

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

### **NOTE: JUNE LOCATION & TIME CHANGE!!**

**Tuesday, June 11 5:30PM**

***Duchess of Markham, Main Street Markham***

***Just south of the church***

***(Free Parking behind Royal Bank)***

### **CASUAL GET TOGETHER**

***Our annual evening of relaxing and just chatting***

***Spouses are invited and welcome!***

***If weather is warm and sunny the group will be outside on the back patio***

***WHY NOT WEAR PLAID!***

***No meetings July or August***

***Next Formal meeting with speaker is Tuesday, September 10***

### **IN THIS ISSUE ...**

***...Page 2***

***3 Things You Can Control During Your Prostate Cancer Journey***

***...Page 3***

***Highly accurate test reveals recurring prostate cancer***

***...Page 4***

***Prostate Cancer: Urinary Incontinence***

***...Page 6***

***Gene Mutation Linked to Poor Survival in Prostate Cancer Patients***

***... Page 8***

***Cancer Cell Chromosome Count Could Clarify Prognosis***

***... Page 10***

***Caring for your sexual well-being? This expert calls for quality love-making***

***... Page 14***

***30 Proven Foods to Help Prevent Cancer \*\****

***A compound in broccoli and kale helps suppress tumor growth***

***... Page 16***

***NOTABLE***

***Plaid for Dad – a new Father's Day tradition!***

**QUOTABLE**

**... Page 17**

**PCCN MARKHAM INFO**

***WEAR PLAID FOR DAD ON FATHER'S DAY! GET YOUR FAMILY TO JOIN IN!***



### 3 Things You Can Control During Your Prostate Cancer Journey



The feeling of helplessness brought upon a patient and those who love them is perhaps one of the worst parts of a prostate cancer diagnosis. Between the uncertainty of the future and the many changes to your day-to-day life, you may feel as if life is spiraling out of your control.

But there are three things you can control during your prostate cancer journey: your attitude, your diet, and your exercise routine.

You may have just rolled your eyes because the above statement may sound like a truism as innovative as “the grass is always greener on the other side,” but allow us to challenge that notion.

The first thing you should know is that this list of three comes from a patient who was diagnosed with stage 4 prostate cancer. Stephen Eisenmann is what refer to as an extraordinary responder (a patient who has had a remarkably positive response to treatment), but before this response, he and his family were preparing for the worst.

As Stephen’s wife, Elizabeth Eisenmann, recalled, “We got very practical, and there was one point we updated our wills, we got our documents together, our powers of attorneys. We did a lot of that stuff that you don’t want to do, you don’t want to think about, because you don’t want that to be your life.”

Nonetheless, throughout all of this, Stephen and Elizabeth remained optimistic on account of some advice Stephen received from a friend: the three things you can control during your prostate cancer journey are your attitude, diet, and exercise routine.

Long before Stephen experienced his positive response to treatment, he kept these principles top of mind. “If I maintained a positive attitude, restricted my diet to things that were going to be good for me, since I had prostate cancer, and maintained my exercise routine, that I would have a better chance at a better response.”

While Stephen’s exceptional response to treatment is unique (at least for now), the agency he took over his attitude, diet, and exercise are 100% replicable.

Is it always easy to keep a positive attitude in the face of so much trauma? Of course not. Similarly, eating healthy and going on a daily hike might seem frivolous, or “too little too late.” But these three aspects of your life, regardless of how treatment is going, are dictated by you and only you.

Cancer is a powerful disease, but it cannot tell you to put down that forkful of salad. And no [oncologist](#) is going to strongly advise that you don’t remain active. So, by taking conscious control of your attitude, diet, and exercise regimen you will find you begin to regain a sense of agency in your own life.

What makes cancer so devastating is not just the toll it takes on our physical health, but the way it manages to disrupt our life while we are still living it. But we can push back on this, in many ways. Attitude, diet, and exercise; those are good places to start.

<https://www.pcf.org/3-things-you-can-control-during-your-prostate-cancer-journey/>



### Highly accurate test reveals recurring prostate cancer

Posted April 29, 2019, 5:30 pm



[Charlie Schmidt](#)

Editor, Harvard Medical School Annual Report on Prostate Diseases

After being treated for prostate cancer, some men will experience a rise in PSA levels suggesting that new tumors lurk somewhere in the body. Finding these tiny cancerous deposits before they grow and spread any further is crucially important. But it's also a challenge, since the budding tumors might be too small to see with standard tools such as magnetic resonance imaging.

Now scientists in California have published results with an experimental imaging technique that detects recurring prostate cancer with high accuracy. Importantly, some of the unveiled tumors were "still curable with targeted radiation therapy," said Dr. Thomas Hope, a radiologist at the University of California, San Francisco School of Medicine, who led the study. "That's what makes the research so exciting."

#### How the test works

The technique used in [the study](#) is a modified form of positron emission tomography, or PET scanning. When performing a PET scan, doctors will first give an intravenous injection of a minimally radioactive tracer that travels through the bloodstream and attaches to proteins on cancer cells. The PET scanning technology detects this radiation, and thus allows specially trained experts to see where the cancer cells are located.

Two tracers have been approved so far by the FDA for use in prostate cancer diagnostics: one called choline C11 and another called fluciclovine-18-F. Dr. Hope's team, however, used an alternative tracer called gallium-68, which has yet to win regulatory approval in the United States. Gallium-68 has the advantage of binding specifically to a protein called prostate-specific membrane antigen (PSMA), which is highly expressed on metastatic cells.

During the study, USCF researchers and their colleagues at the University of California, Los Angeles enrolled 635 men with rising PSA levels after prostate cancer treatment. The men were each injected with gallium-68, and then given a whole-body PET scan. Importantly, the images were interpreted by independent readers who had no other knowledge of a patient's clinical status.

#### What it found

Gallium-68 PET scans produced positive results in 75% of the men, and the likelihood of a positive hit grew as their PSA levels increased. For instance, 38% of men with PSA levels of 0.5 nanograms per milliliter (ng/mL) or less were flagged by PET scanning, compared to 97% of the men with PSA levels of 5 ng/mL or higher.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

The test's positive predictive value (PPV) — meaning the probability that it would correctly identify existing cancer — ranged between 84% and 92%. According to Dr. Hope, PET scans from the pelvic lymph nodes had the highest PPVs, while scans of the lower ribs, which are prone to features that mimic cancer, had the lowest. "As we gain more experience with gallium-68/PSMA scanning, we'll lower the false positive rate and increase the test's accuracy even further," said Dr. Hope, who is now working with UCLA on efforts to win FDA approval for the tracer.

According to Dr. Marc Garnick, Gorman Brothers Professor of Medicine at Harvard Medical School and Beth Israel Deaconess Medical Center, and editor in chief of [HarvardProstateKnowledge.org](http://HarvardProstateKnowledge.org), the incremental value added by gallium-68/PSMA scanning still needs further research. "Comparative cost considerations will also be a determining factor to its overall utilization if and when it is approved," he said.

<https://www.health.harvard.edu/blog/highly-accurate-test-reveals-recurring-prostate-cancer-2019042916546>

### Prostate Cancer: Urinary Incontinence

WebMD Medical Reference Reviewed by [Laura J. Martin, MD](#) on July 08, 2018

[Urinary incontinence](#), or the loss of the ability to control urination, is common in men who have had surgery or [radiation](#) for [prostate cancer](#). You should prepare for this possibility and understand that, for a while, at least, [urinary incontinence](#) may complicate your life.

There are different [types of urinary incontinence](#) and differing degrees of severity. Some men dribble urine, whereas others will experience a total leakage. Loss of urine with a [cough](#), sneeze or laugh is called [stress incontinence](#) and is the most common type of urine leakage men experience after [prostate](#) surgery. On the other hand, the need to frequently urinate with episodes of leakage, called [urge incontinence](#), is the type seen most often after radiation treatment. Doctors continue to improve [treatments for prostate cancer](#) to reduce post-surgery and post-radiation [incontinence](#).

#### Why Do Prostate Cancer Treatments Cause Urinary Incontinence?

It helps to know a bit about how the bladder holds urine. When urine is emptied into the bladder from the kidneys, it is stored inside the bladder until you have the urge to urinate. The bladder is a hollow, muscular, balloon-shaped organ. Urine flows out of the bladder, and leaves the body through a tube called the urethra. Urination happens when the muscles in the wall of the bladder contract, forcing urine out of the bladder. At the same time, muscles that surround the urethra relax and allow the flow of urine. The prostate gland surrounds the urethra. Because an enlarged prostate gland can obstruct the urethra, it can cause urination retention or other problems with urination.

Removing the prostate through surgery or destroying it through radiation (either with an external beam or with radioactive seed implants) disrupts the way the bladder holds urine and can result in urine leakage. Radiation can decrease the capacity of the bladder and cause spasms that force urine out. Surgery can, at times, damage the nerves that help control bladder function.

#### Are There New Techniques That Reduce the Chance of Becoming Incontinent?



When removing the prostate, surgeons try to save as much of the area around the bladder and the sphincter muscles around the urethra, thus limiting damage to the sphincter. Doctors have also fine-tuned the process of placing radioactive seed implants, using sophisticated computer projections that allow the seeds to destroy the prostate while limiting damage to the bladder.

Still, at this point, any man who is undergoing radiation or surgery to treat [prostate cancer](#) should expect to develop some problems with urinary control. With newer techniques, some men will have only temporary problems controlling their urine, and many will regain full control of their bladder in time.

### **What Can Be Done to Treat Urinary Incontinence after Prostate Cancer Treatment?**

Treatments include:

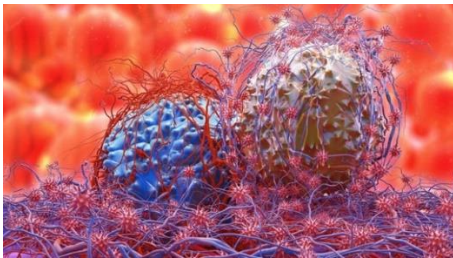
- **Pelvic floor exercises.** Many doctors prefer to start with behavioral techniques that train men to control their ability to hold in their urine. [Kegel exercises](#) strengthen the muscles you squeeze when trying to stop urinating mid-stream. These exercises can be combined with [biofeedback](#) programs that help you train these muscles even better.
- **Supportive care.** This treatment includes behavior modification, such as drinking fewer fluids, avoiding [caffeine](#), alcohol, or spicy foods, and not drinking before [bedtime](#). People are encouraged to urinate regularly and not wait until the last moment possible before doing so. In some people, [losing weight](#) may result in improved urinary control. Supportive care also involves changing any [medications](#) that interfere with [incontinence](#).
- **Medication.** A variety of medications can increase bladder capacity and decrease frequency of urination. In the near future, newer medications will become available to help stop some other forms of urinary leakage.
- **Neuromuscular electrical stimulation.** This treatment is used to retrain and strengthen weak urinary muscles and improve bladder control. With this treatment, a probe is inserted into the [anus](#) and a current is passed through the probe at a level below the pain threshold, causing a contraction. The patient is instructed to squeeze the muscles when the current is on. After the contraction, the current is switched off.
- **Surgery, injections, and devices.** A number of techniques may improve bladder function.
- **Artificial sphincter.** This patient-controlled device is made of three parts: a pump, a pressure-regulating balloon, and a cuff that encircles the urethra and prevents urine from leaking. The use of the artificial sphincter can cure or greatly improve more than 70% to 80% of the patients.
- **Bulbourethral sling.** For some types of leakage, a sling can be used. A sling is a device used to suspend and compress the urethra. It is made from synthetic material or from the patient's own tissue and is used to create the urethral compression necessary to achieve bladder control.
- **Other surgery.** Your doctor can also do a surgery that has helped some men. It involves placing rubber rings around the tip of the bladder to help hold urine.

<https://www.webmd.com/urinary-incontinence-oab/mens-guide/urinary-incontinence#2>



### Gene Mutation Linked to Poor Survival in Prostate Cancer Patients

[News](#) May 07, 2019 | [Original story from the Institute of Cancer Research](#)



Scientists have identified a gene mutation in the tumors of men with prostate cancer that is linked to very poor survival – and which could be used to pick out patients for especially intensive treatment.

Men with mutations in the retinoblastoma gene in their tumors were more than three times as likely to die and nearly seven times as likely to relapse on standard treatments as those without the gene.

The retinoblastoma gene, known as RB1, is so called because mutations in it cause a rare children's eye cancer of the same name and is known to play a central role in stopping healthy cells from dividing uncontrollably. Researchers at The Institute of Cancer Research, London, and The Royal Marsden NHS Foundation Trust believe testing men for the mutation could identify those with especially aggressive disease who need the most intensive available treatments. They are also studying new ways to treat patients with the high-risk gene.

The researchers, along with colleagues in the US and Europe, looked in detail at the DNA sequence, the activity of genes and how the tumors looked under the microscope in 444 tumors samples from 429 men with advanced prostate cancer.

Their study is published today (Monday) in the [Proceedings of the National Academy of Sciences \(PNAS\)](#), and was funded by the Prostate Cancer Foundation and Stand Up to Cancer.

#### **Combining immunotherapy with palbociclib**

The team wanted to identify which of the many genes linked to prostate cancer were the most important indicators of patient survival and response to the standard treatments abiraterone and enzalutamide.

Patients with mutations in the RB1 gene in their tumors were 3.3 times more likely to die and 6.6 times more likely to relapse during the course of the study than other men who also had standard treatment but did not have the mutation.

RB1 was the only gene found to have such an impact on survival, but mutations in two further genes – p53 and the androgen receptor gene – were associated with an increased risk of relapse on abiraterone or enzalutamide.

Mutations in DNA repair genes BRCA1, BRCA2 and ATM, and in PI3K genes were relatively common but had no impact on treatment with abiraterone or enzalutamide or on overall survival.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

However, the research did identify clues for how some patients with prostate cancer could be treated more effectively using immunotherapy and a breast cancer treatment.

Men whose tumors had mutations in a gene linked to a good response to immunotherapy, CDK12, often also had mutations in the genes CDK4 and CCND1, which are the targets of a breast cancer drug called palbociclib.

That suggests that combining immunotherapy with palbociclib could be an effective treatment for this group of men.

### **New approaches to prostate cancer treatment**

Professor Johann de Bono, Regius Professor of Cancer Research at the ICR, and Consultant Medical Oncologist at The Royal Marsden, said:

“Our study really got under the bonnet of prostate cancer to understand the ‘engine’ driving tumor growth and explore how a wide range of genes affect the disease and its response to treatment. We identified one particular genetic mutation that seems to indicate that tumors are going to be very aggressive, and that the affected men need the most intensive treatment we have available.

“Our research could also open up various new approaches to prostate cancer treatment, and offers the intriguing suggestion that some patients could benefit from immunotherapy alongside an existing breast cancer drug.

“That’s a great example of how genetic research can find the common links between cancers, and ensure research into one cancer type can also benefit patients with other tumors.”

### **Improving options for the future**

Professor Paul Workman, Chief Executive of the ICR, said:

“There are a large number of genetic mutations present in a tumor, and working out their relative importance is crucial to deliver the best precision medicine to cancer patients.

“This exciting study has identified which features of advanced prostate tumors are the most important for treatment and survival – and has picked out one gene mutation in particular which has an especially serious adverse impact on how long patients live.

“The crucial thing now is that we make use of this information, by developing a test to identify affected men and to make sure they receive the best treatments we have available today, while also focusing our efforts on improving options for the future.”

This article has been republished from [materials](#) provided by [Institute of Cancer Research](#). Note: material may have been edited for length and content. For further information, please contact the cited source.

Reference: Wassim Abida, *et al.* Genomic correlates of clinical outcome in advanced prostate cancer. *PNAS* (2019)

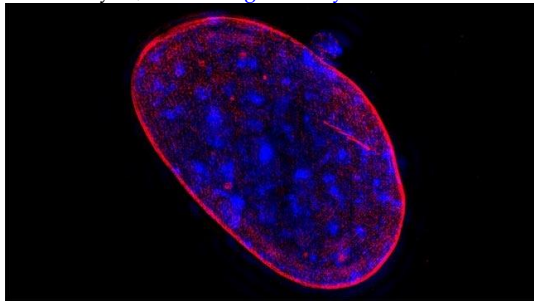
DOI: <https://doi.org/10.1073/pnas.1902651116>

<https://www.technologynetworks.com/cancer-research/news/gene-mutation-linked-to-poor-survival-in-prostate-cancer-patients-319011>



### Cancer Cell Chromosome Count Could Clarify Prognosis

[News](#) May 14, 2019 | [Original story from MIT](#)



*Researchers have found that higher levels of aneuploidy lead to much greater lethality among prostate cancer patients. This suggests a mechanism for how some prostate cancers become lethal, and could be used to alert doctors which patients might need to be treated more aggressively. Credit: Courtesy of the researchers*

Most human cells have 23 pairs of chromosomes. Any deviation from this number can be fatal for cells, and several genetic disorders, such as Down syndrome, are caused by abnormal numbers of chromosomes.

For decades, biologists have also known that cancer cells often have too few or too many copies of some chromosomes, a state known as aneuploidy. In a new study of prostate cancer, researchers have found that higher levels of aneuploidy lead to much greater lethality risk among patients.

The findings suggest a possible way to more accurately predict patients' prognosis, and could be used to alert doctors which patients might need to be treated more aggressively, says Angelika Amon, the Kathleen and Curtis Marble Professor in Cancer Research in the Department of Biology and a member of the Koch Institute for Integrative Cancer Research.

"To me, the exciting opportunity here is the ability to inform treatment, because prostate cancer is such a prevalent cancer," says Amon, who co-led this study with Lorelei Mucci, an associate professor of epidemiology at the Harvard T.H. Chan School of Public Health.

Konrad Stopsack, a research associate at Memorial Sloan Kettering Cancer Center, is the lead author of the paper, which appears in the Proceedings of the National Academy of Sciences the week of May 13. Charles Whittaker, a Koch Institute research scientist; Travis Gerke, a member of the Moffitt Cancer Center; Massimo Loda, chair of pathology and laboratory medicine at New York Presbyterian/Weill Cornell Medicine; and Philip Kantoff, chair of medicine at Memorial Sloan Kettering; are also authors of the study.

#### Better predictions



# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

Aneuploidy occurs when cells make errors sorting their chromosomes during cell division. When aneuploidy occurs in embryonic cells, it is almost always fatal to the organism. For human embryos, extra copies of any chromosome are lethal, with the exceptions of chromosome 21, which produces Down syndrome; chromosomes 13 and 18, which lead to developmental disorders known as Patau and Edwards syndromes; and the X and Y sex chromosomes. Extra copies of the sex chromosomes can cause various disorders but are not usually lethal.

Most cancers also show very high prevalence of aneuploidy, which poses a paradox: Why does aneuploidy impair normal cells' ability to survive, while aneuploid tumor cells are able to grow uncontrollably? There is evidence that aneuploidy makes cancer cells more aggressive, but it has been difficult to definitively demonstrate that link because in most types of cancer nearly all tumors are aneuploid, making it difficult to perform comparisons.

Prostate cancer is an ideal model to explore the link between aneuploidy and cancer aggressiveness, Amon says, because, unlike most other solid tumors, many prostate cancers (25 percent) are not aneuploid or have only a few altered chromosomes. This allows researchers to more easily assess the impact of aneuploidy on cancer progression.

What made the study possible was a collection of prostate tumor samples from the Health Professionals Follow-up Study and Physicians' Health Study, run by the Harvard T.H. Chan School of Public Health over the course of more than 30 years. The researchers had genetic sequencing information for these samples, as well as data on whether and when their prostate cancer had spread to other organs and whether they had died from the disease.

Led by Stopsack, the researchers came up with a way to calculate the degree of aneuploidy of each sample, by comparing the genetic sequences of those samples with aneuploidy data from prostate genomes in The Cancer Genome Atlas. They could then correlate aneuploidy with patient outcomes, and they found that patients with a higher degree of aneuploidy were five times more likely to die from the disease. This was true even after accounting for differences in Gleason score, a measure of how much the patient's cells resemble cancer cells or normal cells under a microscope, which is currently used by doctors to determine severity of disease.

The findings suggest that measuring aneuploidy could offer additional information for doctors who are deciding how to treat patients with prostate cancer, Amon says.

"Prostate cancer is terribly overdiagnosed and terribly overtreated," she says. "So many people have radical

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

prostatectomies, which has significant impact on people's lives. On the other hand, thousands of men die from prostate cancer every year. Assessing aneuploidy could be an additional way of helping to inform risk stratification and treatment, especially among people who have tumors with high Gleason scores and are therefore at higher risk of dying from their cancer."

Amon is now working with researchers from the Harvard T.H. Chan School of Public Health to explore whether aneuploidy can be reliably measured from small biopsy samples.

### **Aneuploidy and cancer aggressiveness**

The researchers found that the chromosomes that are most commonly aneuploid in prostate tumors are chromosomes 7 and 8. They are now trying to identify specific genes located on those chromosomes that might help cancer cells to survive and spread, and they are also studying why some prostate cancers have higher levels of aneuploidy than others.

"This research highlights the strengths of interdisciplinary, team science approaches to tackle outstanding questions in prostate cancer," Mucci says. "We plan to translate these findings clinically in prostate biopsy specimens and experimentally to understand why aneuploidy occurs in prostate tumors."

Another type of cancer where most patients have low levels of aneuploidy is thyroid cancer, so Amon now hopes to study whether thyroid cancer patients with higher levels of aneuploidy also have higher death rates.

"A very small proportion of thyroid tumors is highly aggressive and lethal, and I'm starting to wonder whether those are the ones that have some aneuploidy," she says.

This article has been republished from [materials](#) provided by [MIT](#). Note: material may have been edited for length and content. For further information, please contact the cited source.

<https://www.technologynetworks.com/cancer-research/news/cancer-cell-chromosome-count-could-clarify-prognosis-319334>

### **Caring for your sexual well-being? This expert calls for quality love-making**

[Rachel Ward](#) · CBC News · Posted: May 14, 2019 3:35 PM MT | Last Updated: May 15

**Prof. Sandra Byers promotes positive sexuality, despite most people's difficulties discussing it**



A couple kiss on the first floor of the Eiffel Tower during Valentine's Day in Paris. Sandra Byers has spent her career studying human sexuality, and she's in Calgary to give a distinguished lecture on sexual well-being. (Thibault Camus/The Associated Press)

Sex may be a topic few people are comfortable discussing.

But it's incredibly important to most.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

That's why Sandra Byers has spent the past 40 years studying the issue — and becoming one of the world's leading experts in it.

She's spent much of her career breaking down myths, dispelling misconceptions and encouraging a healthy sexual life.

Byers, who chairs the University of New Brunswick's psychology department, is considered a renowned sex researcher, educator and therapist, and is a licensed clinical psychologist. She was in Alberta on Tuesday to give a distinguished lecture at the University of Calgary on sexual well-being. Ahead of her presentation, she spoke with the [Calgary Eyeopener's](#) guest host, Rob Brown.

*This interview has been edited for length and clarity.*

**Q: So sexual well-being. What does that mean?**

**A:** To me, sexual well-being is experiencing not only the physical but the physical, emotional, psychological and social aspects of your sexuality in a positive way.

Those aspects are related to each other. Of course, somebody who feels better about themselves sexually is more interested in engaging in sex and may have fewer problems. But they're also quite distinct.



Sandra Byers is a professor at the University of New Brunswick and a renowned human sexuality expert. (Joy Cummings Photo/University of New Brunswick)

So you'll find somebody, for example, who may have a sexual difficulty but nonetheless feels sexually satisfied, feels good about themselves sexually. Or you could find the reverse, too, somebody who doesn't have any sexual problems but still feels bad about themselves sexually, doesn't find sex satisfying.

So really we need to take a very broad view of what sexual well-being is.

**Q: When I hear those words, well-being, I think health. Do you equate the two, well-being in terms of sex life to health indicators?**

**A:** I certainly do, and the World Health Organization, for example, gave a definition of sexual health and well-being, which is similar to the one I gave, this kind of broad definition.

Health is not just the absence of disease. Health is experiencing something positive, not just not having negatives. The same way as, for example, we wouldn't say if you're not depressed, you're happy. If you're not depressed, you're not depressed; it doesn't mean you're happy.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

So I would say the same thing about sexual being and health. To be sexually well, to be sexually healthy, you really have to have those positive experiences, not just avoid the negative.

**Q: You've been working in the field for decades. Why did you want to research sexual well-being in the first place?**

**A:** Sexual well-being is something that's very important to people. People want to feel good about themselves sexually. If they have a partner, they want to have a very positive sex life. They want it to be positive for themselves and their partner.

So our sexuality and our feelings about ourselves sexually is important to most people and yet it's something people really struggle with and they have difficulty talking about.



Sandra Byers started studying human sexuality because she said it's important to most people yet it's difficult to talk about. (Refugio Ruiz/The Associated Press)

When I looked at the research, there was some research in sexuality, but again, it was almost all on the negative side. People were researching dysfunction, they were researching sexual assault, they were researching unwanted pregnancy — and all of those are really important issues, so I'm not downplaying that in any way.

But it's an unbalanced view to only look at the negative aspects of sexuality. So a very glaring omission was looking at the positive aspects of sexuality and how to really enhance sexual well-being, not just avoid or solve sexual problems.

**Q: What are some of the biggest myths or misconceptions that you encounter in your field of research?**

**A:** We've encountered very many. For example, we did a study with men with **prostate cancer** and many of them had problems with sexual functioning, with erection. Almost all of them, all but one, had stopped engaging in sexual activity with their partner because they had a myth — a myth that if you can't have sexual intercourse, you can't have sex.

I really differentiate between sex and love-making. To me, love-making is expressing your feelings for your partner in a sexual way, and there are many, many ways to do that. So they had desire, they were interested but they had this myth that their sex life, their physical relationship with their partner, had to be over because they had such a narrow view of what sexuality was.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019



Researcher Sandra Byers, who is internationally recognized for her work on human sexuality, tries to promote positive sexual well-being. (Marcio Jose Sanchez/The Associated Press)

By the way, most of them had not actually discussed this with their partner, so this wasn't a mutual decision. This was just based on their own negative attitudes towards their own sexuality.

Another example would be, we tend to believe that men are more sexually satisfied than women are because women are complicated and it's not so important to women and more important to men.

We tend to believe that men are more sexually satisfied and certainly the media portrays it that.

When we did research using better measures, using measures that were appropriate for both men and women, we actually, in study after study, in couples and individuals, have not found that men are more sexually satisfied than women. We don't actually find a difference between men and women.

**Q: People are having less sex, at least according to a report in the [British Medical Journal](#). What do you make of that?**

**A:** To me, frequency is the wrong metric. It's the wrong thing to focus on because I want to know about the quality.

To me, if people are having less frequent sex but are having higher quality and they're spending more time at it and they're more concerned about pleasing, not only themselves, but their partner, then to me, the frequency is not so important.

I would never consider frequency without also considering quality, I think the two have to go hand-in-hand.



### 30 Proven Foods to Help Prevent Cancer \*\*

Add some of these healthy foods to your diet to help prevent cancer and keep other diseases at bay.

\*\* *Ed. Note:*

This article was a little too long to print but is very interesting. Here is the link to the Reader's Digest article

<https://www.rd.com/health/conditions/10-foods-to-help-prevent-cancer/>

### A compound in broccoli and kale helps suppress tumor growth

By [Catharine Paddock PhD](#) Fact checked by Paula Field Published Monday 20 May 2019

The body has its own mechanisms for fighting cancer, but sometimes they are too weak to suppress tumor growth. Now, scientists have found that broccoli, kale, and other cruciferous vegetables contain a compound that could reinvigorate one of these innate mechanisms.



*Research shows that a compound in cruciferous vegetables can boost a natural tumor suppressor in the body.*

Researchers from Harvard Medical School's Beth Israel Deaconess Medical Center in Boston, MA, saw that the compound indole-3-carbinol (I3C) impeded [tumor](#) growth in a mouse model of [prostate cancer](#).

In a [Science](#) study paper, they explain that I3C promotes PTEN, a tumor suppressor protein "whose activity is often decreased in human [cancers](#)."

**The team found a molecular pathway in which the protein WWP1 alters and weakens the tumor suppressor PTEN. WWP1 is active in several human cancers.**

However, their investigation reveals that I3C can inactivate WWP1 by switching off its gene. This unleashes the full power of PTEN to restrict tumor growth.

"We found a new important player that drives a pathway critical to the development of cancer," says senior study author Dr. Pier Paolo Pandolfi, Director of the Cancer Center and Cancer Research Institute at Beth Israel Deaconess Medical Center.

He suggests that the pathway is "an Achilles' heel [that] we can target with therapeutic options."

#### **Cancer and cruciferous vegetables**

Cancer arises when abnormal cells grow out of control, invade tissues, and spread. The malignancy can affect nearly every part of the body.

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

According to the [World Health Organization \(WHO\)](#), cancer caused 9.6 million deaths in 2018, and its economic impact is rising. In 2010, the total cost of cancer worldwide was around \$1.16 trillion.

There are more than 100 types of cancer, each depending on the type of cell that it starts in.

Scientists have also identified [six hallmarks](#) of cancer at cell level. These work by sustaining growth signals, avoiding tumor suppression, escaping cell death, promoting endless replication, setting up a blood supply, and triggering invasion and spread.

**There is a growing need for new and cost-effective drugs to treat cancer. Researchers are increasingly turning to the plant world in search of natural compounds that might meet this requirement.**

Previous studies have identified cancer-fighting compounds in cruciferous vegetables, such as cabbage, [kale](#), broccoli, and [Brussels sprouts](#). They have suggested that the compounds [operate on genes](#) that promote some of the hallmarks of cancer.

### Restoring tumor suppression

The recent study adds to this knowledge. The team already knew that PTEN is normally a powerful tumor suppressor. However, in cancer, the protein's gene can be absent, altered, down-regulated, or silent.

It is rare for the gene to be absent altogether; that would require the deletion of both of the two copies that each person carries. Often, what happens is that tumors have low levels of PTEN protein, because, for instance, only one of the two copies is active.

This led Dr. Pandolfi and his team to wonder if there might be a way to restore PTEN to its full tumor-suppressing potency, and the extent to which this might stop tumors from growing.

To investigate these questions, they set out to pinpoint the molecular pathways that activate PTEN.

Using human cancer cells and a mouse model of prostate cancer, they identified that the protein that *WWP1* codes for reduces PTEN's ability to suppress tumors.

Further investigation into *WWP1*'s molecular shape and biochemical activity revealed that the small molecule I3C was a "natural and potent *WWP1* inhibitor."

**However, the team is not suggesting that eating lots of cruciferous vegetables could have the same effect. For a start, a person would have to eat around 6 pounds of raw sprouts per day to reach an effective level of I3C.**

Instead, Dr. Pandolfi and his colleagues are looking for other ways to use this knowledge. They are going to continue examining how *WWP1* works and whether there might be other molecules with even greater power to block it.

"These findings pave the way toward a long-sought tumor suppressor reactivation approach to cancer treatment." Dr. Pier Paolo Pandolfi

<https://www.medicalnewstoday.com/articles/325219.php>

# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

### NOTABLE

#### **Plaid for Dad – a new Father’s Day tradition!**

**While most of us are retired....** The Friday before Father’s Day is officially designated as the day to wear Plaid for Dad. Participants will share photos online using the hashtag #PlaidforDad to show their support and help spread the word.

*Over the past 25 years, thanks to our supporters, Prostate Cancer Canada has accomplished so much.*

*The mortality rate has been cut in half and we’ve invested over \$120 million in research.*

*If detected early, survival is now close to 100 per cent.*

*Sadly, we’re still losing too many “dads” to this disease; over 4,000 each year.*

*We know with your help, we can change that!*

#### **Tribute Wall - Special Way to Honour Dad**

Have kids?!? Explore our Plaid for Dad Tribute Wall and see everyone who is honouring DAD this year by supporting the campaign. You can add your own tribute [when you donate to Plaid for Dad.](#)

**Be part of this incredible fundraising campaign! How will you Go Plaid for Dad?**

**Last but not least - Suggest to your family and friends - wear some plaid on Father’s Day – Let’s make people aware of prostate cancer!**

<https://www.plaidfordad.ca/donate>

### QUOTABLE

“A perfect summer day is when the sun is shining, the breeze is blowing, the birds are singing, and the lawn mower is broken.” – James Dent

“When the sun is shining I can do anything; no mountain is too high, no trouble too difficult to overcome.” – Wilma Rudolph

“Don’t count the days, make the days count.” – Muhammad Ali



# PCCN Markham



## Newsletter

Volume 20 Issue 10

June, 2019

***PCCN Markham  
Prostate Cancer Support Group  
Meets the 2nd Tuesday  
Every month  
September – June  
St. Andrew's Presbyterian Church  
143 Main St Markham***

The Markham PCCN Prostate Support Group is generously supported by Dr. John DiCostanzo, Astellas Pharma, St. Andrews Presbyterian Church, PCCN, and the Canadian Cancer Society.

The group is open to all; survivors, wives, partners, relatives and those in our community who are interested in knowing about prostate health. Drop by St Andrews Presbyterian Church 143 Main Street Markham at 7:30PM, the 2<sup>nd</sup> Tuesday every month from September to June. The information and opinions expressed in this publication are not endorsements or recommendations for any medical treatment, product, service or course of action by PCCN Markham its officers, advisors or editors of this newsletter.

Treatment should not be done in the place of standard, accepted treatment without the knowledge of the treating physician.

The majority of information in this newsletter was taken from various web sites with minimum editing. We have recognized the web sites and authors where possible.

PCCN Markham does not recommend treatment, modalities, medications or physicians. All information is, however, freely shared.

Email [markhampccn@gmail.com](mailto:markhampccn@gmail.com)

*We look forward to your feedback and thoughts. Please email suggestions to [mahoneybj@rogers.com](mailto:mahoneybj@rogers.com)*

**Website** [www.pccnmarkham.ca](http://www.pccnmarkham.ca)  
**Twitter** <https://twitter.com/pccnmarkham>

***REMEMBER NO MEETINGS JULY OR AUGUST!***