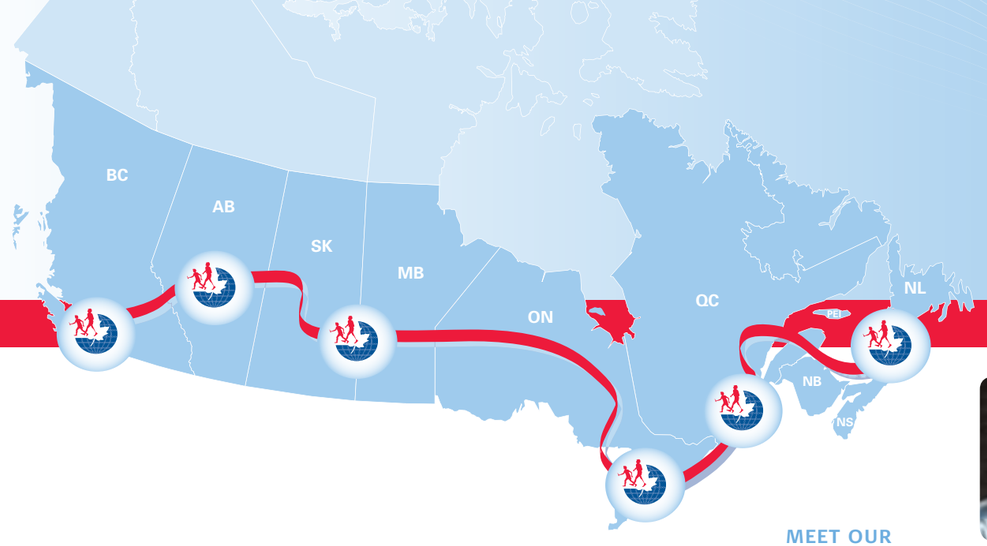

The Terry Fox Research Institute (TFRI) Research Portfolio

The Terry Fox Research Institute acts as the research arm of The Terry Fox Foundation. Our research portfolio includes:

- Terry Fox Translational Research Programs (pan-Canadian projects)
- Terry Fox New Frontiers Program Project Grants at CIHR
- Terry Fox Strategic Training Initiatives in Cancer Research at CIHR
- Terry Fox New Investigator Awards
- Terry Fox Fellowships / Scholarships with Regional Research Agencies

TFRI is an Institute without walls linking the capability of over 50 leading cancer care and cancer research institutes and universities organized through six regional "nodes".

NATIONAL PARTNERS
The Terry Fox Foundation
Canadian Partnership Against Cancer Corporation (CPAC)
Canadian Tumour Repository Network (CTRnet)

BRITISH COLUMBIA
British Columbia Cancer Agency
Genome British Columbia
Michael Smith Foundation for Health Research
St. Paul's Hospital (Providence Health)
Simon Fraser University
University of British Columbia
Vancouver Coastal Health Authority

ALBERTA
Alberta Health Services
Alberta Innovates – Health Solutions
Cross Cancer Institute
Tom Baker Cancer Centre
University of Alberta
University of Calgary

SASKATCHEWAN
Saskatchewan Cancer Agency
Saskatchewan Health Research Foundation
Cancer Care Manitoba
Manitoba Health Research Council
University of Manitoba
University of Saskatchewan

ONTARIO
Brock University
Children's Hospital of Eastern Ontario
Hospital for Sick Children
McMaster University
Mount Sinai Hospital
Ontario Institute for Cancer Research
Ottawa Hospital Research Institute
Queen's University
Sunnybrook Health Sciences Centre
Thunder Bay Research Institute
University Health Network
(Princess Margaret Hospital)
University of Toronto

QUEBEC
Centre Hospitalier de L'Université de Montréal
Centre Hospitalier Universitaire du Québec
L'Institut de Recherches Cliniques de Montréal
Jewish General Hospital
McGill Cancer Centre
McGill University Health Centre
McGill University
Université Laval
Université Sherbrooke

ATLANTIC
Atlantic Research Institute (Moncton)
Dalhousie University (Halifax)
Memorial University of Newfoundland St John's)
New Brunswick Cancer Network
QEII Health Sciences Centre (Halifax)
The University of New Brunswick
The University of Prince Edward Island

MEET OUR TFRI REGIONAL NODE LEADERS

ALBERTA
Dr. Carol Cass

ATLANTIC
Dr. Michael Johnston

BRITISH COLUMBIA
Dr. Marco Marra

ONTARIO
Dr. Robert Rottapel

Dr. Christopher Paige

PRAIRIES
Dr. Jim Davie

QUEBEC
Dr. Anne-Marie Mes-Masson

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bulletin

Canadian Cancer Research Conference | November 27–30, Toronto

Conference attendees:
Join our tribute run/walk in memory of Mrs. Betty Fox on **Tuesday, November 29.**
Register at
www.tfri.ca/bettyfox/

Terry Fox Run dollars provide $12.7 million for breakthrough research

Cancer patients across Canada will benefit from a multi-million dollar investment announced in Vancouver Nov. 2 by The Terry Fox Foundation that will support new and breakthrough research undertaken by leading scientists and clinicians at health and research centres and institutions in British Columbia, Ontario and Quebec.

"Today The Terry Fox Foundation is providing a total of $12.7 million for three significant research programs led by the nation's top cancer scientists. We are confident their work will open doors to new discoveries that advance our understanding of this disease and enable new and innovative ways to diagnose and treat cancer in its many forms," says Dr. Victor Ling, President and Scientific Director of the Terry Fox Research Institute (TFRI). "We appreciate the work of the Canadian Institutes of Health Research (CIHR) in overseeing the peer review for this very prestigious competition. These grants provide substantial funding to enable scientists to explore fundamental and complex areas of cancer research which are critical to our understanding and management of cancer."

"I applaud The Terry Fox Foundation for its commitment to supporting research that aims to make breakthroughs in the fight against cancer," said the Honourable Leona Aglukkaq, Canada's Minister of Health. "The Government of Canada is pleased to have been able to help in the process of selecting these outstanding research teams for funding. Their work, and the funds invested by The Terry Fox Foundation, will contribute to improved health for all Canadians."

"Terry believed in the importance of cancer research. Our investment ensures that the best and brightest research teams will be able to move his vision forward with new discoveries that will make a difference for cancer patients everywhere," says Mr. Brett Kohli, National Director, The Terry Fox Foundation. "We are extremely grateful to the millions of Canadians, young and old, who believe in Terry's vision and support this important and complex research through our annual school and community Terry Fox runs."

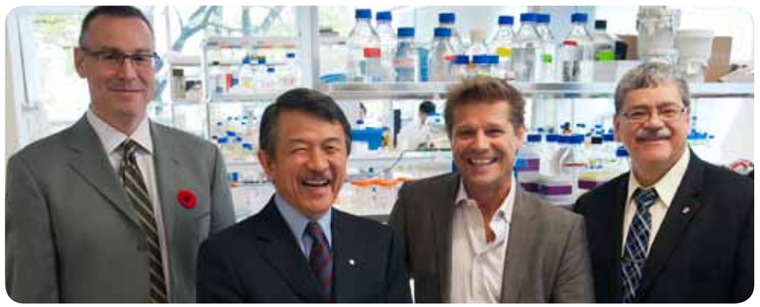
Nearly one-half of the funds to be invested via the 2011 New Frontiers Program Project Grants at CIHR competition will support new research into advanced prostate cancer at the Vancouver Coastal Health's Vancouver Prostate Centre. The lead investigator of the Terry Fox New Frontiers Program on Prostate Cancer Progression is Dr. Martin Gleave, executive director of the Vancouver Prostate Centre and lead investigator. With five-year funding of over $6M, Dr. Gleave and a team of 20 co-investigators will delve deeper into understanding why patients with advanced cancer become resistant to hormone therapy.

At The Hospital for Sick Children (SickKids) in Toronto, Ontario, Dr. Sean Egan, senior scientist in the Developmental & Stem Cell Biology Program, and associate professor in the Department of Molecular Genetics at the University of Toronto, heads an investigative team that will receive $2.8M over three years to find the "Achilles' heel" responsible for tumour metastases of the breast and brain. Recent cancer DNA sequencing efforts have shown that cancer-associated mutations can be quite different between primary tumours and their metastases, which have spread throughout the body. His group, which aims to address tumour heterogeneity through the identification of subgroup-specific "shared maintenance genes," will identify critical targets to treat the primary tumours and their malignant descendants.

In Montreal, Quebec, at the Rosalind and Morris Goodman Cancer Research Centre, Dr. Michel Tremblay, professor, Departments of Biochemistry and Oncology and Centre director, will lead a team of investigators over the next three years to study molecular linkages between other diseases, such as obesity, and cancer. The scientific and medical communities have long known that the intricate molecular control in obesity, diabetes and cardiovascular diseases are linked to cancer. Yet this remains uncharted territory and much work needs to be done to understand these links. His team will receive a total of $3.8M over three years

The New Frontiers Program Project Grants is the flagship program of The Terry Fox Foundation's investment portfolio, funding team science and research excellence for nearly three decades. TFRI and CIHR formed a joint partnership in 2010 to oversee the delivery of the program.

West Vancouver cancer patient Mr. Don Konantz speaks to media at The Terry Fox Foundation's announcement Nov. 2 that it is providing $12.7 million for breakthrough research. Nearly one-half of the funds will support research into advanced prostate cancer at the Vancouver Prostate Centre.



Cancer scientists (l-r): Dr. Sean Egan (Toronto, Ontario), Dr. Victor Ling (TFRI president and scientific director), Dr. Martin Gleave (Vancouver, BC) & Dr. Michel Tremblay (Montreal, Quebec) tour Dr. Gleave's lab following the $12.7 million funding announcement by The Terry Fox Foundation.

Photos: Bob Young/ Terry Fox Research Institute

Members of the COOLS team as well as special guests unveil their logo at the study's launch in Victoria, British Columbia in May 2011.

Surgical study offers new hope for patients with early-stage oral cancer

In May 2011, The Terry Fox Research Institute (TFRI) launched a $4.7 million Pan-Canadian Phase III clinical trial aimed at improving outcomes for patients undergoing surgery for oral squamous cell cancers. The Canadian Optically Guided Approach for Oral Lesions Surgical Trial (The COOLS Study) has the potential to revolutionize clinical practice here and around the world for this kind of cancer.

Currently, about 30 per cent of patients who receive oral surgery have their cancer recur. This trial uses a new approach to remove tumours and pre-cancerous cells from the mouths of those diagnosed with early-stage oral cancer offering new hope for patients.

"Our investment in this promising study is our response to a serious clinical concern expressed by head and neck surgeons across Canada and it has the potential to change surgical practices for cancer of the mouth nationally and internationally," said Dr. Victor Ling, TFRI President and Scientific Director.

Guided by an existing hand-held light tool, the surgeons, pathologists, and scientists involved in this nine-centre study will determine whether recurrence is reduced when they shift the surgical field for the removal of tumours or pre-cancerous cells in the mouth.

The surgeons will use fluorescence visualization (FV) or "blue light" provided by the optical aid rather than traditional white light to determine the tissue to be removed. Under the blue light, normal tissue generates a fluorescence which is absent in tumour or pre-cancerous tissue. The study will aim to spare normal healthy tissue from surgery while catching high-risk, pre-cancerous tissue identified through FV.

"This study will have an immediate impact on practice if the study turns out the way we hope," says TFRI COOLS Study principal investigator Dr. Miriam Rosin, a senior scientist with the BC Cancer Agency who holds joint appointments at the University of British Columbia and Simon Fraser University. "If the study is successful, it will help to reduce the number of deaths from oral cancer as well as to improve the quality of life for people living with this disease. Working with scientists, we will have this new approach ready to disseminate to the surgical community at large and even globally."

"In work we've conducted to date in Vancouver, there has been almost no recurrence where surgery followed the contour of the lesion shown by using FV-guided surgery. Working together with surgeons, pathologists, research staff and scientists, this TFRI-funded study will enable us to test the approach on a broader cohort of patients at sites across the country and obtain the evidence required to change current practice." remarks principal investigator Dr. Catherine Poh, a senior scientist with BC Cancer Agency and oral pathologist and associate professor, University of British Columbia and oral pathologist and consulting dentist, Vancouver General Hospital.

This is the first Canadian study ever to bring together this group of clinicians to address a surgical challenge in oral cancer. "Our surgical community has expressed great interest in participating in this trial which provides a unique and important opportunity to assess a surgical intervention in a controlled prospective manner across many sites," says principal investigator Dr. Scott Durham, an ear, nose and throat surgeon and clinical professor and head, division of otolaryngology, Vancouver General Hospital. The study aims to build a network of clinicians, pathologists and research staff across the country to fight oral cancer.

In Canada, it is estimated that 3,400 Canadians are diagnosed with oral cancer every year. In 2010, the estimated number of deaths due to oral cancer was 1,150. (Source: Canadian Cancer Society, 2010) Surgery is often used to treat oral cancer. Reconstructive surgery may be needed after the surgeon removes the tumour and some healthy tissue around it. If the cancer has spread, surgery may be required in other areas such as the neck, lymph nodes and throat.

PARTICIPATING CITIES

Vancouver, Edmonton, Calgary, Winnipeg, Toronto, London, Ottawa, Montreal, Halifax

ABOUT THIS STUDY

- This pan-Canadian study will recruit 400 patients from across Canada over the next two years;
- Study teams will follow their patients' progress for an additional three years to determine if there is any recurrence.
- Teams of clinicians and scientists have been formed at each site and they include surgeons, pathologists, dental specialists, and research nurses and coordinators. Participating surgeons will recruit eligible patients.
- Health economists involved will collect health economic evidence and data relative to the cost-effectiveness of the study and cost per quality of adjusted life years gained.
- A knowledge translation specialist will partner with the team to collect and exchange health service information and develop plans to apply, both in Canada and abroad, the knowledge gained.

Dr. Catherine Poh (l) demonstrates the blue light tool with a patient. Project manager Alisa Kami looks on.

COEUR principal investigators (l-r) Dr. Diane Provencher, Dr. Anne-Marie Mes-Masson and Dr. David Huntsman

photos: Stephane Lord, Multimedia Production, CHUM

Project seeks to change the way ovarian cancer is diagnosed and managed worldwide

Ovarian cancer patient Michele St-Pierre speaks at the project launch in Quebec

Women throughout the world will benefit from a new, pan-Canadian Terry Fox Research Institute (TFRI) initiative that aims to change the way in which ovarian cancer is diagnosed and managed. TFRI and The Canadian Partnership Against Cancer are providing a total of $5-million in funding for a five-year, multi-site Ovarian Cancer Pan-Canadian Program called COEUR.

The program will identify new biomarkers to predict and treat this relatively rare but deadly form of cancer, which will result in the use and application of current and new drugs more effectively for patients.

Ovarian cancer is the fifth-leading cause of cancer-related deaths in the Western world. One in every four women diagnosed with this form of cancer is resistant to standard first-line chemotherapy. Through TFRI, leading ovarian cancer researchers and clinicians across Canada have joined forces to develop a "made-in-Canada solution" to this global clinical problem facing cancer doctors.

The team's work will result in a new stratification system for ovarian carcinoma subtypes and will help clinicians better determine what treatment will work best for each patient. Patients who do not respond to standard therapy can be directed to clinical trials where new therapies are being validated.

"This project will change the way in which pathologists, physicians and clinicians think about ovarian cancer. It will help us to classify and sub-divide ovarian cancer into different diseases through molecular profiling. A better understanding of the disease will enable the development and delivery of more personalized care for the patient, which is both better and more efficacious," says TFRI President and Scientific Director Dr. Victor Ling.

Momentum to form the consortium of 35 investigators came from within the ovarian cancer community. The project is headed up by three Canadian researchers at two prominent cancer care and research centres. At the University of Montreal Hospital Research Centre (CRCHUM), molecular oncologist Dr. Anne-Marie Mes-Masson and gynecologist oncologist Dr. Diane Provencher are the principal investigators. Dr. David Huntsman, a genetic pathologist with the Ovarian Cancer Research Program at BC Cancer Agency and Vancouver Coastal Health, will co-lead the study from Vancouver.

"Ovarian cancer is a relatively rare disease that is also very complex. Today we know that it consists of several different subtypes; these are not yet well understood and we have significantly more work ahead to determine what treatment will work for patients and their specific tumour subtype," says Dr. Huntsman. "This program includes an important knowledge transfer component that will enable the results to be rapidly deployed within the Canadian pathology community and readily translated into practice." "The women who are participating in this initiative by providing tissue samples for collection and analysis are hoping this research will accelerate the pace of discovery and validation of new biomarkers for ovarian cancer," says Dr. Provencher. "We hope to redirect women to new clinical trials and, in particular, those women who don't respond to first-line therapy."

The investigators have already begun to assemble 2,000 high-quality tissue samples from ovarian cancer patients being cared for in the participating centres. The tissue samples will be obtained from nine tissue bank repositories across the country. "The team is building a unique, central scientific platform that will create a rich clinical resource for researchers to validate new biomarkers and treatments for ovarian cancer. By linking together laboratory scientists with the oncologists, surgeons and pathologists who work with the patients on the front lines, our work will be much more relevant and bear fruit that will reach patients much more quickly," says Dr. Mes-Masson.

In additional to institutional partners and investigators, other program collaborators include the Society of Gynecologic Oncology of Canada, Ovarian Cancer Canada, the Canadian Tumour Repository Network, the Canadian Pathology Study Group and the NCIC Clinical Trials Group.

PARTICIPATING CITIES

Victoria, Vancouver, Edmonton, Winnipeg, Hamilton, London, Toronto, Kingston, Ottawa, Montreal, Sherbrook, Quebec City, Laval.

ABOUT THIS PROJECT

- It is the largest Canadian research consortium in ovarian cancer.
- The long-term goal of the project is to increase overall survival through the application of current and future diagnoses and therapies that are appropriate to the various subtypes.
- Investigators will classify these cancers into different subtypes via molecular stratification and this collection of subtypes will serve as a resource for investigators to test potential biomarkers to predict and define the type of treatment response to first-line chemotherapy.
- Investigators will be able to test prospective markers and treatments by accessing tissue samples within the collection.