



2011 ANNUAL REPORT

Research & Education Funded by the Physicians of Ontario

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION



APPLICATION PROCEDURE

In order that proper consideration may be given to each application, applicants for research projects should submit requests **at least six months** prior to requiring funds. For deadline submission dates please visit the Foundation's website.

While independent appraisals are obtained on most applications, the final decision on each application lies with the Grants Committee and the Board of Directors.

Application forms are available on the Foundation's website, and any inquiries about grants and fellowships should be directed to:

Samuel Moore, Executive Director The Physicians' Services Incorporated Foundation 5160 Yonge Street Suite 1006 Toronto, Ontario M2N 6L9

Tel: 416-226-6323 Fax: 416-226-6080 e-mail: psif@psifoundation.org website: www.psifoundation.org

Although the Foundation does not solicit funds, as a charitable organization it is able to accept donations or bequests and to provide receipts for tax purposes.

MISSION STATEMENT

The Physicians' Services Incorporated Foundation is a public charitable foundation, originally funded by the physicians of Ontario, whose mission is to support research and education related directly or indirectly to health, the science and practice of medicine, and the healing arts in Ontario.

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*special Committee members

** resigned during 2011

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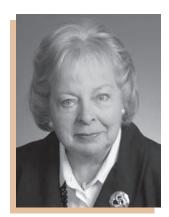
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This 2011-2012 Annual Report of the PSI Foundation reflects the excellent number and quality of grant submissions by Ontario physician-researchers; and the ongoing skill of the Finance Committee to enable operational and grant funding at the same level despite ongoing world-wide economic concerns. Our economic managers report their activity and their expectations to the board via the Finance Committee who recommend action if deemed appropriate. We continue to be grateful to the financial expertise and insight which guide the Finance Committee on behalf of the board. The first PSI Fellowship is expected to be awarded in 2012. The ongoing Harry Bain Lectureship at the Hospital for Sick Children in 2011 was given by Dean Roger Strasser of the Northern Ontario Medical School. We are in talks to establish a second PSI Lectureship at the Northern Medical School in the future.

The collective commitment of the board members to the PSI Foundation is I believe exemplary. The contribution of the outstanding individuals on the board is motivated by the highest ideals of business and medicine promoting the vision of the PSI Foundation to improve the health and quality of life of individual Ontarians though scientific advancement and the continuing education of physicians. They care with head and heart serving PSI with practicality and vision.

Further formalization of the board has been the creation of a Board of Directors manual outlining the PSI Foundation structure and responsibility including a Governance Committee. The contents are to be reviewed and updated regularly to include regular outside reviews to assess quality and to suggest change in direction or structure for consideration.

The continuing support of the PSI staff is essential to our successful organization. We are proud of our small staff of 4 plus 1 part-time worker. Our Executive Director, Mr. Sam Moore attended the Rotman School of Management for a 4 day session on non-profit organizations. Sam follows other successful Executive Directors I have enjoyed working with in my time on the Board of the PSI Foundation – Mr. Art Bond, Ms. Sandra Bennett and Ms. Kathryn McGuire. Their capable management and guidance has resulted in smooth and seamless operations of the Foundation for over 40 years. Their commitment to the foundation and its goals are appreciated.

I must acknowledge the role of the House of Delegates on whose behalf the Board of Directors function, cognizant of the original source of our funds and the spirit and continuing interest of the House of Delegates.

As a representative of the House of Delegates – I sit on the Board of Directors as do many other physicians, some are appointed for their expertise in various fields. My father, Dr. G. Cliff Armitage, a family physician, was a member of the House of Delegates first active as a medical plan in 1947 from the Porcupine Community in Timmins, Ontario, where a miners medical plan was previously established, and later of Peel County in Brampton until I replaced him 20 years ago. He was genuinely enthusiastic about the PSI Foundation – its work, its members and its formation. I well recall driving my father to the Park Plaza Hotel, for the Annual Meeting in April from Kalamazoo, Michigan 2 days before my daughter Allison was born, 27 years ago April 27, 1985.

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THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

(continued...)

I also acknowledge that my entire medical career of over 40 years now has been to provide services under OHIP benefits to patients. The business of medicine continues to be controversial and challenging but the ancient art of medicine remains a dedicated call of skill and service based on scientific evidence of creditability and concern. I am proud of the medical profession especially proud of my association with the PSI Foundation. Thank you for the privilege of being part of the PSI – a uniquely Ontario Foundation initially funded by physicians that has contributed significantly to medical knowledge and patient care of all ages.

Respectfully submitted,

Kathlee J. HEmitres

Kathleen J. Armitage, B.A., M.D., F.R.C.P. (C), President

March 07, 2012

ORGANIZATION

The Physicians' Services Incorporated Foundation was incorporated on June 4th, 1970 under the laws of the Province of Ontario and is registered with the Canada Revenue Agency as a public charitable foundation under the Federal Income Tax Act.

The membership of the Foundation is composed of physicians representing each of the seventy-five medical societies in Ontario, the Ontario Medical Association and six other persons appointed by the Board for their interest in the Foundation's activities. These six members and eight physician representatives of the medical societies form the Board of Directors. The management of the Foundation is vested in this Board. An Executive Committee acts for the Board when required between meetings of the Board.

A Finance and Grants Committee rmakes recommendations to the Board of Directors on investment policy and granting programs respectively, both Committees are composed of members of the Board.

An Executive Director, who is responsible to the Board, administers the Foundation's programs, as approved by the Board.

SOURCE OF FUNDS

The original capital of the Foundation came from the remaining funds of Physicians' Services Incorporated, the doctor-sponsored prepaid medical care plan.

HISTORICAL BACKGROUND

Physicians' Services Incorporated commenced operation in November 1947 and soon became the largest prepaid medical care plan in Canada. P.S.I. was sponsored by the Ontario Medical Association and supported by about 8,000 practising physicians in the Province of Ontario. These participating physicians agreed to allow the Corporation to prorate their medical fees in order to meet administrative expenses and provide the reserves required by law.

In September 1969, P.S.I. ceased operation because of the implementation by the Ontario Government of what is now the Ontario Health Insurance Plan. The Board of P.S.I. and the participating physicians decided that the funds remaining in the general reserve, after meeting all obligations to subscribers and physicians, should be used to establish a foundation, the income of which would be applied to charitable activities within the health field.

GRANTING POLICY AND PROGRAM

The Foundation is a granting agency and does not normally engage directly in charitable activities other than awarding medical fellowships. In accordance with the Federal Income Tax Act the Foundation cannot award grants to other than registered charities as defined by the Income Tax Act. Hospitals and medical schools come within this definition for the purposes of the Foundation's granting activities. Organizations seeking funds from the Foundation must provide the Foundation with the organization's charitable registration number issued by the Canada Revenue Agency. It is a policy of the Foundation to devote its funds to charitable endeavours in the health field within the Province of Ontario only.

The Foundation's granting interests are currently focused on two areas - education of practising physicians and health research with emphasis on research relevant to patient care.

EDUCATION OF PRACTISING PHYSICIANS

FELLOWSHIPS FOR PRACTISING PHYSICIANS

This program is directed at physicians in established practice in Ontario, particularly those residing outside of the teaching centres, who wish to take a period of training to bring a needed clinical skill or knowledge to the community or to undertake training in research methodology.

The fellowships are provided to cover course fees, if any, transportation, room and board costs. Funds are not provided to replace income lost while undertaking a training program and the program is not designed to assist physicians taking refresher courses.

SPECIAL FELLOWSHIP

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION - FELLOWSHIP IN TRANSLATIONAL RESEARCH

The terms of this funding program have been finalized, and the Foundation plans to award the inaugural Fellowship in 2012.

HEALTH RESEARCH

Within this broad category the Foundation's preference is to support research into any clinical problem (other than cancer, heart and stroke, mental health, drug and alcohol abuse, pharmaceutical drug studies or where there is substantial funding available through other agencies) that is of direct relevance to the care of patients. In order of priority, the types of research the Foundation will consider are:

- (a) Clinical Research
- (b) Medical Education Research and Development at the post M.D. level
- (c) Health Systems Research
- (d) Healthcare Research by Community Physicians

CLINICAL RESEARCH

Clinical research is defined as research that is of direct relevance to patient care. Studies involving animals will be considered only if the animals are required as an immediate patient surrogate and this should be indicated in a written statement attached to the application.

Applications will be considered only where a practising physician is the principal investigator, which is defined as one having direct patient care responsibilities. Applicants must possess an academic appointment, and academic appointment is defined as someone who is allowed to apply for his or her own research grants and be an independent investigator. Further in establishing priorities among the applications submitted, when scientific merit and clinical relevance are equal, preference will be given to the new investigator as opposed to the established investigator.

Fellows are eligible to apply for research grants, but are required to have a co-investigator who has an academic appointment. The fellow must provide evidence of having official hospital status, which should be in the form of a letter from his or her supervisor or department chair.

The duration of projects considered by the Foundation will be for a maximum of two years with the possibility of renewal for one further year. Except under unusual circumstances, the Foundation cannot consider applications for projects requiring more than \$85,000 per year.

RESIDENT RESEARCH

Clinical research being undertaken by a resident will be considered if the project is supervised by a physician with an academic appointment and this is best evidenced by the physician being shown on the application as the applicant, with the principal investigator being the resident. Projects must not extend beyond a twelve month period and the maximum amount that will be provided per project is \$20,000.

The maximum the Foundation feels it can award in any year for all resident research is \$300,000 but as these applications are in competition with all others, the maximum amount expended could obviously be less depending on the Foundation's available funds.

Proposals within this category should be short term, concise projects, which have been largely developed by the resident. The majority of the work involved in completing the research must be done by the resident and the resident must append a letter to the application clearly describing what his or her role in the study will be.

The following is set out for the purpose of clarifying eligibility under the resident research program.

- 1. Salary for the resident must be provided by The Ministry of Health.
- The individual must be in a recognized program leading to certification by the Royal College of Physicians and Surgeons or the College of Family Physicians. Residents in Royal College programs by accreditation without certification are also eligible.
- 3. Must be registered as a postgraduate student at the university where residency training is being taken.

The restriction whereby the Foundation will not consider applications for research within the areas of cancer, heart and stroke and mental health does not apply to resident research projects.

MEDICAL EDUCATION RESEARCH

Limited funds are available for support of research and development projects designed to assess the post M.D. educational environment such as curricula, methods and teaching resources. The Foundation recognizes that research within this area may involve teams that include non-medical researchers and consultants.

HEALTH SYSTEMS RESEARCH

Projects of a special nature within the health care system, such as preventive medicine, care of the elderly, communications within the system, underserviced regions and ways of enhancing the effectiveness of medical practice will be considered under this category.

Projects within these categories should not exceed the maximum of two years duration and the limit of \$85,000 per year set for clinical research.

HEALTHCARE RESEARCH BY COMMUNITY PHYSICIANS

Within this category of funding, physicians practising in a community setting may apply for a grant to assist them in undertaking a review of their practice patterns which would enhance effectiveness of practice and patient care in their own clinic, hospital or region. Grants up to \$5,000 are available to cover the costs of the data gathering and analysis, support staff and preparation of reports. Up to an additional \$600 will be provided for travel costs incurred in presenting papers on the results of a community practice study. The Foundation does not exclude support of research in the areas of cancer, heart and stroke and mental health under the program of community-based research.

AREAS OF NON-SUPPORT

While not an all-inclusive list, the following areas are not supported by the Foundation:

- Annual fund raising campaigns
- Building funds or other capital cost campaigns
- Research in the areas of cancer, heart and stroke, mental health, drug and alcohol abuse, pharmaceutical drug studies or where there is relatively more funding opportunities available through other agencies
- Operating costs of any organization or department
- Budget deficits
- Service programs
- Ongoing research previously supported by another funding agency
- Major equipment, unless required for a research project being supported by the Foundation
- Projects outside the Province of Ontario
- Films, books and journals.

The Foundation will support only one project, per investigator, at any given time. If an investigator is currently being supported by the Foundation as the principal investigator, the Foundation will not consider an application for a new project until the current granting period has ended.

ASSISTANCE GIVEN

If in doubt as to whether a proposal would come within the interests or policies of the Foundation, please telephone or email the Executive Director or Grants Coordinator at the Foundation office. Additionally, we are quite willing to assist applicants in the preparation of applications and, where required, to direct individuals to persons skilled in research design and research methodology.

GRANTING ACTIVITIES - 2011

The Foundation reviewed 218 applications during 2011, with a total value of \$21,700,766. In the prior year, 253 applications totalling \$22,158,547 were reviewed.

The Foundation began 2011 with grant commitments of \$4,761,650 and approved a further \$3,930,475.

The Foundation paid \$4,605,970 in granting dollars in 2011, taking into account grant refunds of \$168,280.

At the end of 2011, total commitments going forward equalled \$3,729,875, of which \$2,941,375 is payable in 2012.

HEALTH EDUCATION

EDUCATIONAL FELLOWSHIPS FOR PRACTISING PHYSICIANS

During 2011, \$8,475 was awarded to provide fellowship support to the 2 practising physicians listed below:

PHYSICIAN	SUBJECT
Dr. T.A. Baldisera, Sudbury, ON	Musculoskeletal medicine
Dr. R.N. Gidwani, Sarnia, ON	Cytology and surgical pathology

HEALTH SYSTEMS RESEARCH

In 2011, 4 grants were awarded under this category, totalling \$247,000, of which 2 are highlighted below.

ACADEMIC CHALLENGES FOR THE PRETERM INFANT: EDUCATORS' KNOWLEDGE, ATTITUDES, AND IDENTIFIED BARRIERS TO PROVIDING AID TO THIS POPULATION

Dr. Paige Terrien Church and Dr. Vibhuti Shah, Sunnybrook Health Sciences Centre

The frequency of preterm births in Canada continues to rise. Despite advances in medical care, preterm birth is associated with long-term academic, attention difficulties, and behavioral problems. These difficulties lead to potential academic underachievement, grade failures, and need for remedial assistance during childhood and adolescence and difficulties in coping with adult life. Therefore, recognizing these difficulties earlier and providing educational interventional strategies to reduce the impacts is crucial.

Educators play a key role in: 1) early identification of children with such impairments; and 2) providing parents guidance on how to manage such impairments. Despite the importance of this role, there are no data on educators' understanding of preterm birth and the long-term cognitive and academic outcomes of these survivors.

In this study, the research team will conduct a focus group and survey elementary educators in the Greater Toronto Area to document educators' level of knowledge of the impact of preterm birth on academic achievement, attention deficits, and behavioral problems. Further, this study will explore attitudes towards these impairments/deficits; identify barriers regarding the availability/implementation of educational strategies and their willingness to advance their knowledge on these issues so that the child and the family can be assisted to achieve his/her potential.

IMPROVING COMMUNICATION AND PATIENT SAFETY IN TRAUMA PATIENTS ADMITTED TO THE INTENSIVE CARE UNIT - A PILOT FEASIBILITY STUDY

Dr. Tanya Zakrison, St. Michael's Hospital

Major trauma in Ontario is increasing, affecting adults - young and old, and improving the quality of trauma care represents a priority for the government of Ontario. Up to 10% of trauma patients die preventable deaths each year, due to error, and the most common source of error in the hospital setting, including in trauma, involves failures of communication. The importance of clear communication has been recognized, and multidisciplinary communication tools have been introduced, which have improved patient outcomes in various clinical settings.

Little data exist, however, dealing with communication failures during patient transfer from one clinical setting to another. No literature has evaluated any standardization tools in the handover of the trauma patient from the Emergency Department (ED) to the Intensive Care Unit (ICU).

This study proposes to develop and validate a standardized handover checklist tool for use during patient transfer from the ED to the ICU at a Level I trauma centre. Once validated, the researchers anticipate that this tool will be feasible, reduce communication failures, and improve satisfaction with multidisciplinary handover.

RESEARCH BY COMMUNITY PHYSICIANS

The Foundation awarded 1 grant under this program with a value of \$5,000, which is listed below.

Dr. Susan Woolhouse, South Riverdale Community Health Centre

At-risk and living with hepatitis C, addiction, and mental illness: Stories from a novel model program in Toronto.

MEDICAL EDUCATION RESEARCH

In 2011, 5 grants were awarded in this category for a total of \$317,500, of which 2 are highlighted below.

OBSERVATIONAL LEARNING STRATEGIES IN SIMULATION-BASED ARTHROSCOPIC SURGICAL TRAINING

Dr. Marie-Eve LeBel and Dr. Sayra Cristancho, University of Western Ontario

Understanding what techniques help learning new skills in the most effective way is crucial because physicians spend so much time learning how to do new things. Usually, when practicing a new task, individuals learn from their own mistakes. Learning by watching others' performances is key for surgical training, where making mistakes could have dramatic consequences.

It has long been thought that, to learn a task, one should watch an expert; however, recent research indicates that watching perfect performance may not prove optimal. Rather, watching errors that non-experts make gives the best chance of performing well.

The researchers plan to investigate this surprising finding in the context of learning arthroscopic surgery skills using virtual-reality simulation.

To investigate this 'observational learning', separate groups of subjects will watch either experts or non-experts performing a surgical task, before trying it themselves on a virtual-reality surgical simulator. The researchers expect that the group of subjects who watched non-experts before trying the task themselves on the simulator will outperform the group who watched experts. This counterintuitive finding would have dramatic impact on surgical training methods, redefining the way in which motor skilled tasks should be taught.

PRESSURES ON SURGEONS TO 'MEASURE-UP' WITH THEIR EFFECTS ON SURGICAL JUDGEMENT

Dr. Carol-Anne Moulton, Toronto General Hospital

The influence of social pressures to 'measure up' on the surgeon's cognitive responses to intra-operative uncertainty is an understudied area within the broad field of human factors associated with surgical error. Recent studies of the 'slowing down' phenomenon describe the ability to transition from the automatic to effortful mode when encountering surgical uncertainty as a hallmark of good judgement. Interestingly, social pressures to 'appear' certain may interfere with and affect surgeons' decision-making, ability to 'slow down' appropriately, and ultimately patient outcomes.

To investigate the extent and effect of these interactions, this study is designed in three phases. In the first phase, semi-structured interviews will be conducted with surgeons, exploring their experiences of the influence of social pressures. The second phase will involve interviews with nurses, anesthesiologists, and surgical trainees, addressing how the surgical social scene perceives the surgeon and how others may provide cues which reinforce the surgeon's need to maintain a certain image. In phase three, researchers will observe surgeons in their interactions during their operating and clinical activities. The researchers then plan to develop a framework to understand the effects of social factors on surgical judgement.

CLINICAL RESEARCH

The total approved under the category of clinical research during 2011 was 43 grants for \$3,352,500 and some of the projects supported in this category are highlighted below.

DEFINING THE ROLE OF HPV IN VULVAR SQUAMOUS CELL CARCINOMA IN ONTARIO

Dr. Ghassan Allo (resident) and Dr. Blaise Clarke (supervisor), Toronto General Hospital

In the era of personalized medicine, cancers are being sub-classified according to molecular profiles, and head and neck squamous cell carcinoma is now divided into HPV-positive and HPV-negative subsets, which has therapeutic implications.

This research team maintains that squamous cell carcinoma of vulva may similarly be subdivided into HPV-positive and HPV-negative subsets, with each subset characterized by distinct epidemiology, morphology, and patient outcome. In this study, the researchers will identify biomarkers to accurately classify vulvar squamous cell carcinoma into HPV-positive and HPV-negative subsets.

A reliable classification method is essential to establish a long-term goal of having targeted therapies for each subset.

GENETIC CAUSES OF TEMPORAL LOBE EPILEPSY

Dr. Danielle de Andrade, Toronto Western Hospital

Epilepsy is the result of abnormal synchronized firing of brain cells, leading to seizures, and temporal lobe epilepsy (TLE) is the most common, most severe and most difficult form of epilepsy to treat. TLE's causes remain unknown.

The objective of this research is to identify genes responsible for TLE, by electing specific endophenotypes and reducing genetic heterogeneity to do a more focused search for relevant genes. Identification of these important genes is pivotal for the development of efficient treatments for this disease.

EVALUATING VALUES AND PREFERENCES OF WOMEN FOR THROMBOPROPHYLAXIS DURING PREGNANCY

Dr. Shannon Bates, McMaster University

Venous blood clots are an important cause of death and sickness in women, and such women are at risk of another episode when they become pregnant. Preventative blood thinning medications can reduce this risk. The blood thinner that is safe to take during pregnancy requires daily needles and has small risks of complications. Therefore, patient preferences need to be taken into account regarding the risk of recurrent clots versus these drawbacks when deciding who should be prescribed this medicine. There is no data describing decisions women make about taking these preventative blood thinners during pregnancy.

This study aims to improve understanding of how women perceive the experiences of having a blood clot and of using preventative blood thinners during pregnancy.

Results from this study will help experts develop guidelines for doctors and patients about the best way to care for pregnant women with previous venous blood clots.

EVALUATION OF WET AGE-RELATED MACULAR DEGENERATION (AMD) GENETIC PROFILE INTERACTIONS WITH RANIBIZUMAB TREATMENT OUTCOMES

Dr. Varun Chaudhary, McMaster University

Wet Age Related Macular Degeneration (AMD) is the leading cause of blindness in North America, and the current treatment for wet AMD is multiple injections of the anti-vascular endothelial growth factor (anti-VEGF) drug, ranibizumab (Lucentis). The response to treatment is varied with approximately 70% of patients seeing moderate vision gain, but 30% do not experience a similar improvement. Currently, there is no way to identify patients who will respond with significant vision gain versus those who will not.

Recent literature has implicated genetic mutations as important risk factors for the development of wet AMD. Up to 80% of wet AMD cases can be explained by inherited genetic variations.

This study will utilize Macula Risk®, a validated genetic test that assesses genetic markers known to indicate AMD risk, along with smoking status, to create a risk model.

The aim of this study is to determine if genetic testing can identify patients who will experience moderate vision gain with ranibizumab treatment and those who will not experience a similar gain.

HIGH DOSE VERSUS LOW DOSE OXYTOCIN FOR LABOUR AUGMENTATION: A PILOT STUDY

Dr. Jessica Dy and Dr. Eugene Wai, University of Ottawa

Almost half of all caesarean sections are performed for labour dystocia. When dystocia occurs, oxytocin is used to improve uterine contractions, shorten the duration of labour, and reduce the need for a caesarean delivery. Oxytocin protocols can be broadly categorized as low dose or high dose oxytocin, and most birthing centres in Canada follow a low dose protocol.

This pilot study will determine feasibility and safety of a high dose oxytocin protocol for healthy pregnant women with labour dystocia. The data from the pilot study will help to design a larger multi-centre trial, and the main objective for the larger trial is to determine if, when labour dystocia occurs in healthy pregnant women, using a high dose oxytocin protocol, compared to the currently used low dose protocol, will shorten duration of labour and increase the chance of a vaginal birth without causing harmful effects to the mother and the baby. The results of this trial will directly affect how normal labour and birth is currently managed.

HEMI-ARTHROPLASTY OF THE ELBOW: THE EFFECT OF IMPLANT SIZING ON JOINT KINEMATICS AND CONTACT MECHANICS

Dr. Sagar Desai (resident) and Dr. Graham King (supervisor), University of Western Ontario

Partial joint replacements of the elbow are increasingly popular to manage fractures and arthritic conditions of this joint in the aging population.

This biomechanical project will examine the effects of partial elbow replacements on joint loading and motion pathways.

It is hoped this study will show that optimally sized implants will best recreate the kinematics and stability of the elbow and will provide the greatest contact area and lowest contact stresses when compared with implants either too large or too small.

COMPARISON OF VISIBILITY OF ECHOGENIC AND STANDARD NON-ECHOGENIC BLOCK NEEDLES AND CATHETERS DURING ULTRASOUND GUIDED SCIATIC BLOCKS. A RANDOMIZED DOUBLE-BLIND, PROSPECTIVE STUDY

Dr. Sugantha Ganapathy and Dr. Jon Brookes, University of Western Ontario

Patients undergoing knee replacement surgery may receive continuous peripheral nerve blocks to provide postoperative pain relief, and these blocks are frequently performed with the aid of ultrasonography (US). The sciatic nerve is relatively deep and often difficult to visualize the block needle tip as it approaches the nerve, potentially increasing the chance of complications.

Currently electrical stimulation is initially used to confirm contact of the block needle with the nerve, and then to confirm proximity of the catheter to the nerve by continuous stimulation of the catheter as it is advanced through the needle. Recent studies have indicated that electrical nerve stimulation (ENS) can be unreliable, leading to unnecessary needle passes. Echogenic needles and catheters might facilitate positioning the catheter close to the nerve with the aid of ultrasound without reliance on ENS.

This study will determine visibility of an echogenic needle relative to a standard needle and compare precision of catheter placement using a continuously stimulating catheter technique to one using an echogenic catheter and ultrasound without ENS during catheter advancement. Other outcomes include the time to perform the block, number of needle passes required, success and complication rate.

NITRATES AND BONE TURNOVER: TRIAL TO SELECT THE BEST NITRATE PREPARATION

Dr. Sophie Jamal, Women's College Hospital

One in four Canadians will have an osteoporotic fracture, which cause sickness, loss of independence, and in some cases, death. Unfortunately, current treatments for osteoporosis are limited by side effects and by the fact that they cannot rebuild bone. As a result many women stop taking osteoporosis treatments and a large number of those who continue taking treatments continue to suffer fractures.

Nitrates are common and inexpensive agents used to treat chest pain or angina, and have recently been found to increase bone strength by forming new bone. They are extremely safe medications, and the only side effect, which is common, is the development of headaches. Nitrates are available in a large number of doses and formulations, and it is possible that there is one dose and formulation that results in few headaches and a large improvement in bone formation.

This study aims to identify this ideal nitrate. The nitrate formulation and dose that gives the greatest change in bone formation together with the least headaches will be used in a trial to prevent osteoporotic fractures.

PRECLINICAL ASSESSMENT OF CLINIC READY AGENTS FOR THE TREATMENT OF NEUROMUSCULAR DISEASES

Dr. Alex MacKenzie, University of Ottawa

Spinal Muscular Atrophy (SMA) is one of the most common inherited causes of infant death and occurs when the nerve cells which carry impulses from the brain and spinal cord to the muscular system die. Although a gene is deleted to cause SMA, there is a second almost identical gene present in all children with SMA.

Drugs currently in clinical use which turn up this rescue gene in nerve cell culture have been identified. This study will test the drugs in mice, to identify if this holds true in living organisms. The research team will monitor for a reduction in the disease severity in mice.

Assessing drugs in clinical use offers the advantage of transfering to patients quickly. A similar approach will be taken with Myotonic Dystrophy (MD), which is one of the most common forms of muscular dystrophy.

The researcher hypothesizes that drugs which upregulate SMN protein and downregulate DMPK mRNA will hold therapeutic promise for spinal muscular atrophy and myotonic dystrophy respectively.

GENETIC SCREENING OF CHILDREN WITH NEPHROTIC SYNDROME

Dr. Rulan Parekh, Hospital for Sick Children

Nephrotic syndrome is the most common acquired kidney disease in childhood, and progressive (treatment resistant) forms result in complete scarring of the kidney leading to end stage renal disease (ESRD). Understanding rates of nephrotic syndrome and treatment resistance among children in Toronto with a diverse ethnic population is important to understand a possible biological basis for disease.

Researchers have reported that the genes on chromosome 22, MYH9 and APOL1, explain the higher rates of ESRD and a steroid resistant form of nephrotic syndrome among African Americans compared to European Americans. Screening for these genes could help identify children at risk for disease progression, which is especially important given the morbidity associated with steroid treatment and mortality associated with progression of kidney disease.

The overall objective of this proposal is to determine rates of steroid treatment resistance in a longitudinal observational study of a diverse ethnic group of children with nephrotic syndrome in Toronto and to identify genetic factors associated with the lack of treatment response and progression of kidney disease. If genetic screening can predict poor kidney disease outcomes, current clinical strategies will be challenged, and alternate therapies will have to be considered in managing children with nephrotic syndrome.

EXPLORING THE KING'S OUTCOME SCALE FOR CHILDHOOD HEAD INJURY IN CHILDREN ATTENDING A REHABILITATION HOSPITAL

Dr. Peter Rumney, Holland Bloorview Kids Rehabilitation Hospital

Pediatric acquired brain injuries can severely impact the health and well-being of a child. It is important for the child to have access to appropriate and effective medical treatment and rehabilitation. In order to determine if treatment is effective and to determine levels of disability, an accurate measure is required.

In this study, the King's Outcome Scale for Childhood Head Injury (KOSCHI) will be assessed in a clinical cohort of children 4 to 18 years of age who are seeking care at a pediatric rehabilitation hospital. This study will determine if two physicians can rate the same child at the same level of the KOSCHI score. It will also determine if the different levels of the KOSCHI score are correlated with other outcome measures of overall health status. Lastly, it will determine if the KOSCHI score can detect changes in the child's health status over time.

TOWARDS TAILORED TREATMENT OF FOLLICULAR LYMPHOMA BASED ON PERTURBATION OF THE INK4A TUMOUR SUPPRESSOR GENE

Dr. Soma Sikdar (resident) and Dr. David LeBrun (supervisor), Queen's University

Follicular lymphoma (FL), a tumour formed by cancerous white blood cells, is common in adults and is generally a slow growing cancer such that without treatment patients can live for many years. However, a substantial minority of FL patients have more aggressive disease and die within a few years of diagnosis. Such patients might benefit from treatment tailored to more aggressive lymphoma.

The relative aggressiveness of FL is almost certainly determined by alterations of gene sequences or gene expression in the lymphoma cells. Thus, if such alterations could be found, they could serve as the basis of tests to identify patients with more aggressive lymphoma, thereby establishing these patients as candidates for specialized treatment.

This research team proposes an approach to identifying and quantifying alterations of a particular gene, INK4a, which they have shown in preliminary investigations to denote more aggressive FL case.

CHARITABLE DONATION

The Foundation donated \$50,000 to the North Bay and District Hospital Foundation in memory of Dr. Murray Pace, former President of the P.S.I. Foundation.

FINANCIAL REPORT

2011 OVERVIEW

- Original investment by the doctors of Ontario: \$16.7 million in 1970
- Market value of assets as of December 31, 2011: \$74.8 million before accruing for future grant commitments (2010 \$81.1 million)
- Decrease in value of assets over prior year: \$6.3 million (2010 \$0.5 million increase)
- Rate of return on investments -0.5% consisting of 3.2% from dividends and interest less 3.7% from a decrease in market value of investments (2010 combined return 7.0%)
- Grants approved in 2011: \$3.9* million (2010 \$4.8 million)
- Grants paid in 2011: \$4.6 million (2010 \$3.8 million)
- Total grants paid since inception: \$110.4 million
- Future grant commitments at 2011 year-end: \$3.7 million, with \$2.9 million payable in 2012, the remainder in 2013 (2010 - \$4.8 million with \$3.5 million payable in 2011)
- Operating costs, including investment management fees: \$1.3 million (2010 \$1.2 million)
- Operating costs as percentage of assets under management: 1.8% (2010 1.6%)

Asset allocation at y	rear end:	2011	2010
Canadian bonds		31%	33%
Canadian equities		34	35
U.S. equities		22	20
International equitie	S	9	9
Cash		4	3

*before refunds and withdrawals

2011 IN DETAIL

In 2011, growth in equity markets in the first and fourth quarters was more than offset by a difficult third quarter that affected the Canadian, U.S. and International equity portfolios.

The developed economies of North America, Western Europe and Japan have all struggled to recover from the recessionary effects of the global financial crisis of September 2008, whereas the so-called developing economies of the world such as China, India and Brazil have managed to continue growing at impressive rates.

A combination of continued uncertainty about sovereign debt in several countries in Europe, the political bickering in the U.S. with what to do with their escalating deficit and high unemployment, and the continuing low interest rates in the mature economies of the world in an effort to stimulate economic activity, has resulted in unsettled and volatile conditions in equity and fixed income markets. The overall return on our financial assets in 2011 was a negative 0.5%, with income of 3.2% from dividends and interest receipts being less than the 3.7% decline in the market value of our investments, with the total of \$74.8 million at year-end being the lowest since 2008.

Funding for the \$4.6 million in research grants in 2011 was largely derived from the fixed income portfolio managed by Beutel Goodman, the value of which declined from \$26.4 million at the end of 2010 to \$22.8 million at the end of 2011.

With declining interest rates, bond prices have risen resulting in an 8.1% return on our fixed income portfolio in 2011. However, the returns on any future bond purchases are likely to be minimal as long as interest rates remain low. Currently the yield on Government of Canada 5-year and 10-year bonds is less than 2%, or the target rate for inflation, while even 30-year bonds are only yielding 2.5%.

Eventually fixed income markets will sense that interest rates must start to rise which will cause bond prices to fall. Because of this perceived threat to capital preservation in our fixed income portfolio, we have in late February 2012, on the advice and recommendation of Beutel Goodman sold most of our medium-term and long-term bonds and placed the funds in short-term money market instruments that will yield minimum interest income, but will have limited our exposure to the loss of principal. As this component of our investment assets will be expected to continue to provide the majority of the funding for research grants, which we wish to maintain at a level of \$4 million or more, there is the possibility of a further decline in 2012 in the total value of our assets unless there is an improvement in equity markets in the coming year.

Our Canadian equity portfolio, managed by Magna Vista, a unit of Doherty and Associates, did not have a good year in 2011, with a negative return of -8.2%, similar to the TSX Composite Index loss of -8.9%. The principal components of our Canadian portfolio are the financial and energy sectors, each representing about 30% of the portfolio, slightly higher than their relative share of the TSX Composite Index, while our investments in basic materials or commodities are substantially underweight in the Index.

Value of our Canadian investments was \$29.0 million at the beginning of 2011, declining to \$25.1 million at the end of the third quarter, and recovering to \$26.5 million at year-end. The sale of our investments in Petrobakken Energy, Nexen Inc. and Research in Motion resulted in losses of \$1.5 million.

The U.S. equity portfolio, managed by Neuberger Berman, started the year with a value of US\$17.2 million, declining to US\$16.1 million at the end of the third quarter, and was up to US\$17.5 million at year-end, resulting in a return for the year of 1.7%, which was close to the S&P 500 Index of 2.1% for 2011. The Canadian dollar remained at close to parity with the U.S. dollar for most of the year.

Our International Equity portfolio managed by AGF International Advisors had another difficult year due to the related difficult conditions in Europe with a loss of 11.7% for 2011 as the portfolio declined in value from \$7.8 million to \$6.8 million. As a consequence the decision was made in February 2012 to withdraw our funds from the International Equity markets until such time that there is greater stability and certainty in those markets. Our policy of having a diversified portfolio, including 10% of our assets in international markets, has served us well in the past and will be considered again when there are improved prospects for return to long-term growth.

In the first few weeks of 2012 there has been significant improvement in all equity markets. There appears to be growing confidence for a modest recovery in economic performance in the U.S. with the usual favourable consequences for the Canadian equity market.

With the changes made to our fixed income portfolio, in order to reduce the risk of possible loss of capital should interest rates start to increase, we depend on improving equity markets if we are to maintain our funding level for medical research grants at about the \$4 million level, without further depleting the total of our investment assets.

History has always shown that good quality equity investments inevitably result in good returns, a thesis we expect to be confirmed once again in the next few years, and in contrast to the unsettled economic conditions that have generally prevailed since 2008.

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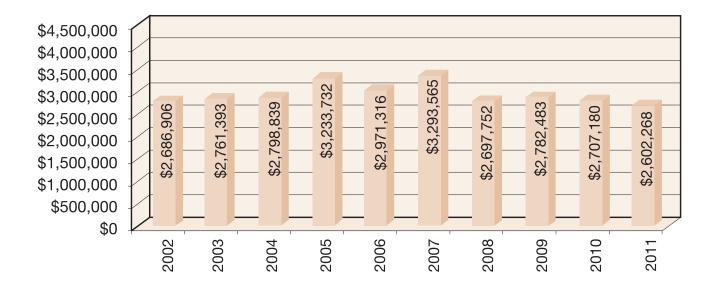
FOUNDATION

FINANCIAL SUMMARY

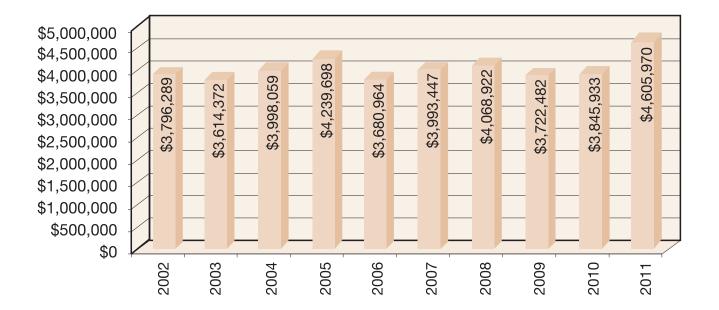
1970 - 2011

Donated Capital		\$ 16,693,123
Plus Capital appreciation	\$ 78,936,263	
Revenue earned	\$ 111,396,701	190,332,964
		207,026,087
Less: Charitable contributions	110,436,592	
Investment & administrative expense	25,582,190	136,018,782
Net assets, December 31, 2011		71,007,305
Net assets, December 31, 2010		76,306,745
Decrease for year		(5,299,440)
Consisting of:		
Deficit for year		(2,316,495)
Capital depreciation on investments		(2,982,945)
		(5,299,440)

REVENUE 2002 - 201



GRANTS PAID 2002 - 2011





INDEPENDENT AUDITORS' REPORT

To the House of Delegates of The Physicians' Services Incorporated Foundation

We have audited the accompanying financial statements of The Physicians' Services Incorporated Foundation which comprise the statement of financial position as at December 31, 2011, the statements of operations, changes in net assets, and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of The Physicians' Services Incorporated Foundation as at December 31, 2011, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

KPMG LLP

Chartered Accountants, Licensed Public Accountants

Toronto, Canada February 15, 2012

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STATEMENT OF FINANCIAL POSITION

DECEMBER 31, 2011, WITH COMPARATIVE FIGURES FOR 2010

	2011	2010
Assets		
Cash and cash equivalents (note 2)	\$ 2,934,536	\$ 2,551,922
Bonds and debentures (note 3)	22,678,600	26,234,784
Shares (note 3)	48,717,957	51,909,999
Dividends and interest receivable	276,359	318,212
HST receivable	44,890	23,591
Capital assets (note 4)	5,058	-
Accrued benefit asset (note 8)	148,173	103,848
	\$ 74,805,573	\$ 81,142,356
LIABILITIES AND NET ASSETS		
Liabilities:		
Accounts payable and accrued liabilities	\$ 68,399	\$ 73,961
Grants payable (note 5)	3,729,875	4,761,650
	3,798,274	4,835,611
Net assets:		
Invested in capital assets	5,058	-
Internally restricted capital (note 6)	71,002,241	76,306,745
	71,007,299	76,306,745
Lease commitments (note 7)		
	\$ 74,805,573	\$ 81,142,356

See accompanying notes to financial statements.

On behalf of the Board:

K.J. Armitage, M.D., President

G. Farquharson, Chairperson, Finance Committee

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STATEMENT OF OPERATIONS

YEAR ENDED DECEMBER 31, 2011, WITH COMPARATIVE FIGURES FOR 2010

	2011	2010
REVENUE:		
Interest on bonds and debentures	\$ 1,043,722	\$ 1,190,311
Dividends	1,558,546	1,516,869
	2,602,268	2,707,180
Expenses:		
Investment management fees	476,670	460,845
Administrative:		
Salaries and benefits	344,756	394,867
Board and committee expenses	131,569	97, 212
Office supplies and expenses	79,325	62,690
Rent and maintenance	78,727	73,919
Referees' fees	69,509	65,455
Safekeeping charges	69,097	64,680
Donation	50,000	-
Legal and audit fees	19,664	21,966
Delegate and annual meeting expenses	13,689	16,299
Information services and annual report	9,878	8,942
Amortization of capital assets	1,684	1,503
	867,898	807,533
Grants	3,574,195	4,374,233
	4,918,763	5,642,611
Excess of expenses over revenue before the undernoted	(2,316,495)	(2,935,431)
Other income/expenses:		
Realized gain (loss) on sale of investments	(724,601)	1,802,718
Unrealized gain (loss) on investments	(2,258,350)	1,095,552
	(2,982,951)	2,898,270
Excess of expense over revenue	\$ (5,299,446)	\$ (37,161)

See accompanying notes to financial statements.

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STATEMENT OF CHANGES IN NET ASSETS

YEAR ENDED DECEMBER 31, 2011, WITH COMPARATIVE FIGURES FOR 2010

				2011	2010
	INVESTED IN CAPITAL ASSETS	INTERNALLY RESTRICTED CAPITAL	UNRESTRICTED	TOTAL	TOTAL
Balance, beginning of year	\$-	\$76,306,745	\$-	\$76,306,745	\$76,343,906
Excess of expenses over revenue	(1,684)	-	(5,297,762)	(5,299,446)	(37,161)
Investment in capital assets	6,742	-	(6,742)	-	-
Internally restricted capital (note 6)	-	(5,304,504)	5,304,504	-	-
Balance, end of year	\$ 5,058	\$71,002,241	\$-	\$71,007,299	\$ 76,306,745

See accompanying notes to financial statements.

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STATEMENT OF CASH FLOWS

YEAR ENDED DECEMBER 31, 2011, WITH COMPARATIVE FIGURES FOR 2010

Cash provided by (used in):Second Provided by (used in):Operations: Excess of expenses over revenue\$ (5,299,446)\$ (37,161)Items not involving cash: Amortization of capital assets1,6841,502Unrealized (gain) loss on investments2,258,350(1,095,552)Change in non-cash operating items(1,061,109)549,652Investing: Decrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-Increase (decrease) in cash and cash equivalents382,614(116,795)Cash and cash equivalents, beginning of year2,551,9222,668,717		2011	2010
Excess of expenses over revenue\$ (5,299,446)\$ (37,161)Items not involving cash:1,6841,502Amortization of capital assets1,6841,502Unrealized (gain) loss on investments2,258,350(1,095,552)Change in non-cash operating items(1,061,109)549,652(4,100,521)(581,559)Investing:(4,100,921)(581,559)Decrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-Increase (decrease) in cash and cash equivalents382,614(116,795)	Cash provided by (used in):		
Excess of expenses over revenue\$ (5,299,446)\$ (37,161)Items not involving cash:1,6841,502Amortization of capital assets1,6841,502Unrealized (gain) loss on investments2,258,350(1,095,552)Change in non-cash operating items(1,061,109)549,652(4,100,521)(581,559)Investing:(4,100,921)(581,559)Decrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-Increase (decrease) in cash and cash equivalents382,614(116,795)			
Items not involving cash:1,6841,502Amortization of capital assets1,6841,502Unrealized (gain) loss on investments2,258,350(1,095,552)Change in non-cash operating items(1,061,109)549,652(4,100,521)(581,559)Investing:2Decrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-4,483,135464,764Increase (decrease) in cash and cash equivalents382,614(116,795)	Operations:		
Amortization of capital assets 1,684 1,502 Unrealized (gain) loss on investments 2,258,350 (1,095,552) Change in non-cash operating items (1,061,109) 549,652 (4,100,521) (581,559) Investing: 3,998,868 3,271,935 Decrease in bonds and debentures 3,998,868 3,271,935 Decrease (increase) in shares 491,009 (2,807,171) Purchase of capital assets (6,742) - Increase (decrease) in cash and cash equivalents 382,614 (116,795)	Excess of expenses over revenue	\$ (5,299,446)	\$ (37,161)
Unrealized (gain) loss on investments 2,258,350 (1,095,552) Change in non-cash operating items (1,061,109) 549,652 (4,100,521) (581,559) Investing: - Decrease in bonds and debentures 3,998,868 3,271,935 Decrease (increase) in shares 491,009 (2,807,171) Purchase of capital assets (6,742) - Increase (decrease) in cash and cash equivalents 382,614 (116,795)	Items not involving cash:		
Change in non-cash operating items (1,061,109) 549,652 (4,100,521) (581,559) Investing: - Decrease in bonds and debentures 3,998,868 3,271,935 Decrease (increase) in shares 491,009 (2,807,171) Purchase of capital assets (6,742) - Increase (decrease) in cash and cash equivalents 382,614 (116,795)	Amortization of capital assets	1,684	1,502
(4,100,521) (581,559) Investing:	Unrealized (gain) loss on investments	2,258,350	(1,095,552)
Investing:ADecrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-4,483,135464,764464,764Increase (decrease) in cash and cash equivalents382,614(116,795)	Change in non-cash operating items	(1,061,109)	549,652
Decrease in bonds and debentures3,998,8683,271,935Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-4,483,135464,764Increase (decrease) in cash and cash equivalents382,614(116,795)		(4,100,521)	(581,559)
Decrease (increase) in shares491,009(2,807,171)Purchase of capital assets(6,742)-4,483,135464,764Increase (decrease) in cash and cash equivalents382,614(116,795)	Investing:		
Purchase of capital assets(6,742)4,483,135464,764Increase (decrease) in cash and cash equivalents382,614(116,795)	Decrease in bonds and debentures	3,998,868	3,271,935
4,483,135464,764Increase (decrease) in cash and cash equivalents382,614(116,795)	Decrease (increase) in shares	491,009	(2,807,171)
Increase (decrease) in cash and cash equivalents 382,614 (116,795)	Purchase of capital assets	(6,742)	-
		4,483,135	464,764
Cash and cash equivalents, beginning of year 2,551,922 2,668,717	Increase (decrease) in cash and cash equivalents	382,614	(116,795)
Cash and cash equivalents, beginning of year 2,551,922 2,668,717			
	Cash and cash equivalents, beginning of year	2,551,922	2,668,717
Cash and cash equivalents, end of year \$ 2,934,536 \$ 2,551,922	Cash and cash equivalents, end of year	\$ 2,934,536	\$ 2,551,922
Supplemental cash flow information:	Supplemental cash flow information:		
Grants paid during the year \$ 4,774,250 \$ 4,057,700	Grants paid during the year	\$ 4,774,250	\$ 4,057,700
Grant refunds received during the year (168,280) (211,767)	Grant refunds received during the year	(168,280)	(211,767)
Grants paid, net of refunds \$ 4,605,970 \$ 3,845,933	Grants paid, net of refunds	\$ 4,605,970	\$ 3,845,933

See accompanying notes to financial statements.

PHYSICIANS'

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NOTES TO FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2011

The Physicians' Services Incorporated Foundation (the "Foundation") is incorporated without share capital under the laws of Ontario. Under the Income Tax Act (Canada), the Foundation is registered as a public foundation constituted for charitable purposes and, accordingly, is exempt from income taxes, provided certain requirements of the Income Tax Act (Canada) are met.

1. SIGNIFICANT ACCOUNTING POLICIES:

(a) Use of estimates:

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the year. Actual results could differ from those estimates.

(b) Bonds, debentures and shares:

Bonds, debentures and shares are valued at year-end quoted market prices, where available. Where quoted market prices are not available, estimated fair values are calculated using comparable securities.

Bonds, debentures and shares of foreign corporations and the income derived therefrom are recorded in the accounts in Canadian funds, based on the rate of exchange at the transaction settlement date.

(c) Capital assets:

Capital assets are recorded at cost and are amortized on a straight-line basis using the following annual rates:

Asset	Rate
Computer equipment	25%

(d) Revenue recognition:

Investment income is recognized on the accrual basis.

(e) Grants:

Grants are recognized in the statement of operations as an expense in the year the grant is approved by the Board of Directors.

(f) Employee future benefits:

The Foundation accrues its obligations under its employee defined benefit plan, and the related costs, net of plan assets. The cost of pensions and other retirement benefits earned by employees is actuarially determined using the projected benefit method prorated on service and management's best estimate of expected plan investment performance, salary escalation and retirement ages of the employees. For the purpose of calculating the expected return on plan assets, those assets are valued at fair value. The excess of the net actuarial gain (loss) over 10% of the greater of the benefit obligation and the fair value of the plan assets is amortized over the average remaining service period of active employees of the plan, as are the past service costs and transitional assets and liabilities. Past service costs from plan amendments are

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 2011

amortized on a straight-line basis over the average remaining service period of employees active at the date of the amendment.

The last actuarial valuation was performed as of June 1, 2011, and the next valuation is required effective June 1, 2012.

(g) Financial instruments:

The Foundation applies the requirements of Section 3861, Financial Instruments - Disclosure and Presentation. In accordance with the Accounting Standards Board's decision to exempt not-for-profit organizations from the disclosure requirements with respect to financial instruments within Section 3862, Financial Instruments - Disclosures, and Section 3863, Financial Instruments - Presentation, the Foundation has elected not to adopt these standards in its financial statements.

2. CASH AND CASH EQUIVALENTS:

The Foundation considers deposits in banks and short-term investments with original maturities of three months or less as cash and cash equivalents. Components of cash and cash equivalents are as follows:

	2	011	2010
Cash on deposit	\$ 2,84	1,680	\$ 2,420,830
Beutel Goodman Cash Management Funds	9	2,856	131,092
	\$ 2,93	4,536	\$ 2,551,922

3. INVESTMENTS:

Investments are managed by four independent investment managers.

	20	11	20	10
	BOOK VALUE	MARKET VALUE	BOOK VALUE	MARKET VALUE
Bonds and debentures:				
Beutel Goodman and Company Limited	\$21,396,628	\$22,678,600	\$ 25,395,499	\$26,234,784
Shares:				
Magna Vista Investment Management	22,514,573	25,514,485	23,065,036	28,052,600
Neuberger Berman, LLP	13,838,782	16,721,707	13,867,010	16,228,347
AGF Asset Management Group	9,036,801	6,481,765	8,949,118	7,629,052
	\$ 45,390,156	\$48,717,957	\$ 45,881,164	\$51,909,999

4. CAPITAL ASSETS:

					2011	2	010
		Acc	UMULATED	NET	г Воок	NET B	Тоок
	Cost		RTIZATION	V	ALUE	VALI	UE
Furniture and equipment	\$ 28,752	\$	28,752	\$	-	\$	-
Computer equipment	35,024		29,966		5,058		-
Leasehold improvements	18,141		18,141		-		-
	\$ 81,917	\$	76,859	\$	5,058	\$	-

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 2011

5. GRANTS PAYABLE:

Grants payable represent the balance of grants approved by the Board of Directors which are payable over the next two years.

6. RESTRICTION ON NET ASSETS:

The Board of Directors has internally restricted the original net assets which established the Foundation as the base on which investment income would be earned annually to fund general operations and provide funds for charitable endeavours in the health field. Annually, the Board of Directors increases or decreases these internally restricted amounts depending on the level of grants awarded in the year. These internally restricted amounts are not available for other purposes without approval of the Board of Directors.

7. LEASE COMMITMENTS:

The Foundation has leased office premises and certain equipment under net operating leases which expire at various dates to June 30, 2017. Future minimum payments, by year and in aggregate, are as follows:

2012	\$ 46,000
2013	46,000
2014	46,000
2015	22,071
2016 and thereafter	5,769
	\$ 165,840

8. EMPLOYEE FUTURE BENEFITS:

The Foundation makes contributions, on behalf of its staff, to the Employees of the Physicians' Services Incorporated Foundation Pension Plan (the "Plan"). Employees are required to contribute 5% of their earnings to the Plan. The Plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and salaries.

Information about the Foundation's defined benefit plan is as follows:

	2011	2010
Accrued benefit obligation	\$ 885,312	\$ 725,692
Fair value of plan assets	626,502	605,732
Funded status - deficit	\$ (258,810)	\$ (119,960)
Unamortized transitional obligation Unamortized net actuarial loss	\$ 5 406,978	\$ 2,414 221,394
Accrued benefit asset	\$ 148,173	\$ 103,848

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 2011

8. EMPLOYEE FUTURE BENEFITS (CONTINUED):

The significant actuarial assumptions adopted in measuring the Foundation's accrued benefit obligation are as follows (weighted-average assumptions as of December 31):

	2011	2010
Discount rate	5.25 %	5.50 %
Expected long-term rate of return on plan assets	6.25 %	6.50 %
Rate of compensation increase	3.00 %	3.00 %

The net expense for the Foundation's defined benefit plan for the current year was \$33,338 (2010 - \$58,856). Other information about the Foundation's defined benefit plan is as follows:

	2011	2010
Employer contributions	\$ 77,663	\$ 22,810
Employees' contributions	11,380	10,194

The fair value of plan assets consists of the following:

	2011	2010
Cash and cash equivalents	8.50 %	8.30 %
Fixed income	35.40 %	35.30 %
Equities	56.10 %	56.40 %
	100.00 %	100.00 %

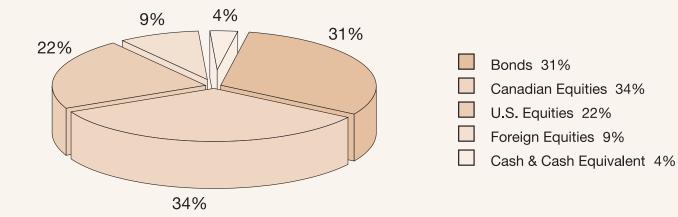
9. FAIR VALUE OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES:

The carrying values of cash and cash equivalents, dividends and interest receivable, accounts payable and accrued liabilities and grants payable approximate their fair values due to the relatively short periods to maturity of these items.

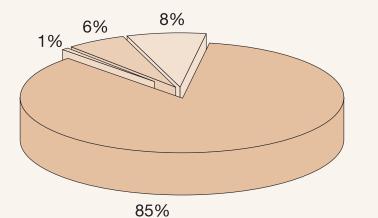
Foreign exchange risk arises from fluctuations in foreign exchange rates and the degree of volatility of these rates. The Foundation is exposed to foreign exchange risk in its foreign investment portfolios. The Foundation does not use derivative instruments to reduce its exposure to foreign investment risk.

Interest rate risk arises from fluctuations in interest rates and the degree of volatility of these rates. The Foundation is exposed to interest rate risk on its bonds and debentures investments. The Foundation does not use derivative instruments to reduce its exposure to interest rate risk.

2011 DISTRIBUTION OF ASSETS AT MARKET VALUE



2011 DISTRIBUTION OF GRANTS APPROVED



Clinical Research 85%
Health Education 1%
Health Systems Research 6%

Medical Education Research 8%

PHYSICIANS'

SERVICES

INCORPORATED

FOUNDATION

GRANTS APPROVED		
FOR THE YEAR ENDED DECEMBER 31, 2011		
		AMOUNT
	А	PPROVED
HEALTH EDUCATION		
Fellowships for Practising Physicians		
Dr. T.A. Baldisera	\$	6,200
Dr. R.N. Gidwani	\$	2,275
	Ψ	2,275
	•	0.475
Total Health Education	\$	8,475
HEALTH SYSTEMS RESEARCH		
Hospital for Sick Children		
Dr. A.L. Bahm*, Dr. S.B. Freedman		
A Population-based cohort to determine the effect of Emergency Department		
pediatric gastroenteritis strategies on admission and return visits rates	\$	20,000
Dr. M. Coffey		-,
Improving resident handoff in teaching hospitals:		
Understanding implementation and effectiveness of a handoff bundle	\$	154,000
	Ψ	154,000
St Mishaal's Haanital		
St. Michael's Hospital		
Dr. T.L. Zakrison		
Improving communication and patient safety in trauma patients		
admitted to the Intensive Care Unit - A pilot feasibility study	\$	12,000
Sunnybrook Health Sciences Centre		
Dr. P.T. Church, Dr. V. Shah		
Academic challenges for the preterm infant: Educators' knowledge, attitudes,		
and identified barriers to providing aid to this population	\$	61,000
Total Health Systems	\$	247,000
COMMUNITY-BASED RESEARCH		
South Riverdale Community Health Centre		
Dr. S. Woolhouse		
At-risk and living with hepatitis C, addiction, and mental illness:		
	\$	5 000
Stories from a novel model program in Toronto	Ф	5,000
Tetel Osmannita Deced		F 000
Total Community-Based	\$	5,000

GRANTS APPROVED		
For the year ended december 31, 2011 (continued)		
		AMOUNT
MEDICAL EDUCATION RESEARCH	Α	PPROVED
MEDIBAE EDBBAHON REJEARCH		
Hospital for Sick Children		
Dr. M. Morin, Dr. A. Dubrowski		
Development of a novel strategy to teach the pediatric MSK examination:		
adolescents patient partners with Juvenile Idiopathic Arthritis (JIA) Phase 1: Exploring the teens' perceptions and motivation to participate	\$	16,000
Exploring the teens perceptions and motivation to participate	Φ	10,000
Mount Sinai Hospital		
Dr. B. Zevin*, Dr. T. Grantcharov		
Design and validation of a surgical skills assessment tool for		
laparoscopic Roux-en-Y gastric bypass	\$	14,500
Toronto General Hospital		
Dr. C. Moulton		
Pressures on surgeons to 'measure-up' with their effects on surgical judgement	\$	98,500
University of Western Ontario		
Dr. M. LeBel, Dr. S. Cristancho Observational learning strategies in simulation-based		
arthroscopic surgical training	\$	48,000
Dr. C.M. Schlachta	Ψ	40,000
Evaluation of a hands-free pointer for surgical instruction in		
minimally invasive surgery	\$	140,500
To de LIMA di sel E deservices		017 500
Total Medical Education	\$	317,500
CLINICAL RESEARCH		
McMaster University		
Dr. S.M. Bates		
Evaluating values and preferences of women for thromboprophylaxis during pregnancy	\$	63,500
Dr. V. Chaudhary		,
Evaluation of wet Age-Related Macular Degeneration (AMD)		
genetic profile interactions with Ranibizumab treatment outcomes	\$	75,000
Queen's University		
Dr. D. Hesse*, Dr. J. Rudan		
Using computer assisted surgical techniques to enhance the		
accuracy of the distal tibial cut in total ankle arthroplasties	\$	13,500
Dr. S. Sikdar*, Dr. D. LeBrun		
Towards tailored treatment of follicular lymphoma based on	ሱ	14 000
perturbation of the INK4a tumour supressor gene	\$	14,000
University of Ottawa		
Dr. E. Bariciak		
Renin and aldosterone levels in the preterm neonate at risk		
for hypertension (Renal HIT Study)	\$	51,000
Dr. J. Dy, Dr. S. Wei High dose versus low dose oxytocin for labour augmentation, A pilot study	\$	154,000
migh dose versus low dose oxytoen for labour augmentation, A pilot study	Ψ	10-7,000

GRANTS APPROVED		
For the year ended december 31, 2011 (continued)		
		AMOUNT
CLINICAL RESEARCH (CONTINUED)	Α	PPROVED
GEINIGAL RESEARCH (GUNTINDED)		
University of Ottawa (continued)		
Dr. E.B. Goldbloom, Dr. A. Ahmet		
National surveillance for adrenal suppression in the Canadian pediatric population	\$	27,500
Dr. A. MacKenzie		
Preclinical assessment of clinic ready agents for the treatment of neuromuscular diseases	\$	142,000
	Ψ	112,000
Holland Bloorview Kids Rehabilitation Hospital Dr. P. Rumney		
Exploring the King's Outcome Scale for childhood head injury in		
children attending a rehabilitation hospital	\$	170,000
Hospital for Sick Children		
Dr. D.M. Levy		
Childhood-onset systemic Lupus erythematosus: Determining long-term outcomes	\$	158,500
Dr. R.S. Parekh		
Genetic screening of children with nephrotic syndrome	\$	170,000
Dr. P. Parkin OptEC: Optimizing Early Child Development in the Primary Care		
Practice Setting: Pragmatic randomized trial of iron treatment		
for young children with non-anemic iron deficiency	\$	168,000
Mount Sinai Hospital Dr. C. Chan*, Dr. E. Greenblatt		
Non-invasive genomic analysis of human endometrial receptivity	\$	20,000
Dr. J.C.P. Kingdom, Dr. S. Keating	Ψ	20,000
Placental response to Heparin: Implications for the prevention of pre-eclampsia	\$	163,000
Dr. B.J. Minnema*, Dr. A. Morris		
Effects of an antimicrobial stewardship pograms on antimicrobial prescribing in	¢	20.000
Intensive Care Units: A prospective, stepped-wedge observational study	\$	20,000
Princess Margaret Hospital		
Dr. I.M. Galvin, Dr. N.D. Ferguson		
Acute lung injury in the ICU: Scope of the problem and focus on prevention	\$	39,500
Dr. T. Hsu*, Dr. N. Leighl Predictors of chemotherapy toxicity in elderly cancer patients -		
Two objective markers of patient physical health	\$	4,000
	Ŷ	1,000
St. Michael's Hospital		
Dr. A. Grewal*, Dr. J. Lee		
The effect of endoscopic sinus surgery on nasal nitric oxide levels in patients with Chronic Sinusitis	\$	10,500
Dr. C.F.J. Lowe*, Dr. M.P. Muller	Φ	10,500
Active surveillance of extended Spectrum β -lactamases (ESBL)		
in the Greater Toronto Area: Effects on nosocomial ESBL infection rates	\$	16,500
Dr. D.B. Whelan		
A Randomized clinical trial comparing late versus early physiotherapy start times following multi ligament		
reconstruction for knee dislocations (Co-LEAP)	\$	68,000
	Ŧ	,000

GRANTS APPROVED		
FOR THE YEAR ENDED DECEMBER 31, 2011 (CONTINUED)		
		AMOUNT
GLINICAL RESEARCH (CONTINUED)	A	PPROVED
Sunnybrook Health Sciences Centre		
Dr. D.R. Ricciuto*, Dr. A.E. Simor		
Analysis of investigations, treatments and outcomes associated with	¢	10 500
staphylococcus aureus bacteremia in the Greater Toronto Area Dr. M. Sinyor*, Dr. A. Schaffer	\$	19,500
Understanding suicides in Toronto: A comparison of suicide		
victims with and without a history of suicide attempts	\$	20,000
Dr. B. Welk, Dr. S. Herschorn		,
The ability of routine renal imaging to prevent the morbidity and		
mortality of urinary stone disease in spinal cord injury patients	\$	14,000
Toxonto Conoval Haanital		
Toronto General Hospital Dr. G. Allo*, Dr. B.A. Clarke		
Defining the role of HPV in vulvar squamous cell carcinoma in Ontario	\$	20,000
Dr. S. Hota	Ŧ	
A randomized controlled trial of oral vancomycin followed by		
fecal transplantation versus tapering oral vancomycin		
treatment for recurrent clostridium difficile infection	\$	170,000
Dr. Y. Pei, Dr. A. Paterson Identifying disease genes for immunoglobulin A (IgA) nephropathy	\$	169,000
Dr. S. Riazi	Ψ	105,000
Calsequestrin-1, a candidate gene for the diagnosis of malignant		
hypothermia. Study of molecular genetics of malignant hypothermia	\$	22,000
Dr. R. Sapir-Pichhadze, Dr. S.J. Kim		
HLAMatchmaker eplet mismatches and transplant glomerulopathy	\$	110,000
Dr. K. Sy*, Dr. B. Clarke Study of diagnostic accuracy of traditional and molecular		
modalities in the diagnosis of gestational trophoblastic disease (GTD)	\$	20,000
	Ŧ	20,000
Toronto Western Hospital		
Dr. D.M. Andrade		
Genetic causes of temporal lobe epilepsy	\$	168,500
Dr. A.J. Steiman*, Dr. D.D. Gladman Interferon-alpha signature in serologically active, clinically		
quiescent (SACQ) systemic lupus erythematosus (SLE)	\$	19,500
	Ψ	10,000
Women's College Hospital		
Dr. S.A. Jamal		
Nitrates and bone turnover: Trial to select the best nitrate preparation	\$	167,500
University of Western Ontario		
Dr. C.S. Bailey		
Surgery versus standardized non-operative care for the treatment		
of lumbar disc herniations: A Canadian Trial	\$	90,000
Dr. S.J. Desai*, Dr. G.J.W. King		
Hemi-arthroplasty of the elbow: The effect of implant sizing on	^	10 500
joint kinematics and contact mechanics	\$	19,500
Dr. D.M. Fraser, Dr. G. Cepinskas Sepsis-associated encephalopathy	\$	166,000
	Ψ	100,000

GRANTS APPROVED		
FOR THE YEAR ENDED DECEMBER 31, 2011 (CONTINUED)		AMOUNT
		APPROVED
CLINICAL RESEARCH (CONTINUED)		
University of Western Ontario (continued)		
Dr. S. Ganapathy, Dr. J. Brookes		
Comparison of visibility of echogenic and standard		
non-echogenic block needles and catheters during ultrasound		
guided sciatic blocks. A randomized double-blind, prospective study	\$	16,500
Dr. A. Garg		
Comparing PubMed and Google Scholar on evidence retrieval	\$	58,500
Dr. D.G. Hackam, Dr. M.K. Kapral		
Statins and intracerebral hemorrhage	\$	83,000
Dr. C.M.J. McCabe*, Dr. C.S. Bailey		
The importance of soft tissue restraints following type II odontoid		
fractures in the elderly - a biomechanical study	\$	20,000
Dr. R.S. McLachlan, Dr. M.O. Poulter		
Why do sodium channel modifier drugs fail in patients with drug resistant epilepsy?	\$	140,000
Dr. S.A. Morrow		
Recovery of demyelinating optic neuritis after treatment with equivalent high doses		
of oral vs. intravenous corticosteroids: A randomized single blinded clinical trial	\$	68,500
Dr. J.M. Murkin, Dr. T. Mele		
Tissue near infrared spectroscopy (tNIRS) in the assessment		
and management of critically ill patients	\$	168,500
Dr. T. Sheidow, Dr. P.L. Hooper		
Evaluation of tele-ophthalmology in Age-Related Macular		
Degeneration (AMD): Telemedicine solution to improve	•	
patient access and quality of vision outcomes	\$	53,500
Total Clinical	¢	2 252 502
	\$	3,352,500
GRAND TOTAL	\$	3,930,475

SPECIAL MENTION

Hospital for Sick Children

Dr. A. Guha (deceased)

Characterization of a novel neurofibromin interacting protein and its potential role in neurocognitive defects in neurofibromatosis 1 (NF1) patients

Dr. Guha unfortunately passed away in November.

His application was posthumously approved without funding by the Grants Committee.

* Residents funded under the Resident Research Program

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

RESIDENT RESEARCH PRIZES		
FOR EXCELLENCE IN RESEARCH PAPERS 2011		
TITLE OF PAPER	AWARDEE	DEPARTMENT
Queen's University The development of a protocol for colonoscopic monitoring of live mice	Archibald, A.	General Surgery
Development and evaluation of simulation-based assessment tool with resuscitation scenarios for emergency medicine residents	Hall, A.	Emergency Medicine
Can emergency physicians safely exclude proximal deep vein thrombosis using limited compression ultrasound?	Poley, R.	Emergency Medicine
A unique tyrosine residue (Y477) of ezrin regulates local invasion and metastasis of breast cancer	Varma, S.	Anatomical Pathology
Predictors of discharge destination from inpatient geriatric rehabilitation: a prospective cohort study	Waymouth, H.	Internal Medicine
McMaster University Active surveillance, radiofrequency ablation or cryoablation for the non-surgical management of a small renal mass: a cost-utility analysis	Bhan, S.	Diagnostic Radiology
The impact of perioperative clonidine on cardiovascular events in patients undergoing noncardiac surgery: a systematic review and meta-analyses	Darvish-Kazem, S.	Internal Medicine
Impact of fresh gas flow rates on usage of volatile anesthetic agents: a cost analysis	Jeffery, A.	Anesthesiology
Heart rate is associated with increased risk of major cardiovascular events and all-cause death in patients with stable chronic cardiovascular disease – an analysis of ontarget/transcend	Rambihar, S.	Cardiology
Comparison between Abbott Precision Xceed Pro (PCP) and Nova Statstrip (STATSTRIP) glucose meters in neonates	Wang, L.	Medical Biochemistry
University of Western Ontario Reconstruction of the coronoid using an extended prosthesis: an in-vitro biomechanical study	Alolabi, B.	Orthopaedic Surgery
Statin use associates with a lower incidence of acute kidney injury after major elective surgery	Molnar, A.	Internal Medicine
Definition of the lateral bulge deformity after primary cleft lip repair using real-time high-resolution ultrasound	Power, S.	Plastic Surgery

RESIDENT RESEARCH PRIZES			
FOR EXCELLENCE IN RESEARCH PAPERS 2011 (CONTINUED)			
TITLE OF PAPER	AWARDEE	DEPARTMENT	
Elective and emergency abdominal surgery in patients 90 years of age or older	Racz, J.	General Surgery	
Utility of treadmill testing in identification and genotype prediction in long-QT syndrome	Wong, J.	Cardiology	
University of Ottawa Effect of high flow oxygen on mortality in chronic obstructive pulmonary disease patients in prehospital setting: randomised controlled trial	Austin, M.	Emergency Medicine	
The application of high frequency ultrasound to assess arteriovenous hemodialysis fistula vein wall morphology for cannulation readiness	Jaberi, A.	Diagnostic Radiology	
Storage time of transfused red blood cells and impact on clinical outcomes in hematopoietic stem cell transplantation	Kekre, N.	Internal Medicine	
The prognostic significance of capsular incision into tumor during radical prostatectomy	Preston, M.	Urology	
Surgical stress promotes the development of cancer metastases by a coagulation-dependent mechanism in a murine model	Seth, R.	General Surgery	
Northern Ontario School of Medicine Adherence of emergency physicians to abbreviation guidelines at HRSRH	Josseau, M.	Family Medicine	
Colorectal cancer screening in a sample of North Bay physicians' practices	King, R.	Family Medicine	
Left without being seen: the causes and consequences, a review of the literature	Perlin, K.	Family Medicine	
TBRH enucleation initiative	Stone, S.	Family Medicine	
Knowledge, attitudes and beliefs of Thunder Bay Regional Health Sciences Centre (TBRHSC) physicians regarding venous thromboembolism (VTE) and VTE prophylaxis	Strickland, S.	Family Medicine	
University of Toronto Bicyclist death and striking vehicles in the USA	Ackery, A.	Emergency Medicine	

Furlan, J.

Morgen, E.

and clinical outcomes after acute ischemic stroke

A clinical algorithm for efficient, high-resolution cytogenomics analysis of uncultured solid tissue samples

White blood cell counts as a marker of stroke severity

Neurology

Anatomical Pathology

RESIDENT RESEARCH PRIZES		
FOR EXCELLENCE IN RESEARCH PAPERS 2011 (CONTINUED)		
TITLE OF PAPER	AWARDEE	DEPARTMENT
Incidence, risk factors for early hepatotoxicity and its impact on survival in patients with myelofibrosis undergoing allogenic hematopoietic cell transplantation	Wong, K.K.M.	Internal Medicine
Is there a need for coagulation laboratory pre-screening in children undergoing peripherally-inserted central catheter placement in a tertiary care setting? Report of a single centre experience	Woodley-Cook, J.	Diagnostic Radiology

THE PHYSICIANS' SERVICES INCORPORATED FOUNDATION

RECENTLY PUBLISHED PAPERS		
ON FOUNDATION FUNDED PROJECTS		
TITLE	GRANTEE	JOURNAL
Prevalence of nocturnal hypoglycemia in pediatric type 1 diabetes: a pilot study using continuous glucose monitoring	Ahmet, A.	J Pediatr, 159(2):297-302, 2011
A multifaceted strategy to reduce inappropriate use of frozen plasma transfusions in the intensive care unit	Arnold, D.M.	J Crit Care, 26(6):636 e7-636, 2011
A comparison of sartorius versus quadriceps stimulation for femoral nerve block: A prospective randomized double-blind controlled trial	Awad, I.T. McCartney, C.J. Anns, J.P.	Anesth Analg, 112(3):725-31, 2011
Failure of pediatric and neonatal trainees to meet Canadian Neonatal Resuscitation Program standards for neonatal intubation	Bismilla, Z.	J Perinatol, 30(3):182-7, 2010
Influence of continuous positive airway pressure on outcomes of rehabilitation in stroke patients with obstructive sleep apnea	Bradley, D.	Stroke, 42(4):1062-7, 2011
Automating the weaning process with advanced closed-loop systems	Burns, K.E-A	Intensive Care Med, 34(10):1757-65, 2008
Wean Earlier and Automatically with New technology (the WEAN study): a protocol of a multicentre, pilot randomized controlled trial	Burns, K.E-A	Trials, 10:81, 2009
Incidence and characteristics of facial nerve stimulation in children with cochlear implants	Cushing, S. Papsin, B.	Laryngoscope, 116(10):1787-91, 2006
Facial nerve electromyography: a useful tool in detecting nonauditory side effects of cochlear implantation	Cushing, S. Papsin, B.	J Otolaryngol Head Neck Surg, 38(2):157-65, 2009
Activating transcription factor 3 confers protection against ventilator-induced lung injury	dos Santos, C.	Am J Respir Crit Care Med, 182(4):489-500, 2010
Neuroimmune regulation of ventilator-induced lung injury	dos Santos, C.	Am J Respir Crit Care Med, 183(4):471-82, 2011
Changes in functional magnetic resonance imaging cortical activation after decompression of cervical spondylosis: case report	Duggal, N.	Neurosurgery, 67(3):E863-4, 2010
Brain reorganization in patients with spinal cord compression evaluated using fMRI	Duggal, N.	Neurology, 74(13):1048- 54, 2010
Open reduction internal fixation versus percutaneous pinning with external fixation of distal radius fractures: a prospective, randomized clinical trial	Faber, K.J. MacDermid, J.C.	J Hand Surg Am, 36(12):1899-906, 2011

RECENTLY PUBLISHED PAPERS

ON FOUNDATION FUNDED PROJECTS (CONTINUED)

TITLE	GRANTEE	JOURNAL
A framework for applying unfamiliar trial designs in studies of rare diseases	Faughnan, M.	J Clin Epidemiol, 64(10):1085-94, 2011
Rapid versus standard intravenous rehydration in paediatric gastroenteritis: pragmatic blinded randomised clinical trial	Freedman, S.B.	BMJ, 343:d6976, 2011
Statins and renovascular disease in the elderly: a population-based cohort study	Hackam, D.	Eur Heart J, 32(5):598- 610, 2011
Biomechanical analysis of lateral pin placements for pediatric supracondylar humerus fractures	Hamdi, A. Kontio, K.	J Pediatr Orthop, 30(2):135-9, 2010
Hand motion analysis using the Imperial College Surgical Assessment Device: validation of a novel and objective performance measure in ultrasound-guided peripheral nerve blockade	Hayter, M. Chan, V.	Reg Anesth Pain Med, 36(3):213-9, 2011
Increased lung clearance of isoflurane shortens emergence in obesity: a prospective randomized-controlled trial	Katznelson, R. Friedman, Z. Fisher, J.	Acta Anaesthesiol Scand, 55(8):995-1001, 2011
Prevalence and predictors of urethral chlamydia and gonorrhea infection in male inmates in an Ontario correctional facility	Kouyoumdjian, F. Main, C. Calzavara, L. Keifer, L.	Can J Public Health, 102(3):220-4, 2011
The effect of posterior capsular tightening on peak subacromial contact pressure during simulated active abduction in the scapular plane	Lapner, P.	J Shoulder Elbow Surg, 19(3):406-13, 2010
Angiotensin converting enzyme-2 confers endothelial protection and attenuates atherosclerosis	Levitt, K. Verma, S.	Am J Physiol Heart Circ Physiol, 295(4):H1377-84, 2008
The novel immunoregulatory molecule FGL2: a potential biomarker for severity of chronic hepatitis C virus infection	Levy, G.A. Heathcote, E.J.	J Hepatol, 53(4):608-15, 2010
Effect of a multifaceted intervention on adherence to hand hygiene among healthcare workers: a cluster-randomized trial	Loeb, M.	Infect Control Hosp Epidemiol, 31(11): 1170-6, 2010
Recombinant factor VIIa affects anastomotic patency of vascular grafts in a rabbit model	Mazer, D.	J Thorac Cardiovasc Surg, 142(2):418-23, 2011
Functional electrical stimulation therapy of voluntary grasping versus only conventional rehabilitation for patients with subacute incomplete tetraplegia: a randomized clinical trial	McGillivray, C.	Neurorehabil Neural Repair, 25(5):433-42, 2011

RECENTLY PUBLISHED PAPERS

ON FOUNDATION FUNDED PROJECTS (CONTINUED)

TITLE	GRANTEE	JOURNAL
A moderated journal club is more effective than an Internet journal club in teaching critical appraisal skills: results of a multicenter randomized controlled trial	McLeod, R.	J Am Coll Surg, 211(6):769-76, 2010
Effect of N-acetylcysteine on serum creatinine and kidney function: results of a randomized controlled trial	Moist, L.	Am J Kidney Dis, 56(4):643-50, 2010
Slowing down to stay out of trouble in the operating room: remaining attentive in automaticity	Moulton, C-A Regehr, G. MacRae, H.	Acad Med, 85(10):1571-7, 2010
'Slowing down when you should': initiators and influences of the transition from the routine to the effortful	Moulton, C-A Regehr, G. MacRae, H.	J Gastrointest Surg, 14(6):1019-26, 2010
Operating from the other side of the table: control dynamics and the surgeon educator	Moulton, C-A Regehr, G. MacRae, H.	J Am Coll Surg, 210(1):79-86, 2010
A molecular signature of proteinuria in glomerulonephritis	Reich, H.N. Herzenberg, A.M. (deceased)	PLoS One, 5(10):e13451, 2010
The role of drinking water in the transmission of antimicrobial-resistant <i>E. coli</i>	Salvadori, M.	Epidemiol Infect, 23:1-10, 2011
Endothelial progenitor cells promote fracture healing in a segmental bone defect model	Schemitsch, E. Li, R. Stewart, D.J.	J Orthop Res, 28(8): 1007-14, 2010
Endothelial progenitor cells for fracture healing: a microcomputed tomography and biomechanical analysis	Schemitsch, E. Li, R. Stewart, D.J. Nauth, A.	J Orthop Trauma, 25(8):467-71, 2011
Warfarin dose assessment every 4 weeks versus every 12 weeks in patients with stable international normalized ratios	Schulman, S.	Ann Intern Med, 155(10):653-9, 2011
Ultrasound reduces the minimum effective local anaesthetic volume compared with peripheral nerve stimulation for interscalene block	Shastri, U.	Br J Anaesth, 106(1): 124-30, 2011
Transient lipopolysaccharide-induced cytokine responses in the maternal serum and amniotic fluid of the guinea pig	Smith, G.	Am J Obstet Gynecol, 200(5):534, 2009
Cortical reorganization after modified constraint-induced movement therapy in pediatric hemiplegic cerebral palsy	Sutcliffe, T.L. Fehlings, D.L.	J Child Neurol, 22(11): 1281-7, 2007

RECENTLY PUBLISHED PAPERS

ON FOUNDATION FUNDED PROJECTS (CONTINUED)

TITLE	GRANTEE	JOURNAL
Pediatric constraint-induced movement therapy is associated with increased contralateral cortical activity on functional magnetic resonance imaging	Sutcliffe, T.L. Fehlings, D.L.	Child Neurol, 24(10): J1230-5, 2009
Neural stem/progenitor cells from the adult human spinal cord are multipotent and self-renewing and differentiate after transplantation	Tator, C.H.	PLoS One, 6(11):e27079, 2011
A comparison between the Boussignac TM continuous positive airway pressure mask and the venturi mask in terms of improvement in the PaO_2/F_1O_2 ratio in morbidly obese patients undergoing bariatric surgery: a randomized controlled trial	Wong, D.	Can J Anesth, 58(6): 532–539, 2011
Erythropoietin protects against diabetes through direct effects on pancreatic $\boldsymbol{\beta}$ cells	Woo, M. Retnakaran, R.	J Exp Med, 207(13): 2831-42, 2010
The extra-hematopoietic role of erythropoietin in diabetes mellitus	Woo, M. Retnakaran, R.	Curr Diabetes Rev, 7(4): 284-90, 2011
Combined oro-caecal scintigraphy and lactulose hydrogen breath testing demonstrate that breath testing detects oro-caecal transit, not small intestinal bacterial overgrowth in patients with IBS	Yu, D. Vanner, S.	Gut, 60(3):334-40, 2011
Comparison of the in vitro safety of intraocular dyes using two retinal cell lines: a focus on brilliant blue G and indocyanine green	Yuen, D.	Am J Ophthalmol, 147(2):251-259, 2009
Nocturnal hemodialysis is associated with restoration of early-outgrowth endothelial progenitor-like cell function	Yuen, D.A. Leong-Poi, H. Chan, C.T.	Clin J Am Soc Nephrol, 6(6):1345-53, 2011

SCIENTIFIC PRESENTATIONS FOR 2012 ANNUAL MEETING

At the annual Delegates meeting held in April, the membership is given an opportunity to hear from the researchers who have received grants from the Foundation, and to learn about the results of the research. Featured below are profiles of the grantees invited to attend this year's meeting. These are just three examples of the many outstanding clinician scientists whose work the Foundation proudly funds.

DR. STEPHEN FREEDMAN, UNIVERSITY OF TORONTO

Dr. Stephen Freedman is an Assistant Professor at the University of Toronto and a physician in Paediatric Emergency Medicine at the Hospital for Sick Children. He is also an Associate Scientist at the Child Health Evaluative Sciences program. Dr. Freedman completed his medical training at McGill University, the Hospital for Sick Children, and Children's Memorial in Chicago, and he also holds a Master of Science in Clinical Investigation from Northwestern University. Dr. Freedman's research focuses on treatment of children with gastroenteritis and dehydration; he has published in journals such as Pediatrics, the New England Journal of Medicine and the British Medical Journal. Dr. Freedman is a member of the House of Delegates of the P.S.I. Foundation.



Dr. Stephen Freedman

DR. KENNETH FABER, UNIVERSITY OF WESTERN ONTARIO

Dr. Kenneth Faber is an Associate Professor in the Department of Surgery at the University of Western Ontario, where he is the Orthopedic Resident Wrist & Hand Lab Program Director. He completed his M.D. at the University of Toronto, residency at the University of Western Ontario, and fellowships at the Hand and Upper Limb Centre and the Hawkins Steadman Clinic in Vail; moreover, he has a Master's degree in Health Professions Education, completed at the University of Illinois at Chicago. Dr. Faber's specialty is shoulder, elbow, hand and wrist surgery, with research interests in shoulder and elbow biomechanics, wound healing and tissue contracture. He has published in journals such as the Journal of Orthopaedic Trauma, the Journal of Shoulder and Elbow Surgery, and the Journal of Hand Surgery.



Dr. Kenneth Faber

DR. JOY MACDERMID, UNIVERSITY OF WESTERN ONTARIO

Dr. Joy MacDermid is a physical therapist, hand therapist, and epidemiologist. She is an Associate Professor at the University of Western Ontario, Associate Professor in the School of Rehabilitation Science at McMaster University, and Co-director of the Clinical Research Lab within the Hand and Upper Limb Centre. She obtained both her Ph.D in Epidemiology and Biostatistics and Master of Science in Physical Therapy from the University of Western Ontario. Dr. MacDermid's research relates to enhancing prevention, assessment, and management of musculoskeletal disorders and related work disability; furthermore, her research interests include research methodology, psychometrics of clinical measurement, clinical epidemiology, clinical practice guidelines, and knowledge transfer. She has published in journals such as the British Medical Journal.



Dr. Joy MacDermid

VISION STATEMENT

BACKGROUND

When the Foundation was established in 1970 it was agreed that it should primarily be a granting agency rather than an operating agency and it continues to be managed by the physicians of Ontario. It was mandated by the Board of the new foundation, and the participating physicians, that the Foundation's prime objective should be the provision of funds solely within the health field.

To meet this mandate the Board of the new Foundation agreed that a diversified portfolio should be held consisting of equities and income-producing securities to permit a consistent level of granting.

THE VISION

The Foundation seeks to build upon its unique situation in the health research community, as a physician sponsored granting agency, and is based on the belief that continued support of peer reviewed, innovative research, will bring new and improved benefits to clinical practice.

The vision of the Foundation is to seek to address the unparalleled challenges that will face physicians in providing effective health care for their patients in the years to come.

The essential supporting structure of this vision is to encourage the research efforts of the new investigator, as well as providing funding for the education of practising physicians.



EDUCATIONAL FELLOWSHIPS FOR PRACTISING PHYSICIANS

PURPOSE

To encourage practising physicians to undertake training to acquire a clinical skill or knowledge currently lacking in the community or to undertake training in research methodology. The Foundation reserves the right to restrict the number of awards approved for physicians practising within the same community, who wish to undertake the same training.

TERMS OF REFERENCE

- 1. The program is directed at Ontario physicians in established practice, preferably residing outside the teaching centres. It is not intended for extended support of a physician undertaking full time training leading to a degree or specialty, although the M.Sc. course will be considered for physicians undertaking training in research methodology.
- 2. The program is available to both general practitioners and specialists.
- 3. Preference is given to a training program involving active participation by the applicant rather than mere observation.
- 4. Training must be undertaken at the closest suitable centre. Funding is not provided for the physician residing in the same area as where the training will be undertaken.
- 5. The applicant must have the approval and support of the local medical society or the physicians within the community.
- 6. The need in the community for the skill to be acquired must be demonstrated to the satisfaction of the Foundation and a letter of endorsement should demonstrate this need.
- 7. Where the application of the skill or knowledge requires the use of new equipment, the Foundation requires a letter from the hospital administrator indicating the equipment is installed or on order for early delivery.

NOTE: Conditions 5, 6 and 7 do not apply to research methodology training.

- 8. The applicant must arrange for the Foundation to receive a letter from the institution at which the training will take place confirming acceptance of the applicant and outlining the training program and the tenure thereof.
- 9. Unless otherwise agreed to in writing by the Foundation, a fellowship will not be awarded to any applicant who has or will receive financial assistance for the same training from any other source.
- 10. The program does not apply to residency training or sabbatical leave and is not designed to assist physicians taking refresher courses.

EXPENSES COVERED

- 1. Course fees.
- 2. Return transportation.
- 3. Room and board.

Applications are available on the Foundation's website.

