edward Island

<u>Time Period</u>: 10 months Amount Funded: \$22,830

<u>Summary</u>: The objectives of the research are: 1) to adapt and validate a nutrition knowledge questionnaire for use on Prince Edward Island; and 2) to describe the knowledge level of adult

Prince Edward Island consumers regarding nutrition.

May 2002 Competition

No funded applicants

November 2001 Competition

Principal Investigator: Dr. Jennifer Taylor

Assistant Professor, RD

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Assessment of Eating Behaviours Among Prince Edward Island School Children

<u>Time Period</u>: 9 months Amount Funded: \$19,103

<u>Summary</u>: The purpose of this research is to develop and evaluate policy and program interventions designed to improve the nutritional health of Prince Edward Island children and youth and reduce the prevalence of risk factors for chronic disease.

The objective of this research project is to describe and compare eating behaviours among school children in the Western and French Language School Boards with those in the Eastern School District.

Principal Investigator: Dr. John VanLeeuwen

Department of Health Management

Atlantic Veterinary Hospital

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: A Case: Control Study to Determine Associations Between Waterborne Nitrate

Exposure and Type 1 Diabetes

<u>Time Period</u>: 36 months Amount Funded: \$81,625

<u>Summary</u>: The purpose of this research is to determine if people diagnosed with insulin dependent diabetes mellitus (IDDM) have had increased nitrate exposure in drinking water compared to people without IDDM, controlling for other risk factors. The long term goal of this research project is to understand the health impacts of waterborne nitrate exposure.

Principal Investigator: Dr. Alastair Cribb

Atlantic Veterinary College

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Characterization of the Metabolic Pathway of 16 ∝ -OH-Estrogen and its

Influence on Breast Cancer Risk

<u>Time Period</u>: 36 months Amount Funded: \$32,250

Summary: The objectives of the research are:

- identification of the enzyme (CYP2C9) responsible for the 16 ∝ -hydroxylation pathway of estrogen metabolism in humans at normal physiological concentrations;
- an assessment to determine whether genetic polymorphisms in the enzyme responsible for 16 ∝-OH-estrogen formation are associated with breast cancer risk;
- identification of food source inhibitor(s) of the identified enzyme.

May 2001 Competition

<u>Principal Investigator</u>: Dr. Philip Smith

Faculty of Arts

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Smoke Free Homes

Time Period: 36 months

Amount Funded: \$100,500

<u>Summary</u>: The overall objective of the research is to address a serious public health issue utilizing behaviour change theory and social marketing theory. The partnerships between researchers and community organizations through which the proposal evolved will enhance development of an appropriate intervention to reduce children's exposure to environmental tobacco smoke.

Principal Investigator: Dr. Angus Beck

Community Mental Health Mona Wilson Building 61 McGill Avenue

Charlottetown, PE C1A 2J9

Project Title: The Maritime Study of Genetics of Bipolar Disorder

Time Period: 36 months

Amount Funded: \$150,000

Summary: The purpose of the research is to study genetic susceptibility to Bipolar Disorder.

Principal Investigator: Dr. Catherine B. Chan

Department of Anatomy and Physiology

Atlantic Veterinary College 550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Evaluation of the Effectiveness of a "First Step Program" in a Workplace Setting

<u>Time Period</u>: 12 months Amount Funded: \$25,927

<u>Summary</u>: The purpose of this research is to evaluate the effectiveness of the First Step Program (FSP) in increasing daily activity in a workplace setting and its acceptability in a population of relatively sedentary adults. Because of its simplicity, the potential to expand the FSP to many population segments is high; this pilot study will provide evidence of its efficacy and suggest means of strengthening the program prior to wider implementation.

November 2000 Competition

Principal Investigator: Dr. R.A.R. Tasker

Associate Dean, Graduate Studies and Research

Atlantic Veterinary College 550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Effects of Domoic and Kainic Acid on Kainate Receptor Function at Different

Stages of Rat Development

<u>Time Period</u>: 36 months <u>Amount Funded</u>: \$93,120

<u>Summary</u>: The overall objective of the research is to test the hypothesis that administration of low doses of kainate receptor selective ligands during critical periods of perinatal development will alter the expression patterns of kainate receptors resulting in permanent behavioural change to the organism.

Principal Investigator: Dr. Philip Smith

Dean of Arts

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Validating the Smoke Free Homes Survey

Time Period: 3 months

Amount Funded: \$11,375

<u>Summary</u>: The objective of the research is to validate the Smoke Free Homes Survey instrument so that it can reliably be used in population surveys to determine how many households - in which there live both smokers and children - are in each of the stages of change.

Principal Investigator: Dr. Robert I. Haines

Professor and Chair, Department of Chemistry

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Third-Generation Platins-Synthesis, Characterization and Reactivity of Platinum

(II) Pendant-Arm Macrocycles: User-Friendly Anti-Cancer Drugs.

<u>Time Period</u>: 12 months Amount Funded: \$21,500

Summary: The objectives of the research are:

- in the long-term design and synthesize a new group of platinum complexes that will be effective anti-cancer agents, that have additional beneficial properties over those currently in use, including lower toxicity; oral efficacy; and the ability to be effective against resistant strains:
- the synthesis of a series of platinum (II) and (IV) macrocycles containing pendant carboxylate arms, and their characterization in solution and in the solid state.

May 2000 Competition

Principal Investigator: Dr. Judith Ritchie

Associate Director Nursing Research McGill University Health Centre Montreal General Hospital Site 1650 Avenue Cedar, Room D6-156

Montreal, QC H3G 1A4

Project Title: Effective Mechanisms and Policies for Establishing, Monitoring, and Predicting

the Needs for Nursing Services in the Atlantic Region

<u>Time Period:</u> 24 months Amount Funded: \$33,333

Summary: The objectives of the research are:

- inventory common needs-based data among the institutional/agency sites providing dialysis, home care and the single site providing transplantation;
- determine existing approaches in use in Atlantic Canada (workload measurement systems) and other assessment tools for identifying and addressing end-stage renal disease (ESRD) related needs;
- evaluate the adequacy of the information and approaches for implementing needs-based human resource planning around ESRD;
- examine the applicability of one needs-based assessment tool, chosen by key informant, in specifying the needs-based models (NBM) approach with ESRD in varied settings (hospital, clinic, home) to determine the human resource implication for nursing.

<u>Principal Investigator</u>: Dr. Glenda Wright

Department of Anatomy and Physiology

Atlantic Veterinary College

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Models of Microfibril Function in Arterial Diseases

<u>Time Period</u>: 36 months <u>Amount Funded</u>: \$92,571

<u>Summary</u>: The objectives of the research are:

- isolate and characterize the Microfibril protein;
- measure changes in the physical properties of (lobster) arteries containing microfibrils which have been chemically modified to appear like microfibrils found in the arteries of people with Marfan syndrome.

Principal Investigator: Ms. Debbie MacLellan

Department of Family and Nutritional Sciences

University of Prince Edward Island

550 University Avenue Charlottetown, PE C1A 4P3

Project Title: Benefits and Barriers to Fruit and Vegetable Consumption Among Adult Women

Consumers on Prince Edward Island

<u>Time Period</u>: 16 months Amount Funded: \$23,382

Summary: The objectives of the research are:

- to provide new knowledge about the prevention of diabetes, cancer or other illnesses (cardiovascular disease);

- to assist in determining best practices in the prevention of other illnesses (cardiovascular disease).

<u>Principal Investigator</u>: Dr. Gary Costain

The Polyclinic 199 Grafton Street

Charlottetown, PE C1A 1L2

Project Title: Improving Management of Persons with Diabetes: Clinician Compliance with

Screening and Testing Guidelines; Prevalence and Characteristics of Individuals

with Less Than Optimal Parameters

<u>Time Period</u>: 12 months Amount Funded: \$9,602

<u>Summary</u>: The purpose of the research is to provide new knowledge about the prevention,

early detection and management of diabetes.