Cover Photo: The west entrance of the Juravinski Cancer Centre. One of the largest cancer centres in the country, the JCC was expanded and redeveloped in 2004 by Vermeulen/Hind Architects to meet the needs for cancer treatment in Hamilton and surrounding region. The five storey atrium space links the old centre with a new tower and brings light into the heart of the building. Warm finishings, gardens, natural light and an extensive art collection create an environment of calm and support for patients, staff and visitors.

Photo: BenRahn/A-Frame Inc
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I recently began my fourth year as Chair of the Department of Oncology. It has been exciting and rewarding to have the opportunity to build a new department within the Faculty of Health Sciences. I have been learning on the job and thank all of my colleagues for their support. I rely heavily on the advice and wisdom of Anne Snider, our director of administration. Many projects that have been accomplished in implementing the department can be considered as “firsts”. Accordingly, I am pleased to present you with the Department of Oncology’s first Annual Report. We are including data primarily from July 1, 2009 to June 30, 2010, but have taken the liberty of occasionally including earlier information for completeness.

The hub of oncology treatment and care in our region is Hamilton Health Sciences Juravinski Cancer Centre (JCC). The departmental administrative offices (including the chair’s office) are located in the JCC. Clinical activities within the department are carried out through the JCC Regional Cancer Program by the divisions of medical oncology (Dr. Richard Tozer, division head), radiation oncology (Dr. Tim Whelan, division head), (Dr. Jim Wright, deputy head), and malignant hematology (Dr. Tom Kouroukis, division head). When the department was first established medical oncologists, radiation oncologists, and some hematology oncologists transferred from the Department of Medicine. Since that time the department has grown to include 42 full-time members (medical oncologists, radiation oncologists, hematologists, a pathologist, PhD health services researchers and biostatisticians). In addition, the department has 14 associate members who have their primary appointments in other McMaster departments, e.g. surgery, obstetrics & gynecology and the School of Nursing. There are 22 members with part-time appointments including oncologists in Kitchener-Waterloo and St. Catharines.

The medical oncologists and hematology oncologists within the department joined Phase III of the academic alternate funding plan. This provides funding to support fellows and recruitment of academic oncologists.

Any university department requires a smooth functioning process for tenure and promotion. I am pleased that a very effective administrative infrastructure for tenure and promotion has been established through the diligence and persistence of Heather Wilde. In 2009-2010 two members were promoted to full professor (Harold Reiter and Stephen Sagar), one member to associate professor with CAWAR (Bindi Dhesy-Third), and three assistant professors were reappointed (Graeme
Fraser, Som Mukherjee and Theos Tsakiridis).
Undergraduate and postgraduate medical education are important academic endeavors of the department. Departmental members play a very active role in undergraduate education. Dr. Alan Neville completed 13 years as the assistant dean in the undergraduate MD program. He is internationally recognized as a leader in establishing new medical schools, implementing problem-based learning and developing a world-class undergraduate program at McMaster University. He was recently appointed associate dean of education, in the Faculty of Health Sciences effective July 1, 2010. This past year he received four teaching awards; the McMaster President’s Award for Excellence in Teaching, the Ari Shali Teaching Award for Outstanding Dedication and Commitment to Undergraduate Medical Education, the Association of Faculties of Medicine of Canada Inaugural President’s Award of Exemplary Leadership in Academic Medicine, and the Department of Oncology Inaugural Award for Outstanding Leadership in Education.

Dr. Harold Reiter is chair of undergraduate medical school admissions at McMaster. He has conducted innovative research in medical education as related to admissions and he is internationally recognized for this work. He pioneered the development of the Multiple Mini-Interview (MMI) and the Computer-Based Multiple Sampling Evaluation of Non-Cognitive Skills (CMSENS) for medical school admissions which has been adopted by 12 of 17 medical schools across Canada. Dr. Deb Marcellus is director of MF3 and Dr. Ann Benger is the director of MF4 in the undergraduate program.

Our postgraduate training programs in medical oncology (led by Dr. Bindi Dhesy-Third), and radiation oncology (led by Dr. Ian Dayes) received high marks in the 2009 accreditation process and were given full approval. The success rate of the residents in the Royal College examinations was 100 per cent.

The Department of Oncology held its first educational retreat in February 2010. This was a full day event hosted by Dr. Deb Marcellus, vice chair of education. The primary focus of the retreat was to discuss practical strategies for improving learner-centre teaching. It included interactive workshops and presentations which were enjoyed by all.

The seventh Annual Student Research Day was held on June 17, 2010, and was hosted by Dr. Sachi Voruganti. There were many excellent oral presentations and posters. Dr. Craig Earle, head of health services research for the OICR/CCO was the keynote speaker.

The postgraduate trainees have their regular academic half-day on Wednesday afternoons. This has now been augmented by a new research curriculum organized by Dr. John Goffin. The goals of this curriculum are to provide the trainees with lectures on research methods that help guide the resident in developing a research project. Many residents and junior researchers require advice and assistance in the development of research protocols. To this end, the department has instituted a monthly research seminar series called Research in Progress Rounds which is organized by Drs. Kevin Zbuk, Jonathan Sussman and Graeme Fraser.

At these sessions, a researcher presents the background and design of a research project. He/she receives feedback from methodologists on the project. These have been well attended and enjoyed by all.

A formalized fellowship program has been established for both clinical and research fellowships in the department. Dr. Peter Ellis chaired a committee involving Jonathan Sussman, Graeme Fraser and Heather Wilde to develop the program. Our first set of fellowships has been advertised on the departmental website and CAMO and CARO journals. In the past year we have had four research fellows (two in medical oncology and two in radiation oncology). The department also had a learner from a school of traditional oriental medicine in Korea spend time with Drs. Stephen Sagar and Raimond Wong to learn about evidence-based practice within radiation therapy.

Recently satellite campuses of the DeGroote School of Medicine have been established in Kitchener Waterloo and St. Catharines. Both of these communities have cancer centres. With the expansion of the medical school there is the opportunity to expand the department’s residency programs.

Research is an important activity of the department and the research activities of the department continue to grow in size and impact. Success in research involves a critical mass of investigators, mentorship and hard work. These are the criteria that the department is using in developing a strong research program. To this end, a model for research in the department is being created whereby clinicians are supported.
by methodologists embedded within the department. Accordingly we have two full-time biostatisticians (Professor Jim Julian and Dr. Gregory Pond), two PhD health services researchers (Drs. Melissa Brouwers and Hsien Seow) within the department. Dr. Melissa Brouwers is the Head of Health Services Research and leads Cancer Care Ontario’s Program in Evidence-Based Care. Dr. Hsien Seow holds a Cancer Care Ontario Research Chair in Health Services Research. Dr. Anita Bane holds a Clinician Scientist Award from the Ontario Institute for Cancer Research. In addition, Dr. Tim Whelan is a Canada Research Chair and Dr. Mark Levine holds an Endowed Chair.

During the 2009-2010 academic year members of the department published 210 papers in peer-reviewed journals including the New England Journal of Medicine. A highlight of the year was the successful application to the OICR for a new translational research team grant which will provide support to a growing translational research program. Drs. Sébastien Hotte and Anita Bane are co-principal investigators.

While the key measures of success in any academic clinical department include excellence in patient care, excellence in education, and excellence in research, there is always significant effort, often less heralded and behind the scenes that is key to contributing to this success. Committees, processes, events, and staff provide the infrastructure that has ensured the Department of Oncology meets the requirements of the University as well as the many internal and external organizations, funding and accreditation bodies to which it is accountable. I am greatly appreciative of their efforts.

In the coming year, we will continue to build upon the department’s early successes. It is truly amazing that in such a short time a vibrant new department has been established. I regard it as a great privilege to have the opportunity of working with so many outstanding colleagues who share a common vision for academic excellence in oncology.

Mark N. Levine, MD., M.Sc., FRCPC
Professor and Chair
Department of Oncology
Buffett-Taylor Chair in Breast Cancer Research
McMaster University
Education plays a key role in the academic mission of the Department of Oncology. Our understanding of this fundamental role continues to grow and evolve, and as a basic tenant we recognize that excellence in education is a principle goal of our department. To this end, the successes and challenges in three areas are highlighted as follows: efforts in the education of our future colleagues; faculty development; and education research.

Education of our Future Colleagues

Our department has two very successful post-graduate training programs, medical and radiation oncology. Both programs performed exceptionally well at their most recent Royal College of Physicians and Surgeons of Canada accreditation under the leadership of Drs. Bindi Dhesy-Thind and Ian Dayes. The programs are attractive to potential candidates; they are attentive to the requirements of the Royal College as well as the trainees; and our trainees are successful at the time of their exams. Faculty are to be congratulated for their significant contributions to these postgraduate training programs.

In addition, the department has a number of graduate students and trainees spanning across our research programs.

For many years, Drs. Alan Neville and Harold Reiter have been bulwarks of the undergraduate MD program. Recently other members of the department are becoming increasingly involved at the undergraduate level. It is important to have a presence in the undergraduate program as medical students have to make career choices very early in their education. Oncology is largely taught in Medical Foundations 4 (MF4). As the director of MF4, Dr. Ann Benger, along with oncology subunit planners, Drs. Som Mukherjee and Barb Strang, have important roles to play in determining the content of the curriculum.

Our department is providing tutors and clinical skills preceptors in MF4. Faculty are also participating in earlier MFs, as student advisors and as professional competencies facilitators/tutors which means medical students have an early exposure to role models from our department. The greater our involvement, the more likely we are to have future oncoogy trainees. To that end, we need to continue to participate in the undergraduate medical program. In addition, as a department, we are planning to introduce an annual event for the medical students during MF4 as a means of introduction to the cancer centre and the discipline. At the other end of the training spectrum, a fellowship program has been developed under the leadership of Dr. Peter Ellis, with the assistance of Dr. Jonathan Sussman and Graeme Fraser. The goal was to establish clear processes for recruiting fellows, to identify resources and coordinate research training opportunities for post-graduate level trainees. Possible positions have recently been advertised and we hope to attract excellent candidates.

Faculty Development

Whether a clinician-educator or a research-educator, as members of the Faculty of Health Sciences at McMaster University, we are required to spend a minimum of 20% of our time (1 day per week/400 hours per academic year) on education. It is important that this expectation not only be explicitly stated but also “operationalized” for each individual faculty member. An enormous amount of time and effort has gone into this, with Heather Wilde deserving the lion’s share of credit for putting together recruitment as well as promotion and
tenure packages for faculty. Along with Drs. Som Mukherjee and Peter Ellis, Heather also led the development of the template for capturing postgraduate educational activities which was distributed for the first time last fall. There is still work to be done in this area as new roles emerge. Plans to capture and enter the data into the Star CV database are ongoing.

In order to help faculty understand the expectations and opportunities for educational contributions, we held our first Annual Education Retreat in February of this year. The theme was “Excellence in Learner-Centered Teaching” and the day was very well attended and received. Presentations and interactive workshops dealt with the role of a clinician educator, tailoring teaching to the learner, teaching the learner who is having difficulties and developing meaningful evaluation strategies. During the retreat, Dr. Alan Neville was given the first departmental “Outstanding Leadership in Education” award. The second annual retreat is being planned for the spring of 2011.

In addition to our department-specific faculty retreat, members of our faculty have been actively participating in the Program for Faculty Development. Drs. Som Mukherjee and Callista Phillips are to be congratulated on becoming the first Department of Oncology faculty to receive the Best Level 1 Certificate in the Academic Pathways in the Program for Faculty Development.

Education Research

This is the way of the future. Developing research projects on how we teach and evaluate our learners is the goal for the next few years. The MD program has an international reputation for education research and we are fortunate to have some of the world leaders within our department. Drs. Alan Neville and Harold Reiter are world experts in this area. Hopefully there are interested faculty who would like to pursue this type of research and benefit from the expertise in research methodology within our department and those within the central resources in the Faculty of Health Sciences. We have abundant opportunities to become leaders in this field.

Final Notes

As a new department, we may sometimes wonder if our challenges are different than those of more established departments. Sitting as a member of the Faculty of Health Sciences Department Education Coordinators Committee, I can assure you that we are not alone in these challenges. There are themes that run across departments that are being addressed by this central committee. These include but are not limited to:

a. the development of tools for faculty evaluation
b. establishing consistency across departments regarding weighting of educational activities and standards for promotion and tenure
c. identifying resources and developing skills in education research
d. faculty development

Finally, I would like to acknowledge the efforts of the members of the Department of Oncology Education Committee (Ann Benger, Ian Dayes, Bindi Dhesy, Karen Dougherty, Peter Ellis, Som Mukherjee, Anne Snider, Sachi Voruganti, and Heather Wilde) who continue to move the mission of excellence in education forward. Also, thanks to Dr. Mark Levine, who as first department chair continues to foster an environment that values education as a core part of the academic mission.
The Medical Oncology Program has made significant progress over this past academic year. A number of exciting new initiatives have been introduced including a new clinical research curriculum and resident participation in the Research in Progress Rounds.

Royal College Accreditation

The Royal College Accreditation of the medical oncology program at McMaster University took place on April 1, 2009. The program received a “full approval” accreditation status. The strengths identified by the Accreditation Committee included:

1. Effective program director with excellent leadership skills.
2. Diligent, organized, hard-working administrative assistant.
3. Effective longitudinal clinical translating to proficient increase of professional responsibility.
4. Dedicated, qualified, collegial teaching staff.
5. Number and variety of patients is excellent.
6. Excellent ambulatory care exposure.
7. Excellent academic program for all CanMEDS domains.

These comments speak to the strength of the faculty in the Department of Oncology and their dedication to the training programs.

Areas identified as requiring attention by the Accreditation Committee included the on-call service demands and disorganization of clinical services and resources within the inpatient rotation. The program has taken steps to address these areas through careful monitoring and limits to the total number of on-calls by residents and a new initiative to reduce the outpatient calls direct to on-call at the Juravinski Cancer Centre. The inpatient rotation is also monitored with regards to resident patient load.

Research Activities

Resident research activity, under the guidance of Dr. Elaine McWhirter continues to progress. Improvements have been made with the introduction of a formal clinical research curriculum (outlined in New Initiatives). Residents also present their research proposals at the Research in Progress Rounds. These interactive rounds provide a forum for experienced research mentors and methodologists to provide feedback to the trainees on their projects. Trainees learn from presenting their own proposals as well as participating in discussions of other protocols. The Annual Student Research Day in oncology and Resident Research Day in medicine also provide opportunities for trainees to showcase their research in either poster or oral presentations.

Dr. Sara Kuruvilla is completing the second year of her 2 year Clinical Research Fellowship in Thoracic Oncology and Clinical Trials under the supervision of Drs. Mark Levine...
and Peter Ellis. Dr. Kuruvilla is enrolled in the Clinicians Investigator Program (CIP) and working towards her Master’s degree in health research methodology.

**Dr. Khalid Al-Saleh** began an 18 month Lymphoma and Lung Cancer Clinical Research Fellowship on July 1, 2010 under the supervision of Dr. Peter Ellis. Dr. Al-Saleh is also enrolled in the Clinicians Investigator Program and working towards his Master’s degree in health research methodology.

**Recent resident publications include:**


**Awards**

Congratulations to **Dr. Cindy Quinton-Gladstone** who was honored with the “2010 Outstanding Resident’s Award” from the Medical Staff Association (MSA). Dr. Quinton-Gladstone was presented with her award at the Annual MSA Dinner & Awards Ceremony held on June 11, 2010 at the Art Gallery of Hamilton.

**New Initiatives**

An exciting new initiative is the clinical research curriculum which begins in September of each year and teaches residents general clinical research methods, pairs them with a mentor to develop a question, and leads to both the development and use of a research protocol. By the end of the second year, residents are expected to complete a research project with mentorship provided through this program. This program began in September of 2009 under the leadership of **Dr. John Goffin**. Preliminary feedback from residents and mentors has been excellent.

Another new initiative has been the revamping of our medical oncology academic half-days. We have developed a new 2 year curriculum organized by cancer disease site group (i.e.; breast cancer, gastrointestinal cancer, lung cancer) with specific speakers chosen for each half-day session based on their areas of expertise. Based on resident evaluations, the curriculum will be modified annually to best meet their learning needs.

From an educational perspective, our trainees continue to be active in teaching at the undergraduate and internal medicine level including development of oncology cases for the PGY3 case-based learning sessions and academic half-days.
Evaluations from these sessions have been outstanding.

**Challenges**

Resident research productivity in a 2 year clinical program continues to be a challenge. A number of steps have been taken to address this; the new clinical research curriculum and increasing resident exposure and involvement with research through discussions in the Research in Progress Rounds will provide opportunities in this area.

**Achievements**

One of the successes of the residency program is the longitudinal clinic in which trainees work under the supervision of a staff oncologist and follow patients from initial diagnosis through treatment. The resident clinic runs for 12-18 months and allows the trainee to develop important consultancy and time management skills. Increasing clinic resource spaces had made it challenging to pair residents with suitable mentors due to either clinic time or space constraints. This valuable learning opportunity is becoming standard across medical oncology training programs and McMaster was one of the first universities to institute this clinic.

**Acknowledgements**

A special thank you goes out to Dr. Mark Levine, chair of oncology for his leadership and vision for the department. Despite many hats, Dr. Levine is always keen to spread his enthusiasm for research and education and is readily accessible to the residents for guidance. Dr. Richard Tozer, division head, medical oncology and acting chief of oncology has shown unwavering support for the residency program and knows first-hand the importance of a strong training program. Acknowledgements to the many faculty in the department who are dedicated to the successful running of our academic half-days (Dr. Som Mukherjee), Oncology Developmental Therapeutic Rounds (Dr. Sébastien Hotte and Dr. Hal Hirte), Clinical Research Curriculum (Dr. John Goffin), Research Program (Dr. Elaine McWhirter), Research in Progress Rounds (Dr. Kevin Zbuk), and to members of the Residency Training Program Committee. The program would not be a success without the support of the outstanding faculty who are committed to ensuring an outstanding learning environment for our trainees. The enthusiasm and dedication to teaching was evident to the Accreditation Committee and continues to be our biggest strength.

The program could not run smoothly without the assistance of key administrative support from Ms. Karen Dougherty. Finally, a thank you to the residents who are so committed to making the program successful and spread accolades about our program to incoming trainees ensuring that we will continue to have a strong program for future years.
Radiation Oncology

Dr. Ian Dayes, MD., M.Sc., FRCP C Program Director

The Division of Radiation Oncology is fortunate in having a thriving resident program in both numbers and activities. The program currently consists of 13 residents spread out over their 5 postgraduate years. This is a more workable number than the previous academic year when clinical and study spaces were stretched out over 16 residents. We continue to accrue new candidates through the CaRMS process and occasionally bring other residents into the fold through alternate means such as pool C candidates (e.g. Saudi-trained students) and program transfers. All of the intensive scheduling continues to be expertly handled by Karen Dougherty.

Royal College Accreditation

Administratively, the highlight of the year was receipt of the official Royal College ratification of the Accreditation survey which had taken place in March 2009. The program received “full approval” status and was praised for the teaching faculty and volume of teaching with an “excellent service/education ratio”. The program is next scheduled for an internal McMaster review in 2012 and a further external Royal College review in 2015.

One of the weaknesses identified was the ongoing need for rotation objectives to be presented in CanMEDS format. This is currently being addressed on a national level with program directors from across the country submitting objectives for each disease site. Hopefully this will lead to Canada-wide standards for radiation oncology rotations and reduce the redundancy of individual program directors compiling massive documents for each disease site. McMaster contributed the objectives for gynaecological and genitourinary tumours.

A further potential concern identified during the survey was that residents “sometimes felt that they may be lagging behind in the latest technology”. With the recent addition of Cyberknife and RapidArc capabilities to the Juravinski Cancer Centre treatment floor, it is hoped that these will eliminate such concerns, present a more attractive department for incoming CaRMS candidates and allow us to develop stronger residents as they graduate into the increasingly competitive market for jobs and fellowships.

Educational Activities

Teaching continues through three major forms. The more formal half-day teaching occurs on Wednesday afternoons. This time remains academically protected for residents. Sessions are typically shared with the Division of Medical Oncology. Teaching specific to radiation oncology tends to occur more during the weekly teaching rounds consisting of one hour sessions on Tuesday afternoon and Friday morning. Residents also receive one-on-one teaching which may occur in clinic, dosimetry or the staff oncologist’s office. In addition to these sessions which occur throughout the year, PGY2 residents also receive more intense training in physics and radiobiology. Residents are also encouraged to attend the many clinical case rounds available through the disease site teams and the Division of Radiation Oncology. Senior residents are also financially supported to attend the Ottawa Royal College exam refresher course which has lately occurred annually in January. Along with medical oncology residents, PGY3 candidates take the research curriculum course which is offered following Wednesday half-days.

A corollary to intensive teaching is evaluation and feedback. In addition to end-of-course exams for physics and radiobiology, residents write an annual in-house general oncology exam that also includes a radiation planning component. They also write the annual American Board of Radiology Radiation Oncology exam. This very thorough exam allows for feedback based on training level and individual disease
site. Summated results are also given for each centre, allowing program directors to shift attention of teaching sessions to disease sites which were consistently underscored. Residents (PGY 3-5) also sit for the in-house OSCE in March. Residents in the senior 2 years also have a further OSCE in November.

**Research Activities**

The radiation oncology residents were also active in research endeavours, presenting at several venues including ASTRO, CARO and the Annual Department of Oncology Research Day. Of note, Dr. Waseem Sharieff (now PGY4) was successful in publishing a letter regarding lung cancer staging in the New England Journal of Medicine.

**Dr. Lynn Chang** was awarded a $37,800 grant from the Juravinski Cancer Centre Foundation entitled “Identifying Risk Factors for Locoregional Recurrence Following Postmastectomy Radiotherapy in Breast Cancer Patients”.

**Dr. Joda Kuk** was awarded a $24,418 grant from the Juravinski Cancer Centre Foundation entitled “A Phase III Study of Magic Mouthwash Plus Sucralfate Versus Benzydamine HCI for Treatment of Radiation-Induced Oral Mucositis in Head and Neck Cancer Patients”.

**Dr. Valérie Théberge**, who completed a 1 year Breast Cancer Clinical Research Fellowship under the supervision of Dr. Timothy Whelan, presented at this year’s student research day and was awarded 2nd place for her oral presentation entitled “Use of Axillary Deodorant and the Impact on Acute Toxicity During Radiotherapy for Breast Cancer”.

**Dr. Jeffrey Greenspoon** recently completed his residency training in radiation oncology and was awarded a 1 year Clinical Research Fellowship in Stereotactic Radiation Therapy under the supervision of Drs. Anthony Whitton and Timothy Whelan.

**Dr. Maha Almahmudi** who also completed her training in our residency program was awarded a 1 year Thoracic Brachytherapy/Breast Cancer Clinical Fellowship under the supervision of Drs. Ranjan Sur and Timothy Whelan.

**Highlights**

Arguably, the gold standard of a training program is its success rate at the Royal College exam. At the close of this 2009-2010 academic year, all three McMaster candidates successfully completed this last hurdle towards licensure.

In June, **Dr. Joda Kuk** was awarded 1 of 6 “2010 Outstanding Resident’s Award” from the Medical Staff Association (MSU) largely based on his development of the Road to Care Charity which raises funds to aid in transportation for women in Uganda with cervix cancer.

In retrospect, this 2009-2010 academic year was quite active for staff and residents. It also served to provide a brief period of breathing room as 2011 will likely have us all gearing up for the 2012 review.
This last year has been a busy one for our division. There were eleven residents in the Medical Oncology Residency Program. There are currently two fellows in the division. We had 27 residents from other subspecialties rotate through our program and another 41 ambulatory rotation residents. There were 23 medical student block electives and an additional 3 medical students who performed horizontal electives.

Our members continue to contribute to the oncology academic half-day run by Dr. Mukherjee. The Oncology Developmental Therapeutics Rounds run by Dr. Hotte are a primary source for the basic science of oncology. A new clinical re-search curriculum was developed by Dr. Goffin and added to supplement the half-day which commenced in September 2009. There was enthusiastic faculty and resident participation.

Dr. Dhesy continues to demonstrate able leadership of the medical oncology training program. The program underwent accreditation in April 2009. Comments from the accreditation team included excellent administrative support, effective longitudinal clinic translating to proficient increase of professional responsibility, dedicated, qualified collegial teaching staff, excellent number and variety of patients, excellent ambulatory care exposure and excellent academic program for all CanMEDs domains. There were some areas identified that required improvement; excessive service demands during on-call and the inpatient rotations required better organization.

The former concern regarding on-call has been addressed through alterations in how after hours patient calls are handled and the increasing use of on-call services to decrease dependency on residents. With respect to the latter issue,

Dr. John Goffin has put in significant work detailing the expectations of attending staff during that rotation. Staff now have adopted an “on-service” mode during these two week blocks, cancelling ambulatory clinics in order to be available to both our inpatients and our ward residents. Interestingly, we (as other residency programs across all subspecialties) are torn between reducing resident working hours while still having enough opportunity for residents to get teaching.

Dr. Tozer is in his final year as Chair of the Medical Oncology Examination Committee for the Royal College of Physicians and Surgeons of Canada. Dr. Hotte also serves on the committee as an examiner. This year a different methodology was selected to set the exam generating an examination with completely new material.

Dr. Mukherjee has been working hard on revamping the neoplasia subunit of Medical Foundation Four in the undergraduate medical program. He has also been successful in recruiting more medical oncologists to serve as tutors. We are also about to appoint an individual to develop an oncology selective for the clerkship rotation.

Dr. Ellis has led a committee which has developed a departmental template for fellowships. In addition to our IND fellowship, Dr. Dhesy has agreed to begin developing fellowships in GI cancer and breast cancer. Dr. Tozer and Ms. Carol Rand are exploring with the Department of Psychiatry, the possibility of developing a psycho-oncology fellowship.

Dr. Waddell has continued to organize the Canadian Association of General Practitioners in Oncology (GPOs) yearly conference and with the assistance of Cancer Care Ontario has developed a web-based certification program for GPOs. She does require ongoing par-
ticipation of oncologists to facilitate the tutorial style of programming to continue.

We are in the process of recruiting via Oncology Academic AFP funding, a medical oncologist with an interest in functional imaging and translational research. We recently received an ONT-MOA position which will be situated at the Brantford General Hospital. This will allow us to expand systemic therapy at that site and also provide another potential site for community experiences for our residents.

The Walker Family Cancer Centre in St Catherine’s should be operational in 2013. Dr. Janice Giesbrecht is the medical director at that site and we have begun discussions with that group to enhance collaborations. Specifically we hope to use that site for trainees both in internal medicine, medical oncology as well as medical students. We would also like to be able to collaborate on clinical trials. As St. Catharines is the site of distributed campus of the DeGroote School of Medicine, the forging of a strong relationship with the medical oncologists in St. Catharines is a very important future goal.

There are a number of active research projects underway. Dr. Bordeleau holds a grant from the JCC Foundation looking at a novel molecular breast imaging gamma camera. Dr. Ellis holds a HAHSO Innovation grant on improving the delivery of care for lung cancer patients. Dr. Mukherjee holds a CIHR grant looking at preoperative breast cancer imaging. Dr. Levine holds grants from CIHR, OICR and the JCC Foundation examining breast imaging, prostate cancer treatment and the genomics of basilar breast cancers. Dr. Tozer holds a HAHSO grant looking at the embedding of psychiatry into the cancer clinic and a JCC Foundation grant looking at oncologists and bereavement. Dr. Goffin has developed a multidisciplinary dyspnea clinic which will be a source of trialing new approaches to the management of this particular symptom. He holds a JCC Foundation grant for a trial examining a new drug in this setting. Congratulations to Dr. Hotte and his team for the OICR Translational Research Team grant. There were 49 publications from our division last year.

The medical oncology program still struggles with low rates of accrual to clinical trials in some disease sites (particularly breast and GI). This can be attributed to a lack of good adjuvant trials but also to the process by which clinical trials are chosen by individual disease site teams. Consequently we are beginning to choose physician research coordinators for individual disease site teams. The hope is that in conjunction with Dr. Andrew Arnold, Brenda Kowaleski and administration, a research council could be developed to oversee clinical trials.

From a clinical perspective, we saw 3,543 new cases last year (which is in excess of the predicted 3,200 in the post construction operating plan for the expanded cancer centre). New cases also continue to rise at approximately 5% per year. This has necessitated changes in how we conduct our business. There is greater discharge of patients back to family physicians and utilization of “transition” clinics. Patients are also being seen less frequently. Our division is being used as a model for implementation of computer physician order entry.
Radiation Oncology

Dr. Timothy Whelan, BSc., BM.BCh., MD., M.Sc., FRCP
Division Director

This has been a very active year for the division both from an academic and program/service perspective. This has been my third year as head of our division and I am pleased to report on our accomplishments. The division consists of 20 radiation oncologists including Dr. Jim Wright as deputy head to whom I am most grateful for his continuing support and leadership.

This year we were delighted when two of our members Drs. Harold Reiter and Stephen Sagar were promoted to full professor, and Dr. Theos Tsakiridis was re-appointed as an assistant professor. One of the criterion for promotion to full professor is that the individual is recognized nationally and internationally for their scholarly activities. Dr. Reiter was recognized for his innovative research in medical education including the development of a number of new evaluation techniques for medical school admissions which have been widely adopted across Canada. Dr. Sagar was recognized for his efforts internationally in promoting the integration of complementary medicine in oncology.

Dr. Ian Dayes is head of our residency program. The program continues to excel under his leadership. In 2009, we received full accreditation from the Royal College and in that same year five trainees wrote and successfully completed the Royal College exams. In 2010, three residents wrote and successfully completed the Royal College exams. We currently have 13 residents in our program. The program continues to be very active from a research perspective. Dr. Do-Hoon Kim, the residents’ research advisor has established a process where all residents are linked with a research mentor and are guided to complete a research project during their 5-year residency program. This year two of our residents (Drs. Crystal Hann and Wassem Sharieff) presented their work at the 7th Annual Student Research Day held on June 17th, 2010. Dr. Joda Kuk won the Hamilton Health Sciences Medical Staff Association Resident of the Year Award and received a peer-reviewed grant from the Juravinski Cancer Centre Foundation (JCCF) to evaluate the treatment of radiation induced oral mucositis.

Our fellowship program has only been in existence for the last two years, but has been quite successful under the leadership of Dr. Jonathan Sussman. This year Dr. Valérie Théberge completed her fellowship in radiation therapy in breast cancer. She was successful in publishing a review of hypofractionation and accelerated partial breast irradiation in Seminars in Radiation Oncology and also received a grant from the Juravinski Cancer Centre Foundation (JCCF) to evaluate cosmetic outcome following breast conserving therapy. She has recently accepted a position at Laval University. Dr. Sundeep Shahi completed her fellowship in intraluminal brachytherapy and was successful in obtaining a position at the Grand River Regional Cancer Centre in Kitchener, which is affiliated with our division. This year we attracted two other fellows to our program including Dr. Jeffrey Greenspoon, who will be studying stereotactic radiosurgery and Dr. Maha Almahmudi who will be studying radiation therapy in breast cancer and intraluminal brachytherapy.

In addition to the residency and fellowship programs, Dr. Barb Strang continues to help with the restructuring and teaching of the neoplasia sub-unit for the Medical Foundation 4 (MF4) of the undergraduate medical program. She also developed an important educational program in oncology for surgery clerkship. Drs. Sagar and Wong were able to obtain funding to support a student from the School of Traditional Medicine in Korea to spend time studying evidence-based...
medicine at McMaster. This is a unique opportunity and recognizes the efforts of Drs. Sagar and Wong to integrate complementary medicine with conventional cancer therapy.

One of the goals of our division is to promote interdisciplinary research in radiation therapy. To this end, we established the Interdisciplinary Technology Rounds and the Radiation Program Seminar Series. At the Interdisciplinary Technology Rounds, radiation oncologists, medical physicists, and radiation therapists present new technologies currently being developed or evaluated for use at the Juravinski Cancer Centre. The Radiation Program Seminar Series invites expert speakers to discuss new advances in radiation therapy and related translational research. This year the program was particularly successful in identifying a number of new technologies for adoption into care including active breath hold for breast cancer treatment to avoid cardiac irradiation and increasing use of intensity modulated radiation therapy for treatment of prostate and lung cancer. In addition, a number of research projects were developed including a study by Dr. Do-Hoon Kim to evaluate once a day therapy for accelerated partial breast irradiation which was recently funded by the JCCF.

This year the division was successful in obtaining funding from Cancer Care Ontario and the JCCF for the Cyberknife, a unique technology which utilizes a robotic arm to deliver radiation therapy. The system allows radiation to be delivered very precisely and tracks the cancer as it moves with normal respiratory motion. This is the first Cyberknife in active use in Ontario and only the second in Canada. Our goal is to evaluate its role in radiosurgery for intracranial and extracranial malignancies in comparison to other more standard approaches.

Research continues to be a very important activity for our division. This year we were very successful in obtaining grants from peer-reviewed agencies. Divisional members received 9 new grants as principal investigator for a total of $1,668,000. This included funding from: CIHR - H. Lukka, PROFIT, “A Randomized Trial of a Shorter Fraction-ation Schedule for the Treatment of Localized Prostate Cancer”; J. Sussman, “Development and Testing of a Cancer Survivorship Care Plan”; CCSRI – R. Sur and J. Wright, “A Phase III Study Evaluating Intraluminal Brachytherapy in Lung Cancer”; CBCRA - J. Wright, “An Evaluation of a New Techniques to Improve Clinical Trial Accrual in Breast Cancer”; RTOG/NCI U.S. – S. Sagar and R. Wong, “A Phase II/III Study Comparing Acupuncture Techniques vs. Pilocarpine for the Treatment of Radiation Induced Xerostomia”; and the Prostate Cancer Foundation - T. Tsakiridis “An Evaluation of the Role of AMP Activated Kinase in Response to Prostate Cancer Radiotherapy”.

In addition, members of the division had thirty one peer-reviewed publications including a number in highly cited journals such as New England Journal of Medicine, Lancet, Journal of Clinical Oncology, and the International Journal of Radiation Oncology Biology & Physics.

From a clinical service perspective, the division continues to be very active. This year our division saw 4,589 new cases, which is up from 4,398 seen in 2009. It is anticipated that new cases will continue grow by 4-5% per year. As a result we are seeking applications for a new departmental member to support our service and academic activities. This year the program has also been busy in helping to plan radiation therapy facilities for the new Walker Family Cancer Centre in St. Catharines, which should be operational in 2013. It is anticipated that the new clinic will lead to further increases in new cases seen and the appointment of more radiation oncologists to the division.

In summary, our division has had a very productive year. As the division grows with increasing service needs, we will build on our previous accomplishments with a continuing focus on academic development and research.
Malignant Hematology

Dr. C. Tom Kouroukis, MD., M.Sc. FRCP.C
Division Director

Educational Activities

Members of the Division of Malignant Hematology are very active in educational activities in both undergraduate and postgraduate programs with key leadership positions. Drs. Fraser and Kouroukis co-tutored Medical Foundations I (MF1) in 2009. Dr. Fraser is Hematology Grand Rounds Coordinator, he coordinates the yearly hematology resident OSCE, is a subunit planner for MF1, and serves on the Oncology Fellowship Program Committee. Dr. Benger is director of MF4 and has taught professional skills to MF4. Dr. Marcellus is the vice-chair of education for the department and director of MF3 and also site supervisor for malignant hematology rotations for the hematology, medical oncology and radiation oncology training programs. Dr. Kouroukis lectures to the post clerkship group on benign hematology. All members provide teaching sessions for residents rotating through hematology, both on the ward and clinic and in supervising/leading both medical/radiation oncology and hematology programs’ academic half-days. All members are student advisors for the undergraduate program.

We welcomed three new PGY4 residents into the adult hematology training program this year including Dr. Vinai Bhagiraith, Dr. Andrea Lee and Dr. Kylie Lepic.

Research Programs

Drs. Fraser and Kouroukis are active members of the NCIC hematology site team and are local PI’s on a number of NCIC and industry sponsored studies. Dr. Fraser is a member of the Protocol Review Committee of the Juravinski Cancer Centre. Dr. Kouroukis and Dr. Fraser hold grants from the JCC Foundation studying “Cognitive function in older lymphoma patients treated with chemotherapy” and “Assessing the needs of adolescents and young adults with cancer: A qualitative study” respectively. The group was successful in having a poster presentation at ASH 2009 entitled: “Empiric antifungal therapy with amphotericin B in the era of fluconazole prophylaxis: A cohort study in adults with acute myeloid leukemia treated within an institutional antifungal policy”. Dr. Kouroukis and Fraser are both members of the Practice Guideline Hematology Disease Site Group of Cancer Care Ontario and the Program in Evidence-Based Care. Dr. Fraser is also a committee member of the Research in Progress Rounds.

Major Achievements

Dr. Kouroukis co-chairs the Practice Guideline Hematology Disease Site Group for Cancer Care Ontario Program in Evidence-Based Care. Dr. Kouroukis is Chair of the Stem Cell Transplant Steering Committee in the Clinical Programs Department of Cancer Care Ontario. Dr. Fraser is a member of a C17-CPAC Task Force for Adolescent and Young Adult Oncology and co-chair of the research working group. Drs. Marcellus, Benger and Fraser hold key leadership positions in the undergraduate medical program.

Future Directions

Our group maintains active programs in clinical service, transplantation, education and research. Movement of inpatient and medical day services to the new Juravinski Hospital and Cancer Centre Ward C4 and Oncology Day Services will take place in August 2010 and is highly anticipated to create a unified malignant hematology unit that will continue to excel in patient service, education and research.
Because I have been a clinician scientist for the past 28 years, it was my desire that our Department of Oncology be research intensive. Over three years ago we developed a strategic plan for cancer research for the department and the Juravinski Hospital and Cancer Centre (now called the Juravinski Hospital and Cancer Centre) was needed. The creation of a search committee for 5 OICR Scientists (co-chaired by Drs. Mick Bhatia and Mark Levine) led to improved communication between basic researchers and clinical researchers, and to enhanced collaborations between researchers at McMaster (the Cancer & Stem Cell Research Institute, the Centre for Gene Therapy, and the Centre for Probe Development & Commercialization) and researchers at the JCC/Henderson Hospital and the Ontario Clinical Oncology Group (OCOG). Through this mechanism, communication has improved, collaborations have been established and for the first time in many years, joint strategic planning for cancer research has occurred between McMaster, HHS and the JCC.

Four cancer research scientists Dr. Gregory Pond (Biostatistics), Dr. Anita Bane (Molecular Pathology), Dr. Hsien Seow (Health Services Research) and Dr. Melissa Brouwers (Health Services Research) were recruited to the department. This has enhanced scientific capacity in health services and translational research. Three major research themes have been developing in the department: health services research, clinical trials and translational research. Dr. Melissa Brouwers has been appointed the new head of health services research in the Department of Oncology. She led a process for developing a new strategic plan for health services research focusing on better coordination of care between the JCC and family physicians (Dr. Jonathan Sussman), improving palliative care (Dr. Hsien Seow), improving quality of cancer surgery (Drs. Laurie Elit, Marko Simunovic), and knowledge translation (Dr. Melissa Brouwers). The relocation of the program in experimental thrombosis and atherosclerosis research to the HHS General campus provided the opportunity for the Cancer Care Ontario Program in Evidence-Based Care with Dr. Brouwers as director, to relocate to the Henderson Research Centre.

For over 25 years the Ontario Clinical Oncology Group (OCOG), located in the Henderson Research Centre and led by Dr. Mark Levine, has been working with networks of clinician investigators locally, provincially, nationally and beyond to conduct trials which address clinically relevant questions. Since 1982, more than 8,000 cancer patients have been entered into OCOG trials. The
OCOG trials of breast irradiation post-lumpectomy in women with early stage breast cancer have established treatment standards not only in Ontario but in Canada and around the world. OCOG has the largest global experience in conducting prospective trials evaluating PET imaging in oncology and the results have informed Ontario MOHLTC policy.

The Department of Clinical Trials at the JCC represents the interface between clinical research and the patients in our community and is very ably led by Dr. Andrew Arnold and Brenda Kowaleski. This past year has been a difficult one because of budgetary shortfalls. A restructuring plan was developed and successfully implemented to tackle this problem and to secure clinical trials remains a cornerstone of the department.

Drs. Hal Hirte and Sébastien Hotte lead the developmental therapeutics program at the JCC and provided patients with advanced refractory, cancer the opportunity to undergo experimental treatment with promising novel anticancer agents.

More recently, a Centre of Excellence in Oncology Advanced Practice Nursing, led by Dr. Denise Bryant-Lukosius, has been established in partnership between CCO, the JCC, the School of Nursing, the Department of Oncology and Amgen. This unit, located on the 4th floor of the JCC, focuses on research and knowledge translation activities that inform effective human resource planning and promote the optimal use of specialized and advanced nursing roles in new models of cancer care delivery.

Translational research is the newest of the department’s research themes. The recruitment of an OICR clinician scientist in molecular pathology (Dr. Anita Bane) and the creation of an interdisciplinary OICR translational research team will be instrumental in bridging the gap between bench and bedside. Dr. Bane has established an immunohistochemistry and gene expression laboratory on the 4th floor of the JCC and Dr. Peter Kavsak has established a biochemistry laboratory on the 4th floor of the JCC. This starts to build the required infrastructure for biomarker translational research using both tumor and blood samples from clinical trials.

A team of researchers from the Centre for Probe Development & Commercialization at McMaster (Dr. John Valliant), the HHS departments of nuclear medicine (Dr. Karen Gulechyn), radiology and physics (Dr. Michael Noseworthy), pathology (Dr. Anita Bane) and OCOG (Drs. Gregory Pond and Mark Levine) have come together to focus on cancer imaging research. This group’s recent success in obtaining OICR funding demonstrates the ability to do interdisciplinary translational cancer research at HHS and McMaster.

The traditional metrics to gauge research success are papers published and grants received from peer-review agencies. During the past year the members of the department had 210 papers published in peer-review journals. Operating grants were held from CIHR (Tim Whelan – RAPID Trial, Mark Levine, Himu Lukk – PROFIT Trial, Jonathan Sussman (Health Services Research), Som Mukherjee (Breast MRI); CCSRI (Ranjan Sur, Jim Wright – Lung Brachytherapy Trial); OICR (Mark Levine – FLT PET/BOLD MRI Trial); and Canadian Breast Cancer Foundation (Tim Whelan – Radiation Biomarkers, Anita Bane – Stem Cells). The successful award of the OICR Translational Research Team grant (Sébastien Hotte and Anita Bane) was a fantastic coup!

During the past 18 months extensive planning has occurred for the development of a new joint hospital-university cancer research institute to be located on the campus of the Juravinski Hospital and Cancer Centre. Initially it will be called the Escarpment Cancer Research Institute. The Institute should be formally approved by HHS and McMaster University during the 2010-2011 academic year. This will be a topic in next year’s annual report.
The Health Services Research team in the Department of Oncology at McMaster University is a highly integrated multidisciplinary team of scientists. Our program of research aims to improve the experience of those affected by cancer and the quality of the cancer system through the design, testing, and evaluation of innovative models of care delivery. Strategies to mitigate gaps in the delivery of clinical care, and strategies to promote the uptake and sustained application of evidence-informed knowledge.

Research to understand current patterns in the organization and delivery of care serve as important precursors to solving issues of access, system performance, and transitions along the cancer journey. The HSR team is undertaking a series of projects to explore these issues. Drs. Sussman, Brouwers, and Seow are studying the integration between primary care providers and regional cancer programs during the transitional phases of the cancer care continuum. Of particular interest, they will develop and test a survivorship care plan template with community providers to improve the transitioning of cancer survivors. This template will be used as a standard across the province to improve quality of care. Under the leadership of Dr. Seow, our department is the first to use a new administrative data source, CD-link, to study transition patterns at end-of-life and their association with quality of care and resource utilization. Specialty nursing care and in particular, advanced practice nursing, has been identified as an important component in evolving models of care to improve health system, provider and patient outcomes. Dr. Bryant-Lukosius, director of the Centre for Excellence in Oncology Advanced Nursing (OAPN) is leading the design and execution of the next generation of studies to inform policy regarding the development and implementation of on oncology nursing roles.

The HSR team lead and participate in programs of research with purposes to define high quality cancer care options, to identify unwanted variations in clinical care, and to design and test solutions to mitigate these variations. Drs. Simunovic and Elit are leading several key research initiatives focused on improving the quality of care for gastrointestinal and gynecological malignancies, respectively. Of particular note, Dr. Simunovic is leading a multi-intervention trial involving more than 100 surgeons in Ontario that aims to evaluate strategies to improve patient outcomes for rectal cancer surgery. Dr. Elit is leading a program of research looking at the role of PET technology for women requiring radiation treatment of the cervix. The results of these projects will have significant impact on policy regarding the delivery of surgical care. Dr. Brouwers leads the Program in Evidence-Based Care (PEBC), the practice guidelines program of the Ontario cancer system. Through methodological advancements in the science of the practice guideline, knowledge translation and social change, the PEBC has overseen the development of 200+ evidence-based guidelines (across disease sites and the cancer continuum) designed directly to improve clinical practice, enable access to cancer care options, provide foundation to clinical policy, and direct organizational re-design in the province. Drs. Sinding and Sussman are leading work examining quality of care and access for breast cancer patients in association with sociodemographic status. This unique study builds on initial patterns of care research that suggest disparities in patterns of care by census region. This study will illuminate which demographic determinants are associated with use of different treatment therapies, whether care is equitable for all sociodemographic groups and if not, how to address the disparities identified.

Understanding how to improve the
uptake of knowledge into practice and decision-making is a key theme that cuts across all the projects of the HSR team, an area of research called knowledge translation. **Dr. Brouwers** leads this effort with projects aimed to identify organizational, provider, and consumer knowledge translations interventions of known effectiveness and to create tools and resources that will enable the implementation of these interventions. In addition, the department is home of the AGREE A3 project, an international initiative that aims to improve design and evaluation of quality of evidence-based health care recommendations and tools to facilitate effective evidence-informed decision making.

**Program in Evidence-based Care (PEBC)  
Cancer Care Ontario (CCO)**

Dr. Melissa Brouwers,  
B.A., MSc., PhD  
National Lead

The *Program in Evidence-Based Care (PEBC)* is an initiative of the Ontario provincial cancer system, Cancer Care Ontario (CCO), supported by the Ontario Ministry of Health and Long Term Care. Under the leadership of Drs. Melissa Brouwers, Sheila McNair, and Hans Messersmith, the PEBC mandate is to improve the quality of cancer care and the lives of Ontarians affected by cancer, through the development, dissemination and evaluation of evidence-based guidelines and other advice documents that are designed to facilitate clinical, planning, and policy decisions about cancer control. The PEBC has a significant research program related to innovative methods of evidence synthesis, guideline development and evaluation, and uptake of evidence-informed knowledge. It is regarded as an internationally recognized leader in these areas.

To capitalize on their respective health services research and clinical research areas of expertise, the PEBC became formally integrated into the Department of Oncology in February 2010. The PEBC relies on the engagement of clinical experts, and since its inception, has involved over 1200 physicians and other health care providers throughout the province as members of guideline development panels and external reviewers. The Department of Oncology is well represented as leaders and participants on guideline development panels with the active participation by Drs. Bryant-Lukosius, Corbett, Dayes, Dhesy-Thind, Elit, Ellis, Evans, Fraser, Ghert, Goffin, Hirte, Hodson, Hotte, Kouroukis, Kuruvilla, Lukka, McWhirter, Okawara, Simunovic, Sur, Sussman, Walker, Whitton, Wong, and Zbuk.

The PEBC’s clinical practice guidelines and other evidence-based documents have had a direct impact on the care patients with cancer receive, both at a clinician level and policy level, through the development of cancer system quality indicators, funding decisions for new drugs and technologies, and the organization of care. Since 1995, over 200 PEBC guidelines and other advice documents have been published online through the CCO website. Many of the guidelines and systematic reviews have been submitted to peer-reviewed journals, resulting in over 200 peer-reviewed publications.
Inventory of Cancer Guidelines

The Inventory of Cancer Guidelines (ICG) is a searchable database of English cancer control guidelines released since 2003 that have been rated using the AGREE II, the current gold standard in appraising guideline-reporting quality. The intent is to evaluate the strengths and weaknesses of the guidelines, the extent of duplication, and identify gaps in the cancer guideline enterprise. The ICG can be used to raise the standard in the science of developing clinical practice guidelines, reduce duplication of effort amongst guideline developers, and facilitate evidence-based decision-making in cancer control. The ICG went live in August 2010 with over 1100 cancer guidelines and several status reports analyzing the current status of the cancer guideline enterprise.

Guideline Development Tools & Resources

As part of a Guidelines Resource Centre, the CEP has identified tools and resources available in the enterprise of evidence synthesis and clinical practice guideline development as they apply to developing, adapting, assessing or implementing evidence products. The tools and resources have a cancer focus; however they can be used to develop guidelines across a variety of health settings. The Cancer Guidelines Resource Centre has been refined over the past year with a professional web site design and the addition of tools and resources. The Resource Centre is publically available on the CEP web site and will be a key resource in the training the next generation of clinicians and health services researchers.

Training Opportunities

The CEP organizes training initiatives aimed at providing education and skill development opportunities to Canadian stakeholders interested in learning how to use evidence and cancer guidelines to inform decisions that will improve quality of cancer care and improve cancer system performance. In addition, the CEP promotes conferences and training initiatives conducted by other groups related to the use of evidence and practice guidelines. The CEP conducted three-day guideline training institutes for clinical trainees, health services researcher trainees, and guideline developers, a one-day symposium for cancer guideline methodologists, one-day mentorships for CPAC partners, and a Canadian Guideline Developers Leadership Forum.

Cancer KT Casebook

The Cancer Knowledge Translation (KT) Casebook represents a strategy to improve the use and application of evidence from research into practice to improve cancer control in Canada. Innovative KT field initiatives in the use and application of evidence toward decision-making in the field of cancer were systematically identified and highlighted as an online KT resource. The Cancer KT Casebook was completed in August 2010 and is now posted to the CEP website.
The Ontario Clinical Oncology Group (OCOG) is an academic-based clinical trials development and coordination organization which focuses on cancer. It works with networks of clinician investigators locally, provincially, nationally and abroad to conduct trials which address clinically relevant questions. There are 38 individuals including methodologists, statisticians, clinician researchers and trials staff within OCOG’s Coordinating & Methods Centre located in the G Wing of the Juravinski Hospital and Cancer Centre at Hamilton Health Sciences (HHS). OCOG is affiliated with Cancer Care Ontario (CCO), HHS, and the Department of Oncology, McMaster University.

In 1982 OCOG was established by the Ontario Cancer Treatment & Research Foundation (CCO) as a way to develop, coordinate and promote cancer clinical trials throughout Ontario’s regional cancer centres and the Princess Margaret Hospital. The OCOG Coordinating & Methods Centre (CMC) was established in the Department of Clinical Epidemiology & Biostatistics (CE&B) McMaster University. Dr. Peter McCulloch was the initial OCOG director and Dr. Mark Levine helped found OCOG and soon became its director.

In 1988 the Clinical Trials Methodology Group (CTMG) was established as a program within the Henderson Research Centre and OCOG became part of CTMG. CTMG also conducted trials in venous thrombosis and cardiovascular disease. In 2002, Dr. Mark Levine assumed the role of director of CTMG and the focus of CTMG became oncology trials. In December 2007, OCOG joined McMaster University’s new Department of Oncology. OCOG’s overall goal is to conduct research that impacts on and improves patient care. The specific objectives are to:

- Determine how new anti-cancer agents and procedures can best be incorporated into clinical practice.
- Determine the optimal method of employing existing therapies in clinical practice.
- Determine the most cost-effective therapy between treatments of equal efficacy.
- Evaluate the efficacy of supportive care interventions.

OCOG works with investigators to design, conduct, analyze and publish clinical trials. Specific activities include protocol development, preparation and submission of regulatory applications, facilitation and tracking of ethics submission and approval, database design, creation of trial materials to be utilized by clinical sites, management of trial logistics, monitoring of trial progress, collection and verification of clinical data, analyses and publication. Increasingly, OCOG acts as the “sponsor” for clinical trials, expanding the regulatory and management responsibilities of the personnel working on these trials. OCOG has engaged in trials that have led to registration of new drugs with government regulatory agencies. OCOG conducts Phase I, II, and III trials ranging in size from 20 to several thousand patients through clinical centres world-wide. Currently most of our trials are in cancer but we have maintained an interest in venous thrombosis.

A number of oncologists from the Department of Oncology and the JCC have been lead investigators in OCOG trials. They have received help in developing research questions into study protocols, getting the protocols funded, and then OCOG has overseen the execution of the trials. OCOG also serves as an educational resource by serving as a training ground for students, residents, and research fellows.

OCOG is appreciative of the support it receives from CCO and HHS. The trials we conduct are supported from several
Reports: Research Groups

Sources including peer-review grants from the Canadian Institutes of Health Research, the Canadian Cancer Society Research Institute, the Canadian Breast Cancer Research Alliance, the Heart & Stroke Foundation, the National Institute of Health, the Ontario Ministry of Health and Long Term Care, and from the pharmaceutical industry.

Since 1982, more than 8,000 cancer patients have been entered into OCOG trials for cancers of the breast, brain, head & neck, ovary, prostate, lung, colon, and brain metastases, and premalignant conditions for the lung and cervix.

Currently OCOG is conducting trials evaluating: FDG PET imaging in oncology, novel radiation fractionation regimens in women with early stage breast cancer who have undergone lumpectomy and in men with early stage prostate cancer, novel chemotherapy and biologic therapy in lymphoma, approaches to reduce morbidity of lymph edema in women with breast cancer, tumour vaccines in breast cancer, follow-up strategies in breast cancer survivors, and a lifestyle intervention (diet and exercise) in women with early stage breast cancer.
Enrolling patients in clinical trials is part of the culture of any comprehensive cancer centre such as the Juravinski Cancer Centre (JCC). While the Ontario Clinical Oncology Group (OCOG) provides the methodologic expertise to design and coordinate trials, the Department of Clinical Trials at the JCC, led by Dr. Andrew Arnold, represents the interface between clinical research and the patients in our community. In 2009, 500 JCC patients were enrolled in clinical trials sponsored by academic groups such as OCOG, the National Cancer Institute of Canada Clinical Trials Group, the Radiation Therapy Oncology Group and industry. In addition, many patients enrolled in studies from previous years continue to be followed. The trials cover all cancer types and range from prevention to diagnosis, treatment of early stage disease to the management of advanced cancer.

In recent years, Drs. Hal Hirte and Sebastien Hotte have been very active in early phase clinical trials of novel anticancer drugs and together lead the Developmental Therapeutics Program at the JCC. The JCC Developmental Therapeutics Program provides patients with advanced, refractory cancer the opportunity to undergo experimental treatment with promising novel anticancer agents. This clinical research program investigates the testing of new agents by themselves or combined with more standard treatments based on promising experimental laboratory data and collaborates effectively with translational scientists to improve the quantity and quality of answers provided by these studies.

In 2008, a two-centre consortium consisting of the JCC (Hotte) and Princess Margaret Hospital (Sui) was awarded a prestigious $3.2 million dollar, five-year U01 grant from the US National Cancer Institute Cancer Therapeutics Evaluation Program. This award was the first U01 grant ever awarded outside of the United States. The mandate of the consortium is to design and implement early phase studies that determine the safety and tolerability profiles, pharmacologic and molecular effects, as well as preliminary clinical efficacy of investigational anti-cancer agents and to provide appropriate patient populations access to investigational anti-cancer agents via participation in clinical trials. The infrastructure created for this consortium is leading to enhanced early phase clinical research at the JCC.
Percentage of patients enrolled in clinical trials is a quality indicator tracked by Cancer Care Ontario and reported to the public as part of the Ontario Cancer Quality Index. The disease sites teams at the JCC endeavor to provide all patients with access to a range of clinical trials. The clinical faculty in the Department of Oncology are the cornerstone of meeting this objective and lead and participate in multi-centre clinical trials funded by both industry and peer review agencies.

As regulatory requirements governing clinical trials increase, cancer clinical trials have become complex and costly to operate. Selecting the optimal range and combination of clinical trials that hold promise for patients and for advancing the field scientifically, and are affordable to deliver, has become a major challenge, not just to the JCC clinical trials department but to cancer trials groups across North America. These issues are appearing with more regularity in the literature and several major cancer centres have had to either close or scale back the size and scope of their clinical trials departments. The potential negative impact on patient access to trials has been noted with concern by cancer control agencies such as Cancer Care Ontario. In order to address these issues locally, the JCC Clinical Trials Department, with funding from the JCC Foundation, and in partnership with Dr. Hsien Seow, CCO Health Services Research Chair in the Department of Oncology, has developed an innovative research project designed to improve our understanding of how best to manage these complex issues. The project is multi pronged and includes strategies to increase patient accrual to trials, reducing the time to trial activation, measuring the amount of unnecessary data collected, and developing models for improving financial forecasting. This research partnership is a good example of the highly integrated nature of a comprehensive cancer centre focused on both patient care and clinical research.
Personalized medicine will transform healthcare over the next several decades. New diagnostic and prognostic tools will increase our ability to predict the likely outcomes of standard treatment, while the expanded use of biomarkers, genetics and imaging, could result in more focused and targeted drug development. However, as personalized medicine becomes more likely to be realized, the number of impediments to the efficient evaluation of personalized medicine strategies has increased. In order to accelerate research, development and ultimately, adoption of personalized medicine, we need to create strong collaborative translational and clinical research capabilities.

There are specific scientific and operational challenges to conducting trials with strong translational research. First, multi-disciplinary collaborations and activities spanning basic laboratory, clinical trial, interventional radiology, pathology, bio-repositories, and imaging research departments are required to effectively support imaging, biospecimen and experimental therapeutic testing within clinical trials. Second, trials with a significant translational component are complex and expensive and resources are limited. The development of an integrative, multidisciplinary translational research team (TRT) that is cooperative, capable and committed to undertaking the necessary organizational activities required for driving biomarker and new cancer therapy development and utility, will be of great benefit to McMaster, the Department of Oncology and its researchers and ultimately, to the patients. The successful Ontario Institute for Cancer Research (OICR) grant application of the Hamilton TRT will give basic scientists, functional imaging specialists and clinical researchers some of the necessary infrastructure to move these important translational questions and studies forward by facilitating specimen and data collection and by creating a collaborative environment. The TRT grant structure will ensure frequent and regular meetings between members of the TRT, which will result in enhanced communication between basic and clinical scientists and will ensure that Hamilton becomes an important force in the quest for personalized medicine. Our patients, current and future, stand to benefit from this initiative.
Buffett Taylor Chair in Breast Cancer Research

Dr. Mark Levine, MD., M.Sc., FRCPC

The Buffett Taylor Chair in Breast Cancer Research was established in October 1999 by a donation from Buffett Taylor and Associates Limited. The first recipient of the Chair, Dr. Mark Levine, was appointed in February 2000. The appointment was recently renewed until 2015.

The role of the chair is to conduct independent research in breast cancer; coordinate the existing strong research capability of McMaster University along the entire continuum of breast cancer research from basic science to clinical trials to health services research; provide strategic leadership in identifying opportunities for enhancing breast cancer research at McMaster and between McMaster researchers and those outside of McMaster; and to ensure that breast cancer issues are an important component of the education of medical and nursing students and residents.

Over the past ten years, Dr. Levine has led national trials from the NCIC CTG (MA.5 and MA.21) that have examined questions related to the optimization of chemotherapy regimens in early breast cancer. He has directed the Ontario Clinical Oncology Group which has conducted trials of radiation in women who have undergone breast conservation surgery. The results of these trials have influenced clinical practice in Canada and beyond. He is internationally recognized for his work in the domain of thrombosis in cancer patients. Over the years he has supervised research fellows who have joined the full-time staff of the Department of Oncology and JCC.

An achievement which provides Dr. Levine with much satisfaction is the establishment of the BRIGHT Run by a team of dedicated volunteers at the JCC to raise funds for breast cancer research in our community. Over the past three years over $1 million has been raised.

Bright Run 2010
Canada Research Chair; Breast Cancer Clinical Trials

Dr. Timothy Whelan, B.Sc., BM, BCh., M.Sc., FRCPC

Dr. Whelan is a radiation oncologist and professor in the Department of Oncology at McMaster University. Dr. Whelan obtained his medical degree at Oxford University Medical School and was a recipient of a Rhodes Scholarship. After receiving training in radiation oncology at the Princess Margaret Hospital, he completed a Master’s degree in Clinical Epidemiology and Biostatistics at McMaster University as a Terry Fox Research Fellow. He joined the staff at the Juravinski Cancer Centre in 1993 and is currently the division head of radiation oncology.

Dr. Whelan currently holds a Tier 2 Canada Research Chair in Breast Cancer Clinical Trials. His research involves clinical trials regarding optimal radiation treatment for patients with cancer and health services research in supportive cancer care. Dr. Whelan’s experience with clinical trials guided him in the design of the program. He and his colleagues, in collaboration with other research facilities, will search for ways to “fine-tune” cancer radiation therapy. They will attempt to answer such questions as: “How frequently should radiation be used?” or “How much radiation is too much or, too little?” Arriving at an optimal formula for treatment is the central goal of the research.

The goal of this research is to identify the optimal use of radiation therapy in the treatment of women with breast cancer and other malignancies. This will involve developing reliable approaches where benefits are maximized and side effects are minimized. This study foresees better-managed radiation therapy leading to better quality of life for patients.

He has led a series of three randomized trials evaluating:
1. Hypofractionated whole breast irradiation compared to conventional radiation
2. The use of regional nodal irradiation in addition to whole breast irradiation (NCIC-CTG MA.20).
3. The evaluation of accelerated partial breast irradiation using conformal radiotherapy as compared to whole breast irradiation (OCOG RAPID trial). To date this trial has enrolled 1750 women of a planned 2120.

In addition, Dr. Whelan has developed an international network of investigators/cancer centres performing trials of radiation therapy in breast cancer. In the latest (RAPID) trial led by Dr. Whelan, twenty seven Canadian centres and ten centres in Australia are participating. He and his team have developed a comprehensive radiation quality control process to review treatment plans for these trials to improve the quality of treatment received and outcomes experienced by patients.

Dr. Whelan has established a bio-bank repository of tumour blocks and blood samples from patients who participated in these trials. He is currently working with translational researchers in Canada to evaluate the role of tumor biomarkers to predict response to radiation therapy in breast cancer.
Dr. Hsien Seow joined the Department of Oncology as an assistant professor in June 2009. He holds an associate appointment in the Department of Clinical Epidemiology and Biostatistics (CEB), and is a faculty member in the Centre for Health Economics and Policy Analysis (CHEPA). In addition, Dr. Seow is an adjunct scientist at the Institute of Clinical Evaluative Sciences (ICES). Dr. Seow earned his BS from Yale University in molecular, cellular and developmental biology. He went on to earn his PhD at the Johns Hopkins School of Public Health, Department of Health Policy and Management, with a concentration in health services research, and a certificate in gerontology.

Dr. Seow is the Cancer Care Ontario Research Chair in Health Services Research - that is, research which studies the ways in which cancer prevention, screening and care services are best delivered to the population to improve outcomes.

Over the past year, with support from a JCC Foundation New Investigator’s grant, he and colleagues have examined the implementation of a standardized symptom assessment system, using the Edmonton Symptom Assessment Scale (ESAS), at the Juravinski Cancer Centre (JCC). Specifically the project focused on examining provider’s perspectives on the usefulness of using the ESAS, particularly with respect to clinical decision-making and improving patient care. This project complements other provincial work he is a co-investigator on that investigates how symptom assessments in regional cancer centres in Ontario are associated with health services use, such as hospitalizations and emergency department visits.

Other research collaborations have included applying health services research and quality improvement methods to the JCC clinical trials department by investigating the financing of clinical trials and the efficiency of the start-up process. He and colleagues have also been examining how cancer care patients transition between healthcare settings at the end of life.
Dr. Anita Bane holds a five year Clinician Scientist Award funded through the Ontario Institute for Cancer Research (OICR). After graduating from medical school and completing her residency training in pathology in Ireland, Dr. Bane went on to complete a Surgical Pathology Fellowship with a special interest in breast pathology at Mount Sinai Hospital, University of Toronto. Additionally, she completed a PhD in molecular biology and cancer genetics at the University of Toronto. Her research interests include the discovery and validation of novel biomarkers of prognostic and/or predictive utility in breast cancer.

As a clinician scientist Dr. Bane’s two main goals are to advance the field of breast pathology at a local, national and international level and use the ever advancing field of molecular biology and cancer genetics to refine our understanding of breast cancer and to tailor therapeutic interventions more specifically in an effort to improve patient morbidity and mortality.

As a researcher Dr. Bane is interested in refining the classification of breast cancer using molecular techniques and through an improved molecular taxonomy to identify novel therapeutic targets for patient treatment. To achieve these goals, she is part of a critical mass of investigators with expertise in cancer biology, preclinical models of disease, clinical trials, and statistics who collaborate in an interdisciplinary fashion at both McMaster University and Hamilton Health Sciences.

Since joining this research community, Dr. Bane has established a number of collaborations which cross the spectrum from basic science to clinical oncology. Key among these is the ongoing collaboration with Dr. John Hassell, a stem cell biologist and professor in the Department of Biochemistry and Biomedical Sciences at McMaster University. The focus of this collaboration is to identify signaling pathways of critical importance to breast cancer stem cells and then to find and test selective therapeutic targets against breast cancer stem cells in preclinical models.

She has established a laboratory at the Juravinski Cancer Centre (JCC) for the identification and validation of novel biomarkers in breast cancer. The laboratory houses a tissue micro array facility and digital imaging acquisition and analysis facility. It is equipped to perform high throughput protein expression profiling of cancer specimens using IHC and gene analysis (amplification/deletion/translocation) using fluorescent in-situ hybridization. To this end, Dr. Tim Whelan and Dr. Bane are collaborating on a correlative science project to identify biomarkers that predict response to accelerated hypofractionated radiation following breast conserving treatment. More recently, Dr. Bane and Dr. Sébastien Hotte, a medical oncologist at the JCC have established a translational research team funded by the Ontario Institute for Cancer Research, which will foster the development of translational (bench-to-bedside) research. In addition, her tissue biomarker research laboratory will be responsible for performing a number of tests to elucidate the molecular biology of tumours.
Bane, A.
OICR Clinician Scientist 5 year award
Ontario Institute for Cancer Research
7/1/2009 - 6/30/2014
$1,450,000

Bane A, Levine MN, Whelan T, Hassell J
Clinical Application of Breast Cancer Stem Cells
Hamilton Health Sciences Foundation
Early Career Award
03/2009 – 02/2012
$45,000

Bane A, Levine MN, Whelan T, Hassell J
Breast Cancer Stem Cells
Hamilton Health Sciences Foundation
New Investigator Fund
07/01/2009 – 06/30/2010
$25,000

Bane A, Levine MN, Hassell J, Whelan T
Breast Cancer Stem Cells
Juravinski Cancer Centre Foundation
07/01/2009 – 06/30/2010
$25,000

Bane, A.
High Impact Clinical Trials Program Equipment
Ontario Institute for Cancer Research
1/1/2010 - 3/31/2010
$254,376

Bane, A, Whelan T (Co-PI's), Hassell J, Hodgson N, Levine M, Lovrics P, Pond G.
Clinical Significance of Breast Cancer Stem Cells
Canadian Breast Cancer Foundation (CBCF)
2010 Jul - 2013 Jun
$453,227

Bane A, Levine MN (Co-PI's)
Comprehensive Genomic Characteristics of Basal-like Breast Cancers
Juravinski Cancer Centre Foundation
6/22/2010 – 07/01/2011
$51,240

Bordeneuve, L., Pond, G., Gulenchyn, K., (Co-PI's)
Clinical Utility of a Novel Molecular Breast Imaging Gamma Camera
Juravinski Cancer Centre Foundation
6/22/2010 – 07/01/2011
$49,200

Redevelopment of AGREE Research Trust (ART) Website for AGREE II
Canadian Institutes of Health Research
9/1/2009 - 8/31/2010
$23,394

Brouwers M.
Practice Guidelines Winter Institute-Building Capacity in Knowledge Synthesis
Canadian Institutes of Health Research
1/1/2010 - 12/31/2010
$15,000

Brouwers M.
Program in Evidence Based Care (PEBC)
Cancer Care Ontario
04/1/2009 – 3/31/2010
$1,565,000
$1,565,000

Brouwers M.
Capacity Enhancement Project (CEP)
Canadian Partnership Against Cancer
4/1/2009 - 3/31/2010
$1,077,679
04/01/2010 – 03/31/2011
$980,679

Brouwers M, Palda VA, Sadowski (Co-PI's), Lang-Robertson K, Meuser AC, Rogers JM
Evidence-based Clinical Practice Guidelines Institute
Canadian Institutes of Health Research
01/01/2010 – 12/31/2010
$14,850


Fraser, G. Assessing the Needs of Adolescents and Young Adults with Cancer in the Hamilton Region: A Qualitative Study. Juravinski Cancer Centre Foundation. 6/22/2010. $25,000


Levine, MN Ontario Clinical Oncology Group. Cancer Care Ontario. 2007 – 2010. $1,050,000

Levine, MN PET in Oncology Field Evaluation. Ministry of Health and Long Term Care (MOHLTC). 4 Years. $3,728,000


<table>
<thead>
<tr>
<th>Name</th>
<th>Project Title</th>
<th>Funding Agency</th>
<th>Dates</th>
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<td>Pond G, Gulenchyn K, Bordeleau L</td>
<td>Clinical Utility of a Novel Molecular Breast Imaging Gamma Camera</td>
<td>Juravinski Cancer Centre Foundation</td>
<td>6/22/2010</td>
<td>$49,200</td>
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<td>Pond G</td>
<td>Comparison of Phase II Cancer Clinical Trial Methodologies</td>
<td>Hamilton Health Sciences Foundation</td>
<td>03/2009 – 02/2010</td>
<td>$20,000</td>
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<td>Seow, H</td>
<td>CCO Research Chair Award in Health Services Research</td>
<td>Cancer Care Ontario</td>
<td>7/1/2009 - 6/30/2014</td>
<td>$500,000</td>
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<td>Seow H, Arnold A, Kowaleski B</td>
<td>Juravinski Cancer Centre Foundation Inspiring Hope: Transforming Clinical Trials Research at the JCC</td>
<td>08/2010 – 07/2011</td>
<td>$300,000.00</td>
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<tr>
<td>Seow, H</td>
<td>One time Infrastructure Funding for CCO Research Chairs</td>
<td>Cancer Care Ontario</td>
<td>7/1/2009 - 6/30/2010</td>
<td>$46,997</td>
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<tr>
<td>Sur R, Farrell T, Hayward J, Hunter R, Scozny J</td>
<td>2D to 3D Image Registration for Improved Treatment Planning of Endoscopic Guided HDR Brachytherapy in Lung Cancer Using a Varisource After Loader Varian Medical Systems USA, Research Collaborations</td>
<td>2009 - 2012</td>
<td>$250,000</td>
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<tr>
<td>Sur R, Lukka H, Zychla L</td>
<td>Predictive Indicators for Quality of Life in Patients with Esophageal Cancer Receiving High Dose Rate Intraluminal Brachytherapy Using a Varisource After Loader Varian Medical Systems USA, Research Collaborations</td>
<td>2007-2009</td>
<td>$91,000</td>
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<tr>
<td>Sussman J</td>
<td>Transitions of Prevention and Care Program Applied Health Research Network Initiative (AHRNI) Ontario Ministry of Health and Long-Term Care University of Western Ontario</td>
<td>9/1/2009 - 8/31/2012</td>
<td>$806,666</td>
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<tr>
<td>Sussman J, Whelan T, Seow H, Brouwers M.</td>
<td>Supportive Cancer Care Research Unit Cancer Care Ontario</td>
<td>04/01/2010 – 03/31/2011</td>
<td>$117,000</td>
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<tr>
<td>Tozer R, Carvalhal A (CO-PI’s)</td>
<td>Psycho-oncology: A Pilot Study to Integrate Psychiatric Service into the Cancer Centre Hamilton Academic Health Sciences Organization (HAHSO)</td>
<td>04/2009 – 03/2010</td>
<td>$97,832</td>
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<td>Tsakiridis, T</td>
<td>AMP-activated Kinase (AMPK) in Response of Prostate Cancer Prostate Cancer Research Foundation of Canada</td>
<td>7/1/2009 - 6/30/2010</td>
<td>$59,950</td>
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Research Funding

**Whelan, T**
Supportive Cancer Care Research Unit
Cancer Care Ontario
4/1/2009 - 3/31/2010
$107,980

**Whelan, T**
Supportive Cancer Care Research Unit
Ministry of Health & Long Term Care (MOHLTC)
04/01/2007 - 08/31/2009
$1,052,961

**Wong R.**
A phase I/II study to examine the accuracy of spinal cord functional MRI scan in evaluating chemotherapy induced peripheral neuropathy and the efficacy of acupuncture and acupuncture-like transcutaneous nerve stimulator in treating this condition.
Lotte & John Hecht Memorial Foundation
11/2007 - 03/2011
$49,000

**Wright J, Sussman J (Co-PI’s), Simunovic M, Whelan T.**
A Pilot Study to Evaluate the Benefits of Pre-Screening and Decision Support for Women with Breast Cancer Eligible for Clinical Trial Enrollment
Canadian Breast Cancer Research Alliance, CBCRA (DEX)
$50,000

Honors and Awards

**RESEARCH AWARDS**

Dr. Hsien Seow
CCO Research Chair Award, Health Services Research 5 Year Award

Dr. Anita Bane
OICR Clinician Scientist, 5 Year Award

**TEACHING AWARDS**

Dr. Pierre Major
Outstanding Clinical Teaching Award, Medical Oncology

Dr Alan Neville
McMaster President’s Award for Excellence in Teaching 2010

The Ari Shali Teaching Award for Outstanding Dedication and Commitment to Undergraduate Medical Education 2010

The Association of Faculties of Medicine of Canada (AFMC) “Inaugural” President’s Award for Exemplary Leadership in Academic Medicine 2010.

Department of Oncology “Inaugural” Award for Outstanding Leadership in Education 2010

Dr. Jim Wright
Outstanding Clinical Teaching Award, Radiation Oncology
On Thursday June 17, 2010 the Department of Oncology held its seventh Annual Student Research Day at the Juravinski Cancer Centre. This popular event attracted students from many disciplines including diagnostic imaging, internal medicine, medical and radiation oncology, medical physics, medical sciences, applied radiation sciences and surgery. The event provided students with the opportunity to showcase their innovative cancer research.

Dr. Sachi Voruganti, associate professor in the Division of Radiation Oncology once again hosted this year’s event. The keynote speaker, Dr. Craig Earle, director of the health services research program for the Ontario Institute for Cancer Research (OICR) and Cancer Care Ontario (CCO) delivered this year’s keynote address, entitled “Yours to Discover” - Why Ontario is a great place to do cancer health services research.”

The eight oral and ten poster presentations were of exceptional quality. This year’s oral presentations created a very competitive deliberation between the 3 judges, resulting in two second place awards.

First place for oral presentation went to Rachel VanderMeer an internal medicine resident, under the supervision of Dr. Peter Ellis in medical oncology, for her project “Do current diagnostic approaches to lung cancer provide adequate tissue samples for individualized treatment decisions.”

Tied for second place were Valérie Théberge a radiation oncology fellow, under the supervision of Dr. Tim Whelan for her presentation on the “Use of axillary deodorant and the impact on acute skin toxicity during radiotherapy for breast cancer: A prospective randomized non-inferiority trial” and Toran Sanli, a PhD student in the medical sciences program, under the supervision of Dr. Theo Tsakiridis for his project - The metabolic stress sensor AMP-activated protein kinase (AMPK) associates with the mitotic apparatus. Possible role as a DNA-damage sensitive switch on cell cycle.”

Meagan Verschoor, a PhD medical sciences student, supervised by Dr. Gurmit Singh professor of pathology and molecular medicine won first place for her poster presentation entitled “Role of Ets-1 in the regulation of energy metabolism in cancer cells.”

Alex Wolf, a Master’s student in medical physics and applied radiation sciences, supervised by Dr. Jehonathan Pinthus, associate professor of surgery, took second place for his poster presentation “Apocynin is an effective oral radiation sensitizer for prostate cancer: In-vivo study in rats.”

Clinical Teaching Awards were presented on behalf of the residents for both the medical and radiation residency programs to the following faculty:

Dr. Pierre Major,
Associate Professor
Medical Oncology

Dr. Jim Wright,
Associate Professor
Radiation Oncology

A special thank you goes out to this year’s committee and judges:

Committee Chair and Host:
Dr. Sachi Voruganti,
Radiation Oncology

Oral Presentation Judges:
Dr. Peter Ellis,
Medical Oncology

Dr. Do-Hoon Kim,
Radiation Oncology

Dr. Eric Seidlitz,
Pathology and Molecular Medicine

Poster Presentation Judges:
Dr. Graeme Fraser,
Malignant Hematology

Dr. Rob Hunter,
Physics

Dr. Bindi Dhesy-Thind,
Medical Oncology

Event Organizer:
Ms. Heather Wilde
Faculty

Professor and Chair
Levine, Mark N
Medical Oncology

Full-Time Professor
Arnold, Andrew
Medical Oncology
Evans, William
Medical Oncology
Lukka, Himu
Radiation Oncology
Neville, Alan
Medical Oncology
Reiter, Harold
Radiation Oncology
Rusthoven, James
Medical Oncology
Sagar, Stephen
Medical Oncology
Sur, Ranjan
Medical Oncology
Whelan, Timothy
Radiation Oncology
Whitton, Anthony
Radiation Oncology

Assistant Professor
Bane, Anita
Oncology
Fraser, Graeme
Malignant Hematology
Goffin, John
Medical Oncology
Kim, Do-Hoon
Radiation Oncology
McWhirter, Elaine
Medical Oncology
Mukherjee, Som
Medical Oncology
Pond, Gregory
Oncology
Seow, Hsien
Oncology
Tsakiridis, Thees
Radiation Oncology
Zbuk, Kevin
Medical Oncology

Associate Professor
Benger, Ann
Malignant Hematology
Bordeleau, Louise
Medical Oncology
Brouwers, Melissa
Medical Oncology
Dayes, Ian
Radiation Oncology
Dhesy-Thind, Bindi
Medical Oncology
Ellis, Peter
Oncology
Hirte, Hal
Radiation Oncology
Hodson, D. Ian
Medical Oncology
Hotte, Sébastien
Medical Oncology
Kouroukis, Tom
Radiation Oncology
Major, Pierre
Medical Oncology
Marcellus, Deborah
Medical Oncology
McMullan, William
Medical Oncology
Okawara, Gordon
Medical Oncology
Patel, Malti
Radiation Oncology
Strang, Barb
Medical Oncology
Sussman, Jonathan
Medical Oncology
Tozer, Richard
Medical Oncology
Voruganti, Sachi
Radiation Oncology
Wong, Raimond
Radiation Oncology
Wright, James
Radiation Oncology

Associate Members
Bryant-Lukosius, Denise
Nursing
Dhamanaskar, Kavita
Oncology
Eit, Laurie
OB/GYN
Ghert, Michelle
Radiology
Heller, Barbara
Surgery
Lovič, Peter
Surgery
Mazurka, John
OB/GYN
Moens, François
Surgery
Pinthus, Jehonathan
Surgery
Simunovic, Marko
Pathology & Molecular Medicine
Trus, Michael
Radiation Oncology

Part-Time Assistant Clinical Professor
Corbett, Tom
Radiation Oncology
DeCarolis, Mary
Medical Oncology
Figueroa, Alvaro
Medical Oncology
Findlay, Brian
Malignant Hematology
Gudelis, Susan
Radiation Oncology
Johanson, Curtis
Medical Oncology
Phillips, Callista
Malignant Hematology
Vergidis, Dimitrios
Radiation Oncology
Wong, Jason
Radiation Oncology

Adjunct Appointments
Bahl, Mala
Medical Oncology
Bouttell, Elaine
Medical Oncology
Califaretti, Nadia
Medical Oncology
Campbell, Caroline
Medical Oncology
Chouinard, Ed
Medical Oncology
Hubay, Stacey
Medical Oncology
Knight, Gregory
Medical Oncology
McCarron, Bonnie
Medical Oncology
Stevens, Robert
Malignant Hematology
Tam, Amy
Malignant Hematology

Clinical Research Fellows
Kuruvilla, Sara
Medical Oncology
Koneru, Rama
Radiation Oncology
Shahi, Sundee
Radiation Oncology
Théberge, Valerie
Radiation Oncology

Part-Time Professor
Pritchard, Kathleen
Oncology/OCOG

Part-Time Associate Professor
Julian, Jim
Oncology/OCOG

Part-Time Assistant Professor
Bell, Kathleen
Medical Oncology

Research for Life
Department of Oncology | 2009-2010 ANNUAL REPORT 35
Faculty Promotion, Tenure, Reappointment and New Faculty Appointments

**Promotions – Full-time**
- Dr. Harold Reiter, Professor, Radiation Oncology
- Dr. Stephen Sagar, Professor, Radiation Oncology
- Dr. Bindi Dhesy-Thind, Associate Professor with CAWAR, Medical Oncology
- Dr. Graeme Fraser, Reappointment, Malignant Hematology
- Dr. Som Mukherjee, Reappointment, Medical Oncology
- Dr. Theos Tsakiridis, Reappointment, Radiation Oncology

**Reappointments – Part-time**
- Dr. Kathleen Pritchard, Medical Oncology
- Dr. Alvaro Figueredo, Medical Oncology

**New Faculty Appointments – Part-time**
- Ms. Kathleen Bell, Medical Oncology
- Dr. Susan Gudelis, Medical/Radiation Oncology

**Adjunct Appointments**
- Grand River Regional Cancer Centre, Kitchener, Ontario
  - Dr. Mala Bahl, Medical Oncology
  - Dr. Elaine Boutilier, Medical Oncology
  - Dr. Nadia Calafaretti, Medical Oncology
  - Dr. Carolyn Campbell, Medical Oncology
  - Dr. Stacey Hubay, Medical Oncology
  - Dr. Bonnie McCarron, Medical Oncology
  - Dr. Gregory Knight, Medical Oncology
  - Dr. Robert Stevens, Malignant Hematology
  - Dr. Amy Tam, Medical Oncology

Department Administration

**Chair**
Dr. Mark Levine

**Vice-Chair, Education**
Dr. Deb Marcellus

**Head, Health Services Research**
Dr. Melissa Brouwers

**Division Head, Malignant Hematology**
Dr. Tom Kourovkis

**Division Head, Medical Oncology**
Dr. Richard Tozer

**Division Head, Radiation Oncology**
Dr. Timothy Whelan

**Residency Program Directors**
Dr. Bindi Dhesy-Thind, Medical Oncology
Dr. Ian Dayes, Radiation Oncology

**Fellowship Program Directors**
Dr. Peter Ellis, Medical Oncology
Dr. Jonathan Sussman, Radiation Oncology
Dr. Graeme Fraser, Malignant Hematology

**Director**
Anne Snider

**Coordinator**
Heather Wilde

**Finance**
Kathy Cowan

**Research Finance**
Barb Lysakowski

**Administrative Assistant to Chair**
Lori Dale

**Administrative Assistant to Director**
Kim Pudlo

**Administrative Supervisor, Medical Oncology**
Helen McCarthy

**Administrative Supervisor, Radiation Oncology**
Rhonda Walmsley

Departmental Committees

**Executive Committee**
- Dr. Mark Levine
- Dr. Deb Marcellus
- Dr. Richard Tozer
- Dr. Tim Whelan
- Dr. Tom Kourovkis
- Ms. Anne Snider
- Ms. Kathy Cowan

**Tenure & Promotion Committee**

**Voting Members:**
- Dr. Mark Levine
- Dr. Deb Marcellus
- Dr. Richard Tozer
- Dr. Tim Whelan
- Dr. Tom Kourovkis
- Dr. Jonathan Sussman
- Dr. Peter Ellis
- Dr. Alan Neville

**Consultants Non-Voting:**
- Ms. Anne Snider
- Ms. Heather Wilde

**Finance Committee**
- Dr. Mark Levine
- Dr. Deb Marcellus
- Dr. Tom Kourovkis
- Ms. Kathy Cowan
- Ms. Anne Snider

**Education Committee**
- Dr. Deb Marcellus
- Dr. Ian Dayes
- Dr. Peter Ellis
- Dr. Ann Benger
- Ms. Karen Dougherty
- Ms. Anne Snider
- Ms. Heather Wilde

**Fellowship Committee**
- Dr. Peter Ellis (Chair)
- Dr. Jonathan Sussman
- Ms. Heather Wilde
Publications

Arnold, Andrew


Bane, Anita


Bordeleau, Louise


Brouwers, Melissa


Publications . . . continued


Brouwers MC, Makarski J, Levinson AJ. A randomized trial to evaluate e-learning interventions designed to improve learner’s performance, satisfaction, and self-efficacy with the AGREE II. Implement Sci. 2010 Apr 19; 5:29.

Kho ME, Rawski E, Makarski J, Brouwers MC. Recruitment of multiple stakeholders to health services research: lessons from the front lines. BMC Health Serv Res. 2010 May 13; 10:123.


Bryant-Lukosius, Denise


Corbett, Tom


Dayes, Ian


Dhesy-Thind, Bindi


Elit, Laurie


Nimeiri HS, Oza AM, Morgan RJ, Huo D, Elit L, Knost JA, Wade JL 3rd, Agamah E, Vokes EE, Fleming GF A


Ellis, Peter


Evans, William


Whitton AC, Green E, Evans WK, Fitch M, Golden B, Soman D, Gutierrez E, ...


Findlay, Brian


Ghert, Michelle


Mak I, Cowan R, Lung C, Nikitovic M, Singh G, Colterjohn N and Ghert MA: Upregulation of MMP-13 via Runx2 in...
the stromal cell of Giant Cell Tumor of Bone. Epub 2009 Aug; 45(2):377-86.

Goffin, John


Hirte, Hal


Hodgson, Nicole


Hodson, D. Ian


Hotte, Sébastien


Kavsak PA, Henderson M, Moretto P, Hotte SJ, McWhirter E, Tannock IF, Mukherjee
Publications . . . continued


Julian, Jim


Kapoor, Anil


Levine, Mark


Lovrics, Peter


Lukka, Himu


Major, Pierre


McWhirter, Elaine


Mukherjee, Som


Neville, Alan

Neville AJ. Problem-Based Learning and Medical Education Forty Years on. Medical Principles and Practice, 18:1-9, 2009.


Patel, Malti


Pinthus, Jehonathan

Klotz L, Pinthus J. The case for prostate capsule-sparing radical cystectomy in...


Pond, Gregory


Reiter, Harold


Sagar, Stephen


Sagar SM. Alternative Therapies as Primary Treatments for Cancer. Integrative Oncology; Chapter 26: 502-529; Abrams D & Weil A; 2009; Oxford University Press, New York.

Sagar S, Sze D, Wong R. Chinese herbal therapies as immune modulators for anti-cancer therapeutics. Bioactive Natural Products; Gupta V, ed. 2009; Studium Press LLC; Houston.


Sagar S, Wong R, Yance D. Development of anti-angiogenesis therapies for treating cancer from Chinese medicinal herbs. Bioactive Natural Products; Gupta V, ed. 2009; Stadium Press LLC; Houston. Leis A, Sagar S, Verhoef M, Balneaves L, Seely D, oneschuk D. Chapter 13 Shifting the paradigm: from complementary and alternative medicine (CAM) to integrative oncology. In Oxford...
Publications . . . continued


Seow, Hsien


Simunovic, Marko


Sussman J, Baldwin LM. The Interface of Primary and Oncology Specialty Care: From Diagnosis Through Primary Treatment. Journal of the National Cancer Institute Monograph 2010; 40:18-24.


beam radiotherapy in the treatment of endometrial cancer (MRC ASTEC and NCIC CTG EN. Randomised trials): pooled trial results, systematic review, and meta-analysis. Lancet. 2009 Jan 10; 373(9658); 137-46


Zbuk, Kevin

Leo Moi (Artist) Tom Lam (Bush Pilot), Bronze 1971

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Faculty of Health Sciences
McMaster University
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www.fhs.mcmaster.ca/oncology