

ESCARPMENT
CANCER RESEARCH
INSTITUTE

“Inspiring research – because every patient matters”



Hamilton Health Sciences



Launch Celebration | September 22, 2011 | Program



Launch Celebration

E S C A R P M E N T **CANCER**RESEARCH I N S T I T U T E

Thursday, September 22, 2011

Atrium, Juravinski Cancer Centre | 10:30 a.m. – noon

Agenda

WELCOME

Dr. Bill Evans, *President, Juravinski Cancer Centre*

Murray T. Martin, *President & CEO, Hamilton Health Sciences*

Dr. John Kelton, *Dean & Vice-President, Faculty of Health Sciences, McMaster University*

REMARKS AND INTRODUCTIONS OF THE ECRI SCIENTISTS

Dr. Mark Levine, *Founding Scientific Director, Escarpmnt Cancer Research Institute*
Professor and Chair, Department of Oncology, McMaster University
Head, Cancer Research, Hamilton Health Sciences

Dr. Andrew Arnold
Dr. Anita Bane
Dr. Melissa Brouwers
Dr. Denise Bryant-Lukosius
Dr. Laurie Elit
Dr. Hal Hirte
Dr. Sebastien Hotte
Dr. Rosalyn Juergens
Professor Jim Julian
Dr. Peter Kavsak
Dr. Gregory Pond
Dr. Hsien Seow
Dr. Marko Simunovic
Dr. Jonathan Sussman
Dr. Timothy Whelan

ADJOURNMENT & REFRESHMENTS

Message from Murray T. Martin



Hamilton has a long tradition of research and discovery and, as this community evolves to become a leading centre of technological innovation, our health care research programs are stronger than ever. Today we are marking an important milestone in one of those programs.

Sixteen scientists (11 of whom are practicing clinicians at the Juravinski Hospital and Cancer Centre) who have dedicated their careers to advancing cancer research are joining forces to form the Escarpment Cancer Research Institute. These individuals are amongst the best in their fields and each of them is already making a difference. Together they will be able to build on their shared experience and expertise to achieve new goals across the cancer research spectrum.

This Institute has become a reality with the support and vision of many people. Dr. Mark Levine and his ECRI colleagues have inspired Hamilton Health Sciences and McMaster University to enhance the profile of cancer research by focusing it at the Juravinski site. This will enable them to move laboratory research findings into the clinic more effectively, deliver better treatments to patients more quickly, and optimize the translation of research findings within our LHIN. That impact will be felt far beyond this community and this region. The Institute, which is currently located in the centre of the Juravinski campus, will also play a key role in the development of the academic profile of our organization.

Murray T. Martin

President & CEO, Hamilton Health Sciences

Message from John Kelton



The Escarpment Cancer Research Institute capitalizes not just on Hamilton's largest geographic point of interest, but also on the city's unique advantages, to be large enough to attract world-class researchers and clinicians but small enough to encourage effective and innovative interdisciplinary teamwork that will inspire trailblazing research.

This is the right time for McMaster University, Hamilton Health Sciences and the Juravinski Cancer Centre to bring together their well-established and successful cancer research groups, as well as newly established ones with promise in order to embrace and grow the opportunities for synergies in research.

These range from: the study of patient tumor samples in the laboratory to identify new targets for therapy and new markers which will predict whether treatment will work or not; to clinical trials of novel therapies and technologies; to health services research on quality of care and knowledge translation. The key is that any one of the Institute's research themes will directly result in better care at the bedside. The Institute will also provide fertile ground for the important training of the next generation of students and researchers.

It is a pleasure today to applaud the work of Dr. Mark Levine and his new team as they reach towards new heights of accomplishment.

Dr. John Kelton
Dean and Vice-President
Faculty of Health Sciences
McMaster University

Message from Mark Levine



“Inspiring research – because every patient matters”

These words resonated with the 16 scientists who met last June to discuss a vision for the Escarpment Cancer Research Institute (ECRI). This is our belief and the beacon that guides our research. As clinicians and researchers, we understand the toll cancer takes on our patients and their families. Through research and the pursuit of greater knowledge, we aim to improve care for those affected by this disease.

The scientists in ECRI will work in three thematic areas:

- Clinical trials
- Quality health care and knowledge translation research
- Translational (bench to bedside) research.

Our commitment is to generate results that will have a meaningful impact in a timely fashion. Our team is multidisciplinary and includes the disciplines of: medical, radiation, and surgical oncology; pathology; nursing; epidemiology; biostatistics; health policy; and social sciences. We are committed to training young students in cancer research and inspiring them to be the leaders of tomorrow.

“Inspiring research” is our way of expressing the spirit of ECRI. Our research will be exciting and cutting-edge. We believe that breakthroughs and innovations come from taking a collaborative, coordinated approach that optimizes the combined skills and talents of a multidisciplinary team. We are committed to inspiring other researchers and students beyond this institute to work with us in order to better the lives of cancer patients and their families worldwide.

The Escarpment Cancer Research Institute is laying the foundation for a future of discovery. It is based on a long tradition of research excellence in Hamilton and in the future it will grow to include more investigators and even larger studies. Currently, we are very appreciative of the space on the campus of the Juravinski Hospital & Cancer Centre provided to our research scientists. In the coming years, our plan is to bring all the scientists together under one roof, so that researchers and staff will be able to interact and share ideas, create opportunities, and establish a vibrant and sustainable enterprise that will generate results for years to come.

On behalf of the scientists and staff at ECRI, and Hamilton Health Sciences and McMaster University, thank you for sharing this celebration with us. In this booklet, you will find brief profiles of our 16 scientists. Each and every one of them believes in **“Inspiring research – because every patient matters.”**

Dr. Mark Levine

*Founding Scientific Director, Escarpment Cancer Research Institute
Professor and Chair, Department of Oncology, McMaster University
Head, Cancer Research, Hamilton Health Sciences*

Dr. Andrew Arnold



Dr. Andrew Arnold's 30-year career in cancer care and research makes him one of the most senior investigators at the Escarpment Cancer Research Institute. That longevity has given him a poignant perspective on the challenge that remains. "Until we cure absolutely everybody of cancer, we shall need to conduct clinical trials," he says. Fortunately, the passion that sparked Dr. Arnold's interest in clinical trials back when he was a young oncologist in England still drives him today. He likes the discipline of collaborating on clinical trials that are properly conducted and answer important questions. Dr. Arnold is also proud of Hamilton's reputation as a centre with high standards in clinical epidemiology and high participation rates in health care research. It's one of the reasons that he was drawn to this city in the first place, and why he has been pleased to head the Clinical Trials Department at the Juravinski Cancer Centre over the past three years. For him, ECRI represents an opportunity to create an environment that will encourage discovery in the next generation of cancer specialists and scientists. "It's tremendously important to support our new investigators," he says.

Dr. Anita Bane



For Dr. Anita Bane, her work as a pathologist is both rewarding and intriguing. "It's kind of like a puzzle," says the Irish-born physician and PhD scientist. "You use different techniques and look at different aspects of the tissue and cells to get an overall picture of the patient's disease." Through a microscope, Dr. Bane gains unique insights that inform decisions related to the treatment and follow-up care for cancer patients. From a research perspective, she is particularly interested in the molecular profile of breast cancer and how this relates to outcome and response to therapy. Additionally, she is studying the clinical significance of breast cancer stem cells, and is in the process of developing testing methods that will enable pathologists to identify specific "markers" for these cells. Dr. Bane plays a leadership role in this field – she is an Ontario Institute for Cancer Research scientist. As part of the Escarpment Cancer Research Institute, she sees an opportunity to build upon a core group of Hamilton-based scientists who are already collaborating. She believes the transfer of knowledge will be enhanced through the establishment of the Institute, and that patients will benefit. "Incremental impacts are very important and our patients need to know that," says Dr. Bane.

Dr. Melissa Brouwers



Dr. Melissa Brouwers is dedicated to using research knowledge to improve health care. It's a long way from her academic roots in psychology and her creative experience in amateur theatre. But as Scientific Director of the internationally-recognized Program in Evidence-based Care for Cancer Care Ontario, she is passionate about the value of knowledge translation and appreciates its innovative potential. “The guidelines we produce translate research into actionable messages,” she says. “Those actions may be how to treat a particular patient better, or how to organize the system so we can treat all patients more effectively.” Dr. Brouwers' 40-person team is located at the Juravinski Cancer Centre and will serve as the Escarpment Cancer Research Institute's Quality of Care & Knowledge Translation unit. It is already the best resourced team of its kind in Canada. Fundamentally, its role is to assemble all the research evidence available on a particular type of cancer treatment and, based on that, develop clinical practice guidelines for optimal treatment plans. “By showing the value of these standards, we're influencing the entire health care system,” says Dr. Brouwers. Over the next five years, her focus will be on interventional research to reduce the gap between guideline recommendations and clinical performance, and the development of tools to help policy makers navigate or mitigate uncertainty in health care decisions.

Dr. Denise Bryant-Lukosius



Nurses play a vital role in cancer care and treatment. No one knows this better than patients themselves who rely on nurses to not only deliver care, but also guide and support them through every stage of their treatment and recovery. As a nurse with many years of clinical experience, Dr. Denise Bryant-Lukosius is well aware of this intimate connection, especially as it relates to Advanced Practice Nurses in oncology. These are veteran nurses who have additional education and expertise that qualifies them to play leadership roles on health care teams. The focus of Dr. Bryant-Lukosius' doctoral and post doctoral research has been on how to best train and utilize this special breed of nurses. She has developed role descriptions and policies related to Advanced Practice Nurses, and has studied their job satisfaction and career development. Dr. Bryant-Lukosius leads the Canadian Centre of Excellence in Oncology Advanced Practice Nursing and is sought after across the country and internationally to share her research. Over the next five years, Dr. Bryant-Lukosius will continue further development of nursing roles and models of care in oncology. “Through the interdisciplinary collaboration that the Escarpment Cancer Research Institute offers, we will be able to advance our work as individual investigators,” says Dr. Bryant-Lukosius. “In oncology that's particularly important because of the complexity of the disease and the need for strategies that address all aspects of the patient's needs.”

Dr. Laurie Elit



Dr. Laurie Elit was just seven years old when her father was diagnosed with cancer. She went to some of his appointments with him and witnessed his battle with Hodgkin's lymphoma, a form of cancer which, at the time, took many lives. Now a healthy 81-year-old, he's proud of his daughter who was inspired, partly by his experience, to become a doctor and then a surgeon. Dr. Elit's specialty is gynecologic surgery and she been on staff at the Juravinski Hospital and Cancer Centre since 1998. Her research focuses on identifying the best ways to prevent, diagnose, assess and treat cancers of the female reproductive system. Dr. Elit also has considerable expertise in international health. About 10 years ago, she responded to an ad in a magazine looking for doctors to work in Mongolia. This led her to a teaching role at a Mongolian obstetrical hospital, and a research project on a form of ovarian cancer unique to one particular tribe. Dr. Elit appreciates diversity and is looking forward to the synergy that will come from bringing people with different skill sets together at the Escarpment Cancer Research Institute. "We'll be able to explore new opportunities and ask new questions," she says.

Dr. Hal Hirte



For inspiration on what career to choose, Dr. Hal Hirte didn't have to look any further than across the dinner table. "My father was an oncologist and I respected what he did," says Dr. Hirte. "I thought this was something I would like to devote my life to as well." At university, the young Dr. Hirte enjoyed research and medicine, but he especially liked the wide range of opportunities offered by the study and practice of oncology. After completing training programs and research in Ottawa, Toronto and Maryland, Dr. Hirte joined the staff at the Juravinski Cancer Centre in 1987. He is now a national leader in the study of novel, anti-cancer drugs. Ovarian cancer has become his focus, in part because, even in the most advanced cases, it is contained within the abdominal cavity. The fluid in that cavity provides clues to what is happening in the tumour environment, and could provide valuable information about what drives tumour growth and why the patient's immune system isn't rejecting the tumor. Once these phenomena are better understood, doctors will be more successful in applying targeted approaches to inhibit processes such as angiogenesis to stop the blood supply to tumors and inhibit pathways crucial to the growth and progression of these cancers. Ovarian cancer is particularly challenging because so many patients have relapses and die. Dr. Hirte is hopeful that, by bringing molecular scientists and clinical scientists together at the Escarpment Cancer Research Institute, great advances in the fight against all cancers will result.

Dr. Sebastien Hotte



Dr. Sebastien Hotte likes a challenge. That's fortunate since, like all oncologists, he faces many challenges every day. "You're dealing with a very serious illness, caring for patients at pivotal times in their lives. You have to create a rapport and build trust very quickly," he says. "And you have to know your medicine very well." The medicine Dr. Hotte specializes in is genitourinary cancer. That is cancer of the prostate, bladder, kidney and testicle. Ever since his early training in Ottawa, his residency in London, Ontario, and his post grad studies at McMaster University, Dr. Hotte has been involved in research. His projects include some significant clinical trials in developmental therapeutics (new anti-cancer drugs), but he is also very interested in translational research – research that translates the findings of basic science so it is applied quickly to medical practice. In the years ahead, Dr. Hotte is looking forward to contributing to the development of more personalized cancer treatments. These are treatments that have the best odds of being effective depending on the patient's genetic makeup and the type and stage of their cancer. "The Escarpment Cancer Research Institute will anchor my research agenda and make it easier for me to collaborate with other like-minded investigators," says Dr. Hotte. "We have a common vision and a common goal."

Dr. Rosalyn Juergens



Dr. Rosalyn Juergens is candid about why she became interested in studying lung cancer. "To be honest, lung cancer needs help!" she says. "Lung cancer is the biggest cancer killer in women – including women who haven't smoked a day in their lives." Dr. Juergens' interest in oncology was sparked when she was randomly assigned to a cancer clinic during the early years of her medical training. She describes the experience as one of the most amazing in her life. "You have this incredible connection with your patients. Plus, the scientific breakthroughs driving patient care offer new options all the time." Dr. Juergens moved to Hamilton in January 2011 after completing a residency in internal medicine and a fellowship in oncology at The Johns Hopkins Medical Institute in Baltimore, Maryland. She is also nearly finished her doctorate in clinical investigation at the Johns Hopkins Bloomberg School of Public Health. In addition, she holds an Ontario Institute of Cancer Research Scientist Award. Dr. Juergens' research focus is on the development of more personalized treatment strategies for cancer – therapies that are selected for the patient depending on the patient's own molecular makeup as well as the type and stage of their disease. She is doing this through the use of novel imaging methods – an approach that is also being pursued by other investigators at ECRI.

Professor Jim Julian



Looking back, Jim Julian acknowledges that his career path has meandered more than most. As a young man, he wanted to be an architect but, during his second year in architecture, he became disillusioned with the profession, and switched into mathematics. A job opportunity as a quality control analyst lured him away to work at Consolidated Bathurst in Hamilton. This exposure to “real-world data analysis” encouraged him to return to school to complete a degree in statistics at McMaster University. It wasn't until his Master's at the University of Waterloo that his talents and interests finally merged. He was concerned about air pollution and its impact on health, and that led him into the field of occupational health and epidemiology. In the mid nineties, after almost 20 years with McMaster's Occupational Health Program conducting research on cancer and silicosis in underground miners, Professor Julian's statistical and methodologic expertise drew him to the attention of one of McMaster's emerging clinical trials groups which he joined. For many years, he was a professor in the Department of Clinical Epidemiology & Biostatistics. He won top teaching awards multiple times, and eventually, a lifetime teaching excellence award. Today, Professor Julian is Associate Director of the Ontario Clinical Oncology Group. He collaborates with medical researchers to design and conduct studies in treating patients with cancer and with thrombosis (blood clots). His greatest joy is mentoring young biostatisticians.

Dr. Peter Kavsak



Dr. Peter Kavsak fell victim to the allure of science early in life. “As a kid, I was always curious about why things happen,” he says. “And I found out soon that the more you know, the more you want to know.” That curiosity has led him to a career in clinical biochemistry and laboratory medicine at the Juravinski Hospital & Cancer Centre and the Hamilton Regional Laboratory Medicine Program. In Peter's laboratory, blood samples from cancer patients are studied for various proteins, called biomarkers, that can be used to predict the effectiveness and side effects of treatments. For example, one of his current research projects is looking at the impact of cancer treatment on heart health. Sometimes patients who survive cancer suffer from cardiac problems later on – problems that are caused by the toxicity of the cancer treatment. Dr. Kavsak has already done a lot of investigation into cell damage and cardiac injury, so he is now applying those findings to cancer care. He is a member of the OICR Translational Research Team. One of his research priorities – and the reason he is so pleased to be part of the Escarpment Cancer Research Institute – is that he would like to help open up what he calls the “bottleneck” between laboratory research and clinical care. “We need to harness the power of discoveries so they can lead more quickly to better patient care,” says Dr. Kavsak.

Dr. Mark Levine



When Dr. Mark Levine reflects on the evolution of his career as an oncologist, his story is sprinkled with the names of mentors and role models who shaped his vision of what he wanted to accomplish as a physician and a researcher. He knows how vital those relationships are in motivating the next generation of scientists and, by facilitating the establishment of the Escarpment Cancer Research Institute, Dr. Levine is ensuring that tomorrow's researchers will also be supported and inspired. Besides being a leader in the advancement of cancer research, Dr. Levine has been a prolific investigator himself. His focus has been on breast cancer, blood clots in cancer patients, and diagnostic imaging. A number of the clinical trials he has conducted have impacted health care across Canada and around the world. In 1982, Dr. Levine helped establish the Ontario Clinical Oncology Group which develops and coordinates clinical trials throughout the province. Currently, he is Professor and Chair of the Department of Oncology at McMaster University, Director of the Clinical Trials Methodology Group at the Juravinski Hospital & Cancer Centre and he holds the Buffett Taylor Breast Cancer Research Chair. With 30 years of clinical and research experience, Dr. Levine knows that the Escarpment Cancer Research Institute will make a difference. "We're laying the foundation for the future," he says.

Dr. Gregory Pond



The real world is very messy. That is one of the many things Dr. Gregory Pond learned as a young statistician involved in health care research for the first time. He was working at the Mayo Clinic in Rochester, Minnesota – his first full time job after completing his masters at Simon Fraser University. "In most fields, research projects happen in a controlled environment and have a clear end point," he says. "But when you talk about end points in clinical trials, it's people's lives you're talking about." The challenge of creating studies while factoring in all the variables that inevitably emerge in health care intrigued Dr. Pond, and he pursued his PhD at the University of Toronto. Originally from Dundas, he was happy to return to Hamilton in 2008 to join the Ontario Clinical Oncology Group located at the Juravinski Hospital & Cancer Centre. "One of the very interesting things about Hamilton is that the trials run here are not necessarily standard clinical trials – that is, one drug versus another," he says. "We are involved in a wide variety of studies – everything from imaging, to lifestyle intervention, to survivorship care." From his point of view, that range of work ensures that, the Escarpment Cancer Research Institute will be a leader not only in Canada, but in the world.

Dr. Hsien Seow



Early in his career, Dr. Hsien Seow feels fortunate to already be in his dream job. He holds the Cancer Care Ontario Research Chair in Health Services Research and, with the Escarpment Cancer Research Institute as his academic home, he is able to share his passion for discovery. “Innovation happens at the intersection of disciplines,” he says. “At ECRI, we have a dynamic and collegial group of experts from many specialties. Together, we’ll answer important questions that can initiate real change.” Dr. Seow started asking his own questions when he was an undergraduate student at Yale University. He began studying courses required for medical school but realized, during a course on health care financing, that he was more interested in how societies organize the systems to deliver health care. This interest led him to conduct research with RAND Health and then complete a PhD at Johns Hopkins School of Public Health in health policy and management. An Oakville native, Dr. Seow was glad to return to Canada and looks forward to pursuing research on palliative care services in particular. “Death is part of life, yet our current health care system is poorly designed to care for the complex needs of the very sick and dying,” he says. “Although our system has problems, I’m optimistic that research can positively impact policies, practice, and patient care in Canada.” Ultimately, Dr. Seow is determined to help change the health care system for the better.

Dr. Marko Simunovic



Dr. Marko Simunovic has always been interested in how systems work, specifically, human systems – human rights, politics, or international relations for example. When he got to medical school and residency training in general surgery, he discovered that the health care system is equally fascinating and he has focused his career on developing strategies aimed at leveraging its strengths. “When I was a resident in general surgery, I was shown an article on how outcomes for patients undergoing colorectal surgery varied dramatically depending on who the surgeon was,” says Dr. Simunovic. “This really fascinated me. To expect such differences may be intuitive, but from an equity perspective it makes no sense.” After completing his MD at the University of Ottawa, Dr. Simunovic earned his masters in public health at Harvard University. This, in addition to a series of surgical fellowships, prepared him well for the leadership role he now plays in setting standards for colorectal cancer surgery. Dr. Simunovic conducts population-based research on volume outcome relationships, wait times and quality improvement. He is dedicated to sharing his knowledge and skills with other surgeons through interventions aimed at raising standards and improving patient outcomes across this Local Health Integration Network and beyond. “The Escarpment Cancer Research Institute offers many opportunities to expand this research. We can all draw on its pools of excellence,” says Dr. Simunovic.

Dr. Jonathan Sussman



Although he is now a highly specialized radiation oncologist at the Juravinski Cancer Centre, Dr. Jonathan Sussman was once a family physician in Burlington. The three years he spent in primary care helped him decide that he wanted to work in the field of oncology. During that time, he also learned how important it is for caregivers to interact effectively with each other in order to make things easier for patients. Building bridges between cancer specialists and family physicians is now a major theme of Dr. Sussman's research and professional work. He is Director of the Supportive Cancer Care Research Unit at the Juravinski Cancer Centre and Director of the Program in Transitions in Care within the Applied Health Research Network of the Ontario Ministry of Health and Long-Term Care. "All care providers need to be supportive of each other, especially with the complexities of treatment that use new technologies and personalized medicine approaches" says Dr. Sussman. "The role of the family physician is pivotal to the overall care of cancer patients and must be clearly articulated and appropriately supported." He believes that by sharing one address and one vision, the scientists of the Escarpment Cancer Research Institute will produce research that transforms patient care. "We have a large number of individuals from different disciplines whose work overlaps and intersects. Working together at ECRI will further enhance our ability produce high quality, meaningful research that will improve the delivery of cancer care "

Dr. Timothy Whelan



Dr. Timothy Whelan first came to Hamilton to pursue research training 20 years ago and has remained ever since. He holds a Canada Research Chair and is truly one of our stars. He has had a long distinguished career. As a radiation oncologist specializing in breast cancer, he knows that every case is unique, and every patient's priorities are different. He has led numerous, innovative studies that have focused on patient decision making for treatment. For example, he led the development and assessment of decision aids that are used by breast cancer patients and physicians at times when critical treatment choices need to be made. In clinical trials, his work has focused on evaluating the duration and intensity of radiation treatment for breast cancer patients. Amongst other findings, he has shown that shorter radiation treatment regimens can be just as effective as longer regimens in women who have undergone lumpectomy for breast cancer. Recently, Dr. Whelan has extended his research to collaborate with colleagues in the laboratory to identify and evaluate biomarkers, which can potentially predict responsiveness of breast tumors to radiotherapy – another strategy aimed at improving treatment decisions. "I am thankful that we have been able to make a difference," says Dr. Whelan. "The Escarpment Cancer Research Institute is a special opportunity for people with different interests and expertise to work together and perform even better research than we have done so far."



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Dr. Mark Levine

Scientific Director

Escarpment Cancer Research Institute
1st Floor, G Wing, Juravinski Hospital and Cancer Centre
711 Concession Street
Hamilton, Ontario L8V 1C3

Phone: 905-527-4322 x 42176

Fax: 905-389-9288

dalel@mcmaster.ca

(Lori Dale, executive assistant to Dr. Levine)

Anne Snider

Director of Operations

Escarpment Cancer Research Institute
3rd Floor, J Wing, Juravinski Hospital and Cancer Centre
699 Concession Street
Hamilton, Ontario L8V 5C2

Phone: 905-387-9711 x 63006

Fax: 905-575-6323

anne.snider@jcc.hhsc.ca