



THE PROSTATE CENTRE AT VANCOUVER GENERAL HOSPITAL

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PROSTATE CENTRE IS BC'S BIG WINNER IN CFI COMPETITION

The Prostate Centre at Vancouver General Hospital was BC's big winner in one of Canada's toughest grant competitions. On March 9th, the multidisciplinary team of research scientists and clinicians learned that the Canada Foundation for Innovation (CFI) has awarded more than \$7.6 million for the launch of PC-TRIADD: The Prostate Centre's Translational Research Initiative for Accelerated Discovery and Development which is being led by Drs. Martin Gleave and Colleen Nelson. This grant, and the matching funds also raised, total over \$19 million. "This has put BC on the map as home to Canada's largest and most comprehensive prostate cancer research facility", says Dr. Larry Goldenberg, Director of the Prostate Centre.

Prostate cancer is the most common cancer in men. Unlike many cancers, it has the potential to recur after hormone- or chemo-therapy to a lethally resistant form. In other words, prostate cancer cells "learn" to live without the male hormones that feed them. Once this happens, the disease becomes highly resistant to conventional therapies. "While advances in molecular biology promise to improve our understanding of how and why resistance occurs, the real challenge is translating that information into new and effective treatments for the disease", says Dr. Martin Gleave, Co-principal investigator (PI) of the program and Director of Clinical Research at the Prostate Centre.

Along with Co-PI Dr. Colleen Nelson, Head of the Centre's Gene Microarray Facility, Gleave and other members of the Prostate Centre's team of scientists and clinicians plan to tackle the problem head-on, using the most sophisticated, state-of-the-art technology in a series of projects that are geared towards understanding

the molecular and genetic mechanisms responsible for prostate disease and, ultimately, using that information to develop therapies for improved treatments.

Looking To The Future

"Our ability to undertake clinical trials has not kept up with rapid advances in science and we have seen a serious bottleneck as we try to move discoveries from the lab to the clinic," says Gleave. The CFI grant will allow the researchers to buy a significant amount of new equipment to increase their ability to bring new discoveries in the lab to clinical trial. The new program will feature state-of-the-art imaging tools, robotic equipment and new technology to help define

bio-profiles associated with cancer progression. This new technology, and the scientific advances that go with it, will also allow cross-links to other diseases such as breast cancer, ovarian cancer and even lung cancer.

The Prostate Centre is already Canada's most comprehensive disease-specific research and treatment centre. The CFI funding for PC-TRIADD will help us to become one of the world's leading facility for prostate disease research.



Martin Gleave & Colleen Nelson

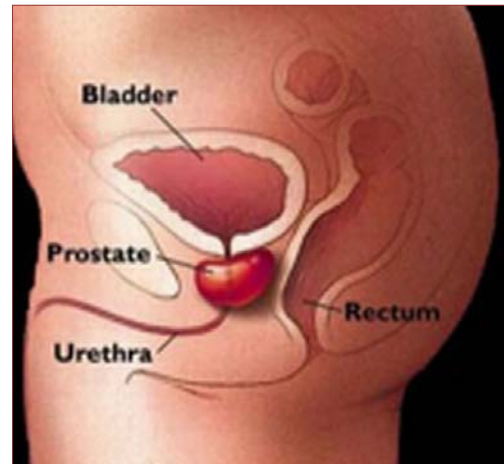
Dr. Martin Gleave Honoured

Dr. Martin Gleave was recently named a University of British Columbia Distinguished University Scholar by the President of UBC. This designation is in recognition of his outstanding work as a clinician-scientist and the extraordinary contribution he has made to research at UBC. He is the first member of the Department of Surgery to ever win this designation.

THE OTHER PROSTATE DISEASES

BENIGN PROSTATIC HYPERTROPHY

You would think that such a little gland couldn't possibly have so many things that could go wrong with it. We tend to mention prostate cancer first when we talk about diseases of the prostate. However, there are others which are far more prevalent and, although not lethal, they have the potential to greatly affect a person's quality of life. One of these is Benign Prostatic Hypertrophy (BPH), which means enlargement of the prostate gland.



Fifty percent of fifty year-olds and 80-90% of eighty year-olds will face a diagnosis of BPH. Men may experience few symptoms and often attribute them to a natural consequence of aging. Others may experience a variety of Lower Urinary Tract symptoms (LUTS) [See box below]. These symptoms are not specific to BPH and can occur in a multitude of lower urinary tract disorders in both men and women. However, people who experience some or all of these symptoms should see their doctor.

Lower Urinary Tract Symptoms (LUTS)

1. Incomplete emptying of the bladder
2. Frequency of urination
3. Urgent need to urinate
4. Weak urinary stream
5. Straining to void
6. Need to get up during night to urinate
7. Painful urination

In BPH, the enlarged prostate squeezes the urethra tighter than normal, like a clamp around a hose, and begins to obstruct the flow of urine from the bladder. As this occurs, the bladder contracts harder to push the urine past the obstruction. The urethra may eventually become so narrow that the bladder is unable to empty completely, allowing 'residual urine' to remain in the bladder after voiding. At this stage the bladder will fill up again that much sooner, causing more frequent urination.

Diagnosis

Your physician may ask you questions to determine the severity of your symptoms (*International Prostate Symptom Score*) and may order additional tests to determine if you have an obstruction. A rectal examination and a blood test to check for prostate cancer (PSA test) will most likely be done on the initial visit to the urologist.

Treatment

Treatment options will depend on the severity of symptoms, the patient's age and quality of life and a host of other factors. Appropriate treatment depends on a shared decision process between patient and physician. The most common treatment methods are:

- Watchful Waiting: particularly in patients with mild or intermittent symptoms
- Drug Treatment: using compounds that help to relax prostatic smooth muscle in order to control contractions or which block the effects of male hormones in order to reduce prostate size
- Surgery: The most common and effective means of treating BPH

Some men may also use complementary and alternative medicines in addition to, or instead of, conventional treatments. Although not scientifically substantiated, many men feel that alternative remedies are beneficial.

SELENIUM

There is a great deal of interest in the scientific community about the role of selenium as a possible cancer prevention agent. Independent studies have shown that populations with the highest intake of selenium have the lowest risk of almost every type of cancer, including prostate cancer.

Selenium is a trace element that is found in soil in varying concentrations. It is extracted from the soil by grains (wheat, barley, rye, etc.) and some other plants (for example, garlic and onions). When these grains are eaten by animals, the selenium is incorporated into a number of cells. Humans, therefore, obtain selenium from grains and other plants, meats, and supplements.

The role of selenium in prostate cancer prevention was found almost by accident. A study of selenium was designed to determine if this agent could reduce skin cancer risk. The researchers found that selenium supplementation did not affect the risk of getting skin cancer but actually decreased the chance of getting prostate cancer by two-thirds.

A number of studies are underway to determine selenium's potential as a cancer preventative. The National Cancer Institute of Canada is currently conducting a long-term study of this agent to determine if it truly can reduce the risk of prostate cancer. Another study, the SELECT trial, is the largest study every undertaken on cancer prevention. Funded by the US National Institutes of Health, it involves 32,000 men from Canada, the United States and Puerto Rico who will be studied over 12 years to determine if a combination of selenium and vitamin E will control the cell damage that can lead to prostate cancer.

Should you take a selenium supplement to ensure you are getting an adequate amount?

We do not normally recommend selenium supplementation unless a person is on a special diet that prevents normal intake of selenium. The trouble with selenium is that it has a relatively narrow range of safety, and slight increases in supplementation can lead to brittle nails and other side effects. The best thing that you can do is eat a well-balanced diet which includes grains, meat and vegetables.



TABOULEH

1 cup boiling water
1 cup bulgur

Let soak for 30 minutes or until water is absorbed

Stir in:

1 cucumber, chopped
1 tomato, chopped
2 cloves garlic, minced
4 green onions, chopped
1 red pepper, chopped
1/2 cup parsley, minced

Mix for a dressing:

2 tablespoons olive oil
juice of 1 lemon
handful of chopped fresh basil or mint.

Toss well and chill. Serves 6



FOR MORE INFORMATION

VISIT OUR WEBSITE AT

www.prostatecentre.com

**22ND ANNUAL PRO-AM
HADASSAH-WIZO GOLF
TOURNAMENT RAISES
FUNDS FOR PROSTATE CENTRE**



Prostate cancer affects women too! Men and their families need information on the latest screening techniques and most appropriate treatment methods in order to be able to make informed decisions about the treatment options available to them.

For the fourth year, the Vancouver Hadassah-WIZO Golf Tournament is raising funds to help with the development of educational materials such as videos and pamphlets for men with prostate disease and their families. The materials are available through the Prostate Education and Research Centre at the Prostate Centre at VGH (604-875-5006).

The 2004 Golf Tournament will be held on **Wednesday, July 14th** at the Richmond Golf & Country Club. For information, call 257-5160 or email: hadassah-wizo-vanc@telus.net



>>>>>FAST FACTS

- > The prostate gland is about the size of a walnut but can grow as large as an orange or small grapefruit
- > its two semi-circular lobes encircle the urethra, which is the tube that carries urine from the bladder
- > the prostate is made up of thousands of tiny fluid-producing glands which produce a fluid rich in chemicals and nutrients to help sperm survive in the female reproductive tract

Interested in supporting the Prostate Centre?

Contact: **VGH & UBC Hospital Foundation**
855 W. 12th Avenue
Vancouver, B.C. V5Z 1M9
(604) 875-4676

PROMOTIONS AND AWARDS

Congratulations to our team members for their accomplishments in the past year!

Dr. Goldenberg was elected President of the Canadian Urological Association and is President-elect of the Western Section, American Urological Association.

Dr. Martin Gleave was named a UBC Distinguished University Scholar.

Dr. Colleen Nelson has been promoted to Associate Professor in the Department of Surgery.

Dr. Emma Guns is the recipient of a three-year Vancouver Hospital Research Scholarship Award.

Dr. Piotr Kozlowski has been appointed as Associate Director of the CFI funded MRI Centre of Excellence at UBC Hospital.

Dr Joyce Davison has been appointed as an Assistant Professor in the Department of Surgery.

Dr. Susan Moore received a major NSERC award for her post-doctoral research work.

Welcome!

Welcome to Dr. Stéphane Le Bihan, who joined the Prostate Centre in mid-April as Process Manager for the Gene Array Facility. Formerly Director of Biology for Active Pass Pharmaceuticals, Dr. Le Bihan will be responsible for coordinating the business, financial, internal and external relations/communications for the GAF. We are delighted that he has joined our team.

FEEDBACK

Are you planning an event to support prostate treatment or research? Send us the details and we'll announce it in our upcoming Newsletters!

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