



**HEART &
STROKE
FOUNDATION
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Finding answers. For life.

Research for Health

Kamloops Edition

A HEART AND STROKE FOUNDATION OF BC & YUKON NEWSLETTER

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Teaming Up to Fight Congenital Heart Disease

Dr. Shu Sanatani, a cardiologist at BC Children's Hospital, is on the phone, talking to the mother of a young patient with a genetic heart condition. At his request, some UBC colleagues have run tests on her daughter's blood sample. To their surprise, a drug that is normally used for something quite different has induced a positive response in the cells. Now, Dr. Sanatani would like the girl to come to the hospital to see if the drug will have the same positive effect on her heart condition.

This is just one small example of how a growing collaboration between cardiologists at BC Children's Hospital and cardiovascular researchers, supported by the Heart and Stroke Foundation of BC & Yukon, is yielding benefits for patients and their families. "Our relationship with the scientists has evolved over a number of years," Dr. Sanatani says. "Now, we're at the point where we'll have a telephone conversation or meeting and I'll say, 'what about this', and then they'll go away and check it out – read the literature, try testing tissue samples."

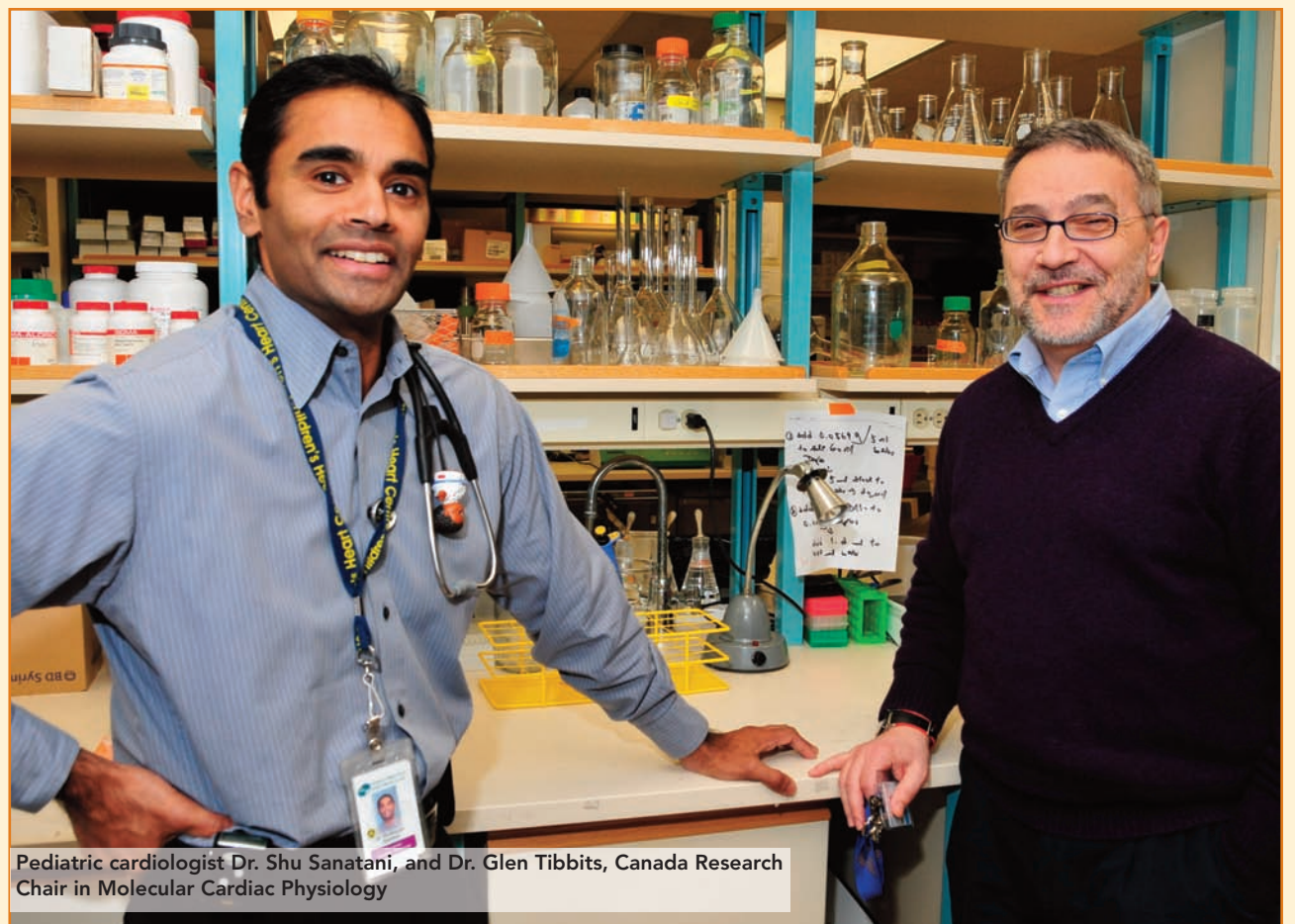
One of Dr. Sanatani's scientific collaborators is Dr. Glen Tibbits. His laboratory at the Child and Family Research Institute, right next door to Children's Hospital, specializes in the molecular aspects of heart disease. For Dr. Tibbits, collaboration with frontline healthcare providers is one of the most exciting developments in his career. "It has fundamentally changed what we do," he says. "The problems we're working on are now driven by questions that come from the bedside, from the patients."

One such collaboration brought the two into partnership with geneticists, electrophysiologists, and a First Nations community in Northern BC that was experiencing a high rate of sudden cardiac death. Working in the community, in the clinic, and in the lab, the group was able to identify a new genetic variation that caused a life-threatening arrhythmia as well as find the community members who possessed this variation. This has enabled health care providers to prescribe medication and support life-style changes to help people avoid the onset of arrhythmia.

Currently, Dr. Tibbits has teamed up with Dr. Sanatani to tackle JET – junctional ectopic tachycardia. This arrhythmia – or heart rhythm disorder – sometimes strikes

those who are recovering from open heart surgery. For infants who have had surgery to correct a congenital heart defect, the speeding heart rate caused by JET can be fatal. Yet, we have virtually no understanding of why or how it happens. Treatment usually consists of cooling down the body, a procedure that can also have serious side-effects.

By locating the basic biological mechanisms that cause the heart rate to speed up, Drs. Tibbits and Sanatani will then be able to identify ways to treat JET more effectively, or even stop it from happening – thus improving the outcomes for children who need open heart surgery.



Pediatric cardiologist Dr. Shu Sanatani, and Dr. Glen Tibbits, Canada Research Chair in Molecular Cardiac Physiology

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Long Distance Rehab



Dr. Scott Lear, Pfizer/HSFBCY Chair in Cardiovascular Prevention Research

ROB MOSES PHOTOGRAPHY

As a cardiovascular health expert at St. Paul's Hospital in Vancouver, Dr. Scott Lear sees patients from across British Columbia. He knows that they get world class care when they are in the hospital. But he's also keenly aware that when many go home, they won't have access to the follow-up rehabilitation programs that can do so much to improve their health.

"Only ten to 25 per cent of patients have access to hospital-based rehab programs in BC," says Dr. Lear. "Even though people are automatically referred to cardiac rehab when they are discharged, distance and lack of transportation are big barriers to

using the internet as more than "just a flashy website," says Dr. Lear. "We're looking at the internet as a real communication tool that directly links heart patients with all kinds of rehab specialists." The online cardiac rehab program provides patients with access to nurses, dieticians, and exercise specialists at the Heart Centre at St. Paul's Hospital. Participants are given and trained to use electronic monitors for heart rate and blood pressure. They take their own measurements and then enter them into an online database. The patients also have access to real time internet chat sessions with experts and with each other to replicate counselling and peer support sessions.

"We know that cardiac rehab dramatically improves outcomes for patients. What we want to show is that the same benefits can be achieved through the internet by people living in remote areas."

- Dr. Scott Lear

access." That's why, with support from the Heart and Stroke Foundation of BC & Yukon, he has developed a program to change this situation. Working with a team from the BC Centre for Telehealth Policy and Research, where he is the Principal Investigator, Dr. Lear initiated a pilot program in 2008 that uses the internet for cardiac rehab for patients living in rural and remote areas of the province.

Doing cardiac rehab this way means

"Forty per cent of the heart patients here at St. Paul's are from outside the Lower Mainland," Dr. Lear notes. "This kind of program gives them access to rehab expertise and information they wouldn't normally get where they live unless they're in a major centre. We know that cardiac rehab dramatically improves outcomes for patients. What we want to show is that the same benefits can be achieved through the internet by people living in remote areas."

Saving a Generation

One of the most significant health issues we face is the threat that obesity poses to our children. Not only are today's children at risk, but this alarming trend signals an imminent health crisis as these children become adults.

HeartSmart Kids

Research has shown that when people learn healthy habits while they are young, those habits can stay with them throughout their lives. Through the generous support of our donors, the Heart and Stroke Foundation of BC & Yukon has been able to develop a classroom initiative called HeartSmart Kids™ to invest in children's health, both now and in the future.

HeartSmart Kids™ focuses on encouraging elementary students to make heart-healthy lifestyle choices within the main areas of healthy eating, active living and being smoke-free. These three areas are known to be the greatest lifestyle contributors to heart disease and stroke. Introduced in 1995, the HeartSmart Kids™ program has been used by over 220 grades K-6 educators in the Kamloops Thompson school district, reaching more than 6000 children.



DO YOU KNOW?

SIGNS OF A HEART ATTACK

One or more of these:

- Chest pain or discomfort.
- Pain in arm, neck, jaw, or back.
- Sweating.
- Nausea.
- Difficulty breathing.

SIGNS OF A STROKE

One or more of these:

- Sudden weakness, numbness.
- Sudden trouble speaking.
- Sudden vision problems.
- Sudden severe headache.
- Sudden dizziness.

KNOW WHAT TO DO

If you or someone you know is experiencing a heart attack or stroke,

CALL 9-1-1

or your medical emergency number immediately.

ation of Children

Sip Smart! BC™ is a new classroom initiative that has been produced by the Heart and Stroke Foundation of BC & Yukon in conjunction with the BC Pediatric Society, funded by ActNow BC through the BC Healthy Living Alliance. It is designed to complement the healthy eating component of HeartSmart Kids™ by teaching students about making healthy beverage choices.

ds™

Both programs focus on promoting health at home as well as in the classroom, and have resources available to parents and caregivers to reinforce the healthy message with their families.

To receive these free resources, both educators and parents can contact: Heart and Stroke Foundation of BC & Yukon
Toll-Free: 1-888-473-4636 ext. 364 or healthpromotion@hsf.bc.ca



Stopping Strokes Before They Start

Every year, there are more than 7,500 strokes in BC. It's the third leading cause of death in the province and the leading cause of acquired adult disability. For Dr. Todd Collier, a neurologist at Royal Inland Hospital, these numbers are more than just statistics. He sees the effects of stroke close up and knows that without immediate treatment, stroke can be devastating, even when it's not fatal.

That's why Dr. Collier teamed up with the Heart and Stroke Foundation, other stroke experts, and Health Authority managers from across the province, to develop and implement the BC Stroke Strategy. With support from the BC Ministry of Health, the strategy is setting provincial standards for stroke diagnosis, treatment, and rehabilitation. It has developed and is implementing on-the-ground projects to improve stroke diagnosis and treatment across the province.

A key part of that system are TIA Rapid Assessment Clinics. In Kamloops, one such clinic has been operating at Royal Inland Hospital since the end of last September. A TIA (transient ischemic attack or mini-stroke) happens when a blood clot lodges temporarily in a brain artery, then floats away before the damage becomes acute.

Many people don't know they've had a TIA or realize that it can be a valuable warning sign of a major stroke to come. During a major stroke, the clot lodges permanently and can be broken down only with a clot-busting drug. If the drug is not delivered within four and a half hours, then serious brain damage and permanent mental and/or physical disability can result.

Any doctor in the Thomson-Cariboo-Shuswap region can refer a patient with a suspected TIA to the clinic for tests and diagnosis. Nurses specializing in vascular disease prevention work with the stroke specialist and provide counselling and other arrangements to reduce patients' stroke risk.

Jaymi Chernoff, TIA Rapid Access Coordinator for Interior Health, says that the new clinic is already making a big difference. Fifty patients have visited the clinic in its first 17 weeks. This includes, she notes, "patients who might not otherwise have had access to the system." Overall, data shows that the clinic has greatly improved the time it takes for patients to get the help they need.

In addition to the Kamloops TIA Rapid Assessment Clinic, a second TIA clinic opened recently in Cranbrook. Other similar clinics are now operating on Vancouver Island, in Greater Vancouver, and the Fraser Valley.

Royal Inland is also the site of a new Integrated Stroke Unit, supporting Kamloops' role as a secondary stroke centre where patients will get comprehensive diagnosis, treatment, and rehabilitation for major strokes.

Dr. Collier says that this is the first time that efforts to build a province-wide stroke system have borne fruit. The BC Stroke Strategy has been able to bring together all the relevant players, including decision-makers, to "prove that it's possible to improve stroke care without breaking the bank."

TIA Clinics are one of several ambitious projects from the BC Stroke Strategy. A provincial telestroke system is now being tested on Vancouver Island. Using digital imaging and communications technology, stroke specialists at a major hospital can consult with and diagnose stroke patients in smaller centres, providing faster treatment and better outcomes. The goal is to have this technology eventually deployed across BC, so all stroke patients have access to treatment as soon as possible.

Find out more about the BC Stroke Strategy at www.bcstrokestrategy.ca.



RIH neurologist, Dr. Todd Collier, with nurse clinician Zoey Bradshaw and TIA Rapid Assessment Coordinator Jaymi Chernoff, meeting with a patient.

1.888.473.4636

KENT WONG PHOTOGRAPHY

Health Check in Restaurants – A Unique Opportunity to Help British Columbians Eat Well



MENU

Health Check
HEART & STROKE FOUNDATION

Health Check now in these restaurants.

Boston Pizza **White Spot** **RED ROBIN**
Pizza Hut **BC Ferries**

Learn more at healthcheck.org

Making wise food choices at home can be done by planning in advance and stocking up on fresh, nutritious ingredients, but eating out poses a bigger challenge. The healthy choices are sometimes few and far between, and even when they are available, without seeing the nutrition information it can be difficult to identify them. The Heart and Stroke Foundation's Health Check program is now in restaurants, making it easier to identify wise choices on restaurant menus.



Every Health Check item meets nutrient criteria developed by the Foundation's registered dietitians based on recommendations in Canada's Food Guide. The criteria include nutrients Canadians are encouraged to consume more of such as fibre, protein and vitamins, and limits others such as fat, sodium and sugar. Staff in Health Check restaurants can answer questions about the specific menu items and the program itself, and complete nutrition information is also available – including the amount of fat, sodium, and calories. Look for Health Check items at Boston Pizza, White Spot, Pizza Hut, Red Robin, Swiss Chalet and BC Ferries.

For information on healthy eating including tips and recipes visit www.healthcheck.org.

Hearts in Motion™ – A Step in the Right Direction

Do you want to reduce your risk of heart disease and stroke, manage or prevent diabetes, increase your energy levels and reduce stress? Join a Hearts in Motion™ walking club!

It has been proven that simply walking on a regular basis can dramatically improve your health. Hearts in Motion™ walking clubs make being active easy, and it's a great way to have fun and make new friends. It is the camaraderie of these clubs that keeps participants returning week after week, to walk with friends and support one another.

And the health and social benefits aren't all you will receive. An annual membership fee of \$10 also includes:

- New incentive item each year
- A Hearts in Motion™ walking club handbook full of tips on getting started safely
- Personal activity cards to record distances walked
- Awards to recognize your personal milestones
- Bi-annual newsletters

Hearts in motion™
WALKING CLUB



There are 30 Hearts in Motion™ walking clubs throughout BC, including one in Kamloops.

For further information or to join the Kamloops club, please contact Sharon Persello, 250-374-0688.

A PERFECT STORM

OF HEART DISEASE LOOMING ON OUR HORIZON

High blood pressure, obesity, and physical inactivity...more and more younger Canadians have them and that's a problem for all of us.

Find out more in the Heart and Stroke Foundation's 2010 Report Card on Canadians' Health – A Perfect Storm at www.heartandstroke.ca/reportonhealth.