

What is Cancer?

The science will tell you that cancer is a disease that starts in our cells. It is when abnormal cells divide and multiply uncontrollably forming lumps or tumors or spread through the blood stream or lymphatic system.

Malignant or cancerous tumors can spread to other parts of the body by invading the surrounding tissue. The cancer cells that spread to other parts of the body are “metastases”. Often times when a malignant tumor has spread, the lymph nodes of that area will start to swell however almost any part of the body can be hit by cancerous cells and it may not always be obvious.

There are many different types of cancer but the National Cancer Institute breaks them down into five main categories. Carcinoma is cancers that begin in the skin or in tissues lining internal organs. Sarcoma is generally cancer that starts in the bone, cartilage, fat, muscle or blood vessels. Leukemia is cancer that starts in blood-forming tissue and causes cancerous cells to enter the blood. Lymphoma and myeloma begin in the immune system and finally Central Nervous System Cancers start in the brain or spinal cord. Cancers are then named after the part of the body that it originates in (ie. lung cancer, bladder cancer, etc.).

A prognosis is a doctor's best estimate of how cancer will affect a person. While there are many factors that affect a prognosis survival statistics are the most commonly used tools to determine a prognosis.

Again, while there are different types of survival statistics, generally speaking survival is measured by the number of people who are alive at a certain point in time after their diagnosis, the most often used being five years.

The Canadian Cancer Society says that about 52 per cent of all new cancer cases will be either lung, breast, colorectal or prostate cancers. In general, 63 per cent of Canadian diagnosed with cancer will survive at least five years after their diagnosis. They estimated that in Ontario, prostate cancer will be the most

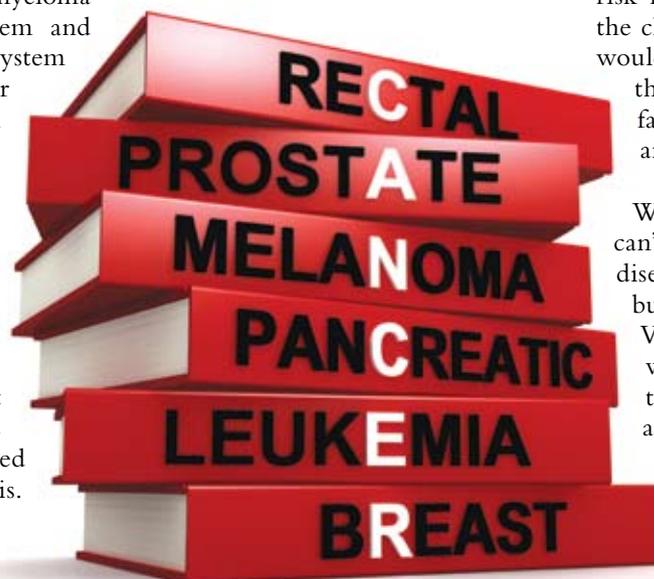
frequently diagnosed cancer for men while for women it would be breast cancer in 2013.

For Canadian men the leading types of cancers causing death are lung and colorectal and for Canadian women it is lung and breast cancer.

Accountable for about 30 per cent of all deaths, cancer is the leading cause of death in Canada. The Canadian Cancer Society had estimated that 500 people would be diagnosed with cancer every day and 200 people would die from cancer every day in 2013. Although cancer diagnosis rates are increasing so are the survival rates.

There is not one single cause of cancer and what's more scary is that anyone can be affected. There are risk factors that potentially increase the chance of getting cancer but this would even include uncontrollable things such as genetics. Other risk factors include lifestyle choices and exposure to carcinogens.

What the science and statistics can't tell you are the affects that this disease can have not only physically but emotionally and mentally. Virtually everyone will in some way be touched by cancer. For this reason, it is so important that a variety of treatments be offered and we never lose hope of one day finding a cure. ■





THE SEELY'S — A Family of **Medical Pioneers**

The Ottawa Integrative Cancer Centre (OICC) is a new cancer care and research facility that incorporates the use of naturopathic medicine and other compatible whole-person treatments with standard cancer care to meet the goals of improving the overall quality of life for those living with cancer.

Naturopathic doctor, Founder and Executive Director of the OICC, Dugald Seely says the Centre is something he had wanted to start for many years. He credits the leadership of the Canadian College of Naturopathic Medicine in supporting its creation and the Lotte and John Hecht Memorial Foundation for contributing operational funding. The OICC emphasizes whole-person, patient-centred care and is the first of its kind in central and eastern Canada.

“Patient-centred care focuses on the needs of the patient first, the quality of life or things defined by the patient as important,” said Seely. “Patients are empowered to make choices for themselves and encouraged to take an active role in their healing process through the adoption of self-care practices.”

The late Dr. John F. Seely (LEFT) and his family; daughters Dr. Jean Seely and Dr. Alison Seely; his wife, Dr. Janet Christie-Seely; and his sons, Dr. Andrew Seely and Dr. Dugald Seely.

Portraits by Karsh and Couvrette

Through the Centre, Seely is an innovator of a new approach to cancer care; one that provides complementary therapeutic support for patients alongside conventional treatments. Seely believes so much more can be done to improve quality of life for patients. Through an evidence-informed approach, his team strives to assess and reduce possible causes of cancer while exploring innovative integrative treatments.

As a Fellow of the American Board of Naturopathic Oncology (FABNO), Dugald is one of only 12 naturopathic doctors in Canada who are board certified in naturopathic oncology. Alongside leading the OICC, he is also Director of Research and Clinical Epidemiology for the Canadian College of Naturopathic Medicine, an Affiliate Investigator with the Ottawa Hospital Research Institute, and board member for the Society of Integrative Oncology.

Seely comes from a family of movers and shakers who have made significant pioneering advancements and contributions in the Ottawa medical community. Seely's greatest inspiration comes from his father, the late Dr. John F. Seely, an internationally-recognized and revered clinician who passed away from cancer in 2009. John Seely was highly regarded among Ottawa's medical community for his depth of compassion and devotion to patient care. For many years, he was the Dean of the Faculty of Medicine at the University of Ottawa but eventually stepped down to return to clinical care to focus his attention on helping terminally ill patients. Working with lifelong friend Dr. Balfour Mount, the founder of palliative care in Canada, he developed the palliative care program for The Ottawa Hospital.

“My father was greatly supportive of the vision for the OICC and joined the board of governors of the Canadian College of Naturopathic Medicine of which the Centre is a part”, said Seely. “He fully believed in and exemplified whole-person, patient-centred care. A medical doctor like many in my family, my father wasn't

biased towards a limited perception of what medicine is, but rather was biased entirely towards what benefits the patient.”

Among many other thoughtful words Dr. Balfour Mount used to describe Dr. John Seely, “invaluable” was one of them. “...he was a remarkable listener,” said Mount. “He had the capacity for radical presence. That was the kind of person he was and it showed in his clinical work or in conversations with a friend.”

When John’s former patients tell their story of being unwell, they talk of his reassuring voice, his incredible warmth, his smile, and his ease with words. When he spoke, it was to explain to the patient exactly what was happening, to ease concerns, to inquire how they were coping, to talk to them of spiritual needs. Never in a rush, and taking the time each day to visit his patients even if they hadn’t requested it.

More than their achievements, perhaps their character traits, warmth, and natural kindness are what set this family apart. What makes the Seely family story so worth telling is the unique way in which they approach and treat the people in their care.

Seely’s great-grandfather and name-sake, Dugald Christie, was a missionary and medical doctor who established the first Western hospital in China and is still greatly admired today for his accomplishments. Seely’s grandfather, Ronald Christie, was a pioneer respiratory researcher, worked with Fleming on penicillin, and was Dean of Medicine at McGill University. His grandmother, Phoebe Seely, was one of the founders of Meals on Wheels.

Dugald Seely is one of four children who are all involved in the medical community. They have each made and are continuing to make considerable advancements within this community as all four share a sense of compassion and dedication to helping others.

Dr. Jean Seely is the eldest of the four. She is the Head of Breast Imaging at The Ottawa Hospital and Women’s

Breast Health Centre, as well as Associate Professor at the University of Ottawa, Faculty of Medicine, Department of Medical Imaging and is the Regional Breast Imaging Lead for the Ontario Breast Screening Program. Jean Seely is a highly-respected radiologist who continues to pursue education and professional development through teaching, research, and clinical practice. Her underlying goal is to improve on ways to see early on what may be amiss in order to help save peoples’ lives.

In an effort to have a greater impact on early detection, Jean began the



PHOTO: PAUL COUVRETTE

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breast MRI program at The Ottawa Hospital in 2001. This program was the first of its kind in Ottawa and has been a resounding success in the community in providing excellent care for women in the region. Jean also helped introduce a new technology, digital breast tomosynthesis, to the Ottawa region in 2009. Tomosynthesis technology reduces false positives and improves sensitivity and overall accuracy of digital mammograms. The Ottawa Hospital is working towards studying this technology in screening patients for breast cancer. These programs

are revolutionary and more accurate in finding and correctly diagnosing breast cancers that may not otherwise be diagnosed.

Dr. Andrew Seely is an Intensivist and Thoracic Surgeon with The Ottawa Hospital. He is Associate Scientist and Associate Professor with the Ottawa Hospital Research Institute and the University of Ottawa, performing research in thoracic surgery and critical care medicine. His research is rooted in complex systems science, and is focussed on monitoring the underlying system as a whole. Andrew is an international leader in the bedside application of complexity science using mathematical analysis of patterns of variation of vital signs. Andrew is pioneering the technological development and clinical evaluation of a clinical decision support system to help improve care for patients in critical care. This novel technology is patented, is being commercialized in partnership with Therapeutic Monitoring Systems (www.therapeuticmonitoring.com), and has the potential to improve efficiency and quality of critical care in hospitals.

Andrew and Dugald are collaborating as Co-Principal Investigators on a first of its kind research trial to determine if melatonin affects patients with lung cancer and improves long-term survival after surgery. This study is the largest clinical trial in the world for testing the use of this natural health product in cancer care. To date, 550 participants have been recruited and as a result of collaborating with the Canadian Association of Thoracic Surgeons, this trial is now enrolling in eight hospital centres across Canada; with The Ottawa Hospital as the primary site. If trial results reflect what has been shown in other studies, there is real potential for reducing lung cancer recurrence after lung cancer resection, and thus improving quality and efficiency of care to the health care system through the use of this low cost non-patentable natural health product.

This study is a compelling example of the pioneering complementary cancer care research efforts led by Dugald

and Andrew Seely. Foundations and philanthropic donations are critical for this kind of innovative research given the lack of industry funding available to support studies on the benefits of natural health products. Funding to the tune of nearly one million dollars, for this particular trial was provided by the Lotte and John Hecht Memorial Foundation and the Gateway for Cancer Research Foundation.

Dr. Alison Seely said that as early as she could talk she said an emphatic no to studying medicine. Yet her love of animals has brought her back to the family fold in the field of veterinary medicine. She is one of the few veterinarians in Ottawa that also provides chiropractic care for animals - in fact she said that the chiropractic care now takes up the majority of her practice.

“We love animals,” she explains. “Animals though do not typically love vets. But animals love chiropractic. I see dogs tugging at their leashes to come in.”

Alison has won the hearts of pet owners throughout the Ottawa Valley, bringing them a whole new set of options to ease the unnecessary pain and discomfort that their beloved pets have by adding chiropractic to her veterinary belt. While most vets are in their clinics, Alison drives from stable to stable adjusting horses, and operates out of three clinics (Carp Road Animal Hospital, Pembroke Animal Hospital, and Deep River Veterinary services) to adjust dogs and cats, improving their quality of life and addressing needs that regular veterinary care cannot.

Alison Seely said she really loves what she does as there is an immediate and visible result with essentially no negative reactions.

Aside from her work as a vet, a passion of hers and her husband are in the pursuit of Iron Man competitions around the globe of which she has already run more than a dozen full and half Ironman races with the goal of qualifying for the Hawaii Kona race.



PHOTO: DWAYNE BROWN PHOTOGRAPHY

The Ottawa Integrative Cancer Centre teaches integrative oncology to help patients and cancer care professionals alike.

All four of the Seely children have what Andrew called “grittiness” as they are each driven by a passion to contribute and leave something bigger than themselves in this world.

Each Seely attributed his/her compassion to their parents, explaining that they were not only powerful influences in their career and life choices but huge inspirations overall.

“We’re really fortunate to have had incredibly supportive parents,” said Dr. Jean Seely. “They have really wanted to help people and gave a perfect example of how to do that.”

Their mother, Dr. Janet Christie-Seely is a Family Therapist, a Professor of Family Medicine at the University of Ottawa, and also practices family therapy at the OICC. Janet focuses on “systems theory” in her practice which is a way of looking at family interactions or the family as a whole and how it correlates with illness. She trained with Virginia Satir, a pioneer family therapist. Dr. Christie-Seely has been a great advocate for systems theory and helping family doctors see

how it helps them understand illness. She was Author-Editor of a textbook, *Working with the Family in Primary Care: a Systems Approach to Health and Illness*. Starting off with research on the lung she then became a Family Physician. Janet expanded her knowledge, moving into the field of family therapy and hasn’t looked back. She founded the Satir Learning Centre of Ottawa, and has traveled the globe, teaching in 16 countries as far flung as Azerbaijan and Hong Kong. Never one to be stopped, as some might be, in attempting to teach other cultures a whole new therapeutic language, Janet easily overcomes this, seeing instead the possibilities in expanding the skill sets of doctors around the world, despite cultural or language barriers.

The OICC is just one recent example of the major health care contributions that has arisen from the Seely family here in Ottawa. “What sustains and inspires me daily is the incredible courage of the patients we see at the Centre and the phenomenal dedication of the team at the OICC to provide the best care possible to each person that comes through our doors,” said Dugald.

Dugald, the youngest of the crew, is a unique example of vision and courage in grappling with current medical issues and a societal shift towards more patient-centred care. Dugald has pursued a path that embraces the best of what complementary and alternative medicine has to offer while recognizing the importance and value of conventional medicine. Always ready to take on a challenge, and clearly starting up a new model for cancer care was a challenge indeed, Dugald Seely is dedicated to supporting his patients where they need support the most. He has pursued his vision of starting the OICC with a determination to make a difference and to improve the lives of those living with cancer.

The Seely children are all pioneers and honour the family’s legacy in the way they care for their patients, and in their approach to medicine with open minds and open arms. ■