BUILDING ON OUR STRENGTHS

Tied to our Vision, Anchored by our Values
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All persons profiled in this Annual Report have agreed to their appearance and have approved their individual stories.
BUILDING ON OUR STRENGTHS

Tied to our Vision, Anchored by our Values
OUR VISION
To be recognized as the #1 choice Department of Medicine in Canada for patients, students, residents, fellows and staff.

OUR MISSION
We will perform the highest quality clinical research and medical education in an environment that focuses on quality and safety of care for all patients.

OUR VALUES

RESPECT
We will treat patients, trainees, staff and colleagues with dignity and equity, recognizing individual, gender and cultural differences and diversity.

QUALITY
We will always strive for excellence in patient care, research and education.

COLLABORATION
We will work together for the good of all members of the Department, The Ottawa Hospital and the University of Ottawa, to improve health, education and research in the Champlain LHIN.

ACCOUNTABILITY
We will value the highest standard for professionalism, fairness and transparency in an environment of, advocacy for, and accountability to, the communities we serve, as well as all members of the Department of Medicine.
The Department of Medicine is an innovative academic health care leader focused on advancing, developing and delivering cutting-edge medical research, outstanding patient care and high-quality education that prepares future generations of health care professionals.

Through strong and visionary leadership and with its exceptional people, the Department of Medicine is creating outstanding opportunities for current and future health care practitioners. By building bridges that link expertise, learning, knowledge and hands-on practice the Department of Medicine is improving patient care locally, nationally and internationally.

As a major department within The Ottawa Hospital and valued partner of the University of Ottawa Faculty of Medicine, the Ottawa Hospital Research Institute and the local health care community, Ottawa’s Department of Medicine actively brings together close to twenty sub specialty medical divisions, physicians, researchers, educators, administrators and future health care professionals in an open, inclusive, supportive and inspiring culture.
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DEPARTMENT OF MEDICINE
EXECUTIVE COMMITTEE

From left to right:
Dr. Erin Keely (Vice Chair, Medical Education)
Dr. Alan Karovitch (Vice Chair, Finance)
Dr. Kevin Burns (Vice Chair, Research)
Ted Waring (Chief Administrative Officer)
Dr. Philip Wells (Department Chair)
Dr. Susan Dent (Vice Chair, Patient Quality & Safety)
Dr. Michele Turek (Vice Chair, Clinical Services)
Dr. Philip S. Wells, Professor, Chair and Chief, Department of Medicine, University of Ottawa and The Ottawa Hospital.
A MESSAGE FROM THE CHAIR & CHIEF


Writing this introductory message each year serves as a rewarding pause for me, as it forces me to stop and take a moment to reflect on the current state of the Department, and appreciate the achievements of the group and its individual members over the past year.

The theme of this year’s report, “Building on our Strengths”, is certainly appropriate. Clinical and academic successes this year have augmented our existing strengths in the areas of academic and clinical leadership, research, education and clinical care. It is gratifying to see that the Department is providing what we strive to create: an environment in which those who work toward excellence can thrive and build on their own successes, at the same time strengthening the Department as a whole. It’s a pleasure to point out some of the highlights of the Report here.

Our members shine in the area of academic leadership, occupying important positions at the University: Vice-Dean of Undergraduate Medical Education, Vice-Dean of Post-Graduate Medical Education, Assistant Dean of Student Affairs, and Directors of several key programs within Undergraduate and Post-graduate education. At The Ottawa Hospital, members of this Department serve key roles including Clinical Director of Physician Leadership Development and Physician Engagement, Medical Director of Infection Prevention and Control Program, Director of the Antimicrobial Stewardship Program, Scientific Director of The Ottawa Hospital Centre for Patient Safety and Chief Medical Information Officer.

With a view to developing future leaders, this year we have funded leadership training for several individual members, and over the past two years we have also funded 8 positions in the newly-established Undergraduate Medical Education Distinguished Teacher Program at the University.

We have welcomed three new Division Heads, in Nuclear Medicine, Geriatrics and Medical Oncology, all of whom have been recruited to the Department from other institutions. At the level of the Department Executive, two key Department members have moved into Vice-Chair positions, of Education and Patient Quality & Safety.

In the realm of research, the Department of Medicine continues to be unmatched in terms of leadership and performance. In the newly-opened Centre for Practice-Changing Research, the Department plays a leading role with several of our prominent researchers filling key roles. Publication and grant productivity continue to increase in the Department. Our research budget has grown by almost 30% in the past three years. A specific example of our research success is that the Ottawa Hospital Research Institute’s winner of the 2011 Dr. Michel Chrétien Researcher of the Year Award was one of our members (Dr. Shawn Aaron, Respirology).
Collaboratively, at least eight of our divisions conduct research in the focus areas of cardiovascular disease and cancer, partnering with The Ottawa Hospital, the OHRI and the University of Ottawa.

To build on our successes in research, we are increasing our emphasis on the funding and provision of research fellowship programs, continuing to attract high-caliber prospective fellows from within our own institution, across Canada and around the world. We have many leading academic and clinical groups that also offer excellent opportunities for post-fellowship training in areas such as electrophysiology, thrombosis, cardiac imaging and stem cell research.

On the clinical side of things, to build on our strengths within patient quality and safety we have developed an internal grant competition to fund related projects in the Department, and training programs for members identified to be divisional leaders in these areas. We are also working hand in hand with the Hospital on such endeavours as computerized physician order entry (CPOE) and hand-over tools.

Numerous innovations have occurred in Clinical Services in the Department, two of which are the CanVENT program for patients with respiratory complications of neuromuscular disease, and the e-consult service. Both will help us meet the coming challenges of a transformation in ambulatory care.

The Department has received more than $2 million in funding from our Ottawa Hospital Academic Medical Organization over the past five years, toward innovative clinical programs. This has created solid foundations for several new clinical programs.

This has been just a glance at what our Department has accomplished and continues to accomplish, through the hard work, collaboration and vision of a “greater good” of its members as we seek to be the Department of Choice for trainees and specialists in Canada. The report provides more detailed summaries of these and other achievements, and provides profiles of our leaders and some of the outstanding individuals who make unique contributions to the Department. I think as you read through the report you too will appreciate the strengths we have in the University of Ottawa/The Ottawa Hospital Department of Medicine, and see that we are indeed building on them. I couldn’t be more pleased and proud to be its Chair and Chief.

Dr. Philip S. Wells
MD, FRCPC, MSc
Professor of Medicine
Chair and Chief, Department of Medicine
A MESSAGE FROM THE CHIEF ADMINISTRATIVE OFFICER

It doesn’t seem all that long ago that we sat down to write the first Department of Medicine annual report. Putting it all together was a monumental job but it was well worth the effort as it has become a significant part of our documented history and provides us with a valuable reference document. The annual report serves as a testament to just how much really goes on in the Department of Medicine and highlights the commitment and energy that abounds in our faculty and staff.

Throughout this year’s report, you will read about a number of remarkable achievements and contributions made by our members this past year. While we are proud to celebrate these physician successes we also need to remember that behind virtually every innovation and initiative stands a committed team of support staff. Over the past year, our staff has worked tirelessly behind the scenes to improve the processes that directly contribute to many of these achievements. Clearly we have a lot to celebrate.

We continued to work through the external reviews of twelve divisions. With the help of selection committees, we completed seven this past year, while another five were underway mid way through 2012. These reviews are logistically demanding, requiring the organization of hundreds of meetings for the reviewers, candidates, and committees. The data gleaned is providing much needed validation of the quality and quantity of work being done here. External validation of our programs is a key success factor in our quest to become recognized as the number one choice Department of Medicine.

We continued to bolster the Department of Medicine's human resources practices, improving access to HR services and supporting physicians in the selection, review and management of their employees. We continued to work with our stakeholders: The Ottawa Hospital, the Ottawa Hospital Research Institute, the University of Ottawa Heart Institute and the University of Ottawa Faculty of Medicine to ensure consistency in our appointment processes. Along the way, we developed many new checklists that have assisted greatly in reducing the delays involved in the recruitment process.

An HR newsletter, targeted at physician employers was developed and is distributed quarterly. The content is focused on real world HR situations and their management. By ensuring that our physician leaders are aware of the many challenges and regulations that affect the workplace, we hope to foster increased employee well-being and retention.

The extension of the “Access to Information” law, to include Hospitals, led to an overhaul and consolidation of our paper and electronic files. While long overdue and very time consuming, the process provided insight into the efforts of our predecessors and improved our corporate knowledge. It also made moving to a newly renovated space much easier. We now share a larger space with the Department of Surgery. While we will miss the coziness of LM12, the co-location of two departments has already led to the identification of synergies and has improved knowledge of how each department functions.
Physician and staff engagement remains a priority and as a result we made efforts to enhance the Department of Medicine recognition day ceremony, introducing new awards focused on honouring members of the entire Department and creating a less formal, collegial event. Regular updates to our website and features on new faculty appointments were completed throughout the year and the Department’s Winter party was filled up immediately and has become the hottest ticket in town.

The Department also made efforts to engage our future faculty by organizing a well attended medical student’s career night where key leaders from several divisions had frank and engaging discussions about the various options for post graduate specialization. Our staff worked closely with groups of medical students and residents to ensure that the content was focused on their needs and thus the material was current and relevant to them. We also supported staff appreciation events at The Ottawa Hospital by volunteering to serve lunch to hospital staff at the annual BBQ and by distributing coffee and treats to some of our units.

And finally, in a large and complex department like ours, with five different fiscal years, efficient use of our financial resources requires a solid understanding of the inputs and outputs and the expectations and deadlines for each our funding bodies. To this end we completely redesigned our budgeting, tracking and reporting systems to be as transparent and current as possible. We continue to work closely with our practice plans to ensure smooth and timely transactions and to make sure proper documentation follows the money.

In closing, while the Department of Medicine continues to evolve and adapt to new challenges, our commitment to provide exceptional service and support remains unchanged and continues to be our primary focus.

Ted Waring

Chief Administrative Officer
A MESSAGE FROM FINANCE

This past year has resulted in some great successes but has also produced significant challenges including:

- OHIP fee schedule changes
- Our province wide AFP has expired and requires renegotiating

Despite the challenges, our practice plan continues to finance the priorities that allow us to excel clinically and academically.

UMA/DEPARTMENT OF MEDICINE BUDGET

![Pie chart showing funding distribution]

**FUNDING 2011–12**

- AFP Funding (Phase I & III) — 58.08%
- Tithe Income — 26.44%
- University Funding — 7.50%
- Research Tax Credits — 4.11%
- Hospital Funding — 2.27%
- Heart Institute/Oncology/Contributions — 0.67%
- Other — 0.93%

**EXPENDITURES 2011–12**

- AFP Allocation Award — 20.07%
- AFP III Clinical Repair — 12.86%
- Admin Stipends (Division Heads/Finance Reps) — 5.62%
- GFT Benefits — 4.73%
- Chair & DoM Executive (Vice-Chairs) — 2.36%
- Special Leaves (Maternity/Disability) — 0.84%
- Sabbaticals — 0.52%
- Program Support — 43.60%
- UMA Business Office — 4.99%
- DoM—Executive Admin — 4.43%
Money is used to support fellowship awards in research and education. Part of the budget supports the Methods Centre and allows our researchers access to world-class statistical support, study design and study management. We also help to financially support a PhD educator via AIME, which enables our Department to conduct world-class medical education research and curriculum development.

We are in the process of updating our partnership agreement. The goal is to clarify the language within the agreement and to maintain flexibility for future decision making. Along those lines we have rewritten the terms of references for our various paid leaves including maternity, sabbatical and disability programs.

I look forward to another successful budget year and I remain confident that we can continue to drive forward the academic, clinical and educational priorities that have been a hallmark of our department to date.

Alan Karovitch  MD FRCPC M.Ed.
Associate Professor of Medicine
Vice-Chair, Finance
DIVISION HEADS

Reflects the period of July 1, 2011 to June 30, 2012.

- Dr. Rob Beanlands  Cardiology
- Dr. John Kim  Critical Care
- Dr. James Walker  Dermatology
- Dr. Erin Keely  Endocrinology & Metabolism
- Dr. Alexander Sorisky  Endocrinology & Metabolism
- Dr. Linda Scully  Gastroenterology
- Dr. Barbara Power  Geriatrics
- Dr. Marc Rodger  Hematology
- Dr. Mark Tyndall  Infectious Diseases
- Dr. Alan Karovitch  Internal Medicine
- Dr. David Stewart  Medical Oncology
- Dr. Peter Magner  Nephrology
- Dr. Pierre Bourque  Neurology
- Dr. Terrence Ruddy  Nuclear Medicine
- Dr. José Pereira  Palliative Care
- Dr. Sue Dojeiji  Physical Medicine & Rehabilitation
- Dr. Shawn Aaron  Respirology
- Dr. Doug Smith  Rheumatology
DEPARTMENT FACULTY PROMOTIONS

Reflects the period of July 1, 2011 to June 30, 2012.

- Dr. Ian Burwash  Full Professor  Cardiology
- Dr. Anna Byszewski  Full Professor  Geriatrics
- Dr. William Dalziel  Full Professor  Geriatrics
- Dr. Anne McCarthy  Full Professor  Infectious Diseases
- Dr. Carl van Walraven  Full Professor  Internal Medicine
- Dr. Kumanan Wilson*  Full Professor  Internal Medicine
- Dr. Hsaio-Huei Chen  Associate Professor  Neurology

* pending
NEW FACULTY POSITIONS (FTA & PTA)

Reflects the period of July 1, 2011 to June 30, 2012.

• Dr. Nadine Gauthier  Cardiology
• Dr. Jillian MacDonald  Dermatology
• Dr. Caroline Heughan  Dermatology
• Dr. Isabel Desjardins  Internal Medicine
• Dr. Akshai Iyengar  Internal Medicine
• Dr. Abdullah Hadj-Tahar  Neurology
• Dr. Michelle Mckinnon  Palliative Care
• Dr. Christopher Barnes  Palliative Care
• Dr. David Stewart  Medical Oncology
• Dr. Rachel Goodwin  Medical Oncology

RETIREES

Reflects the period of July 1, 2011 to June 30, 2012.

• Dr. Shiv Jindal  Nephrology
• Dr. Dilip Patel  Gastroenterology
• Dr. Pippa Hall  Palliative Care
Clinical care is in constant evolution, never more so than in the last few years. The Department’s members are called upon to deliver superior care in this environment of change, whilst adhering to a “patient-first” model. The integration of mobile devices and technology (including point-of-care testing) into most patient encounters, as well as increasing use of computers to prescribe and order tests, has been challenging even to the most proficient practitioner. The past year has seen our front-line members incorporating and refining word recognition technology and computerized ordering into everyday care. Handheld devices such as iPad tablets are now as ubiquitous as the stethoscope and undoubtedly even more useful given the potential for bedside patient education and as platforms for exploration of best practices. Our clinicians are becoming well versed in such systems and hope to leverage such technologies to smooth flow through the health system and monitor performance.

Innovations within the Department of Medicine that are potentially transformative, especially for chronic diseases, highlight common themes of partnership and dissemination. The Palliative Rehabilitation Program promotes a palliative care approach for those patients with progressive incurable illnesses and has shown that earlier multidisciplinary rehabilitative interventions can better address symptoms and psychosocial well-being, which improves quality of life. The CANVent Program is an example of a pioneering academic, cost-effective and collaborative health care program for patients who are at high risk for respiratory complications from neuromuscular disease. Strategies of education and non-invasive airway clearance are utilized to significantly mitigate risk. The integration of over 20 partner organizations has enabled the Regional Geriatric and Community Intervention Program to successfully implement and optimize an evidence-
based model for Geriatric Emergency Management (GEM) in nine emergency departments (EDs) in the Champlain region. Such programs underscore the Department’s capacity and capability to deliver enhancements in health care for our community.

The provision of quality clinical care frames our decision-making and use of resources. Such care is meant to be both effective and efficient. We have now been tasked to provide high value cost conscious care in an environment of budget constraints. Consequently divisions within the Department are working to identify potential cost savings, while ensuring that any such measures remain evidence based and patient-centered. This is still a work in progress, but already some measures (such as no longer supplying compression stockings for DVT prevention) have translated into costs savings for the organization.

Michele Turek MD FRCPC
Associate Professor of Medicine
Vice-Chair, Clinical Services
One of the happiest days of José Pereira’s life occurred in September of 2011 when he arrived at Santiago de Compostella, the final check-point on his 29 day camino that stretched from the French side of the Pyrenees through the interior of northern Spain. It was an experience that profoundly impacted his life. The 500-mile walk showed him that the camino is in fact an allegory for one’s everyday life, with its failures and successes and the importance of the people who make a difference in your life. At the start of the camino in the small town of St. Jean-Pied-de-Port on the French side of the Pyrenees, José was staring up at the mountains and contemplating the long climb the next two days. An old lady with her shopping bag stopped and said to him, “It looks difficult, but the camino is not about being difficult, it is about humility.” For the next 29 days the camino had a knack of delivering little life lessons every day.

Although most people today who do the camino, which dates back to medieval times, do not do it for religious reasons, it is fair to say that for all it becomes a spiritual exercise that touches one profoundly, often in ways unexpected. However, in addition to being a spiritual journey, it is also an amazing physical and cultural experience. In the 29 days, José met people from around the world, walked across five provinces of France and Spain and experienced the varied geography, cuisine, wines and dialects that each has to offer. He jokes by saying that sometimes it felt like “It was one big pub crawl” because pilgrims (which is what you are called when you are on the camino whether or not you have religious or spiritual motivations) use the pubs all along the way to stop, rest, have a meal and a drink.

“Over the last two to three years Dr. Pereira ventured into areas where Doctors tend not to travel. He was assisting with budgets, staffing levels, building requirements and attended meeting after meeting that at times produced little results. José’s presence at those meetings was essential. He made us aware that his patients, the hospitals and the system needed us to move forward as part of a “team”. All the while as we moved forward he was a key supporter and defender of the “community” values that we cherished.”

— Charles Armstrong
Treasurer, The Hospice at May Court
As a kid Dr. José Pereira dreamed of being a pilot. And as an adult collects model airplanes, each of which is relevant to his history, such as the KLM Boeing 747 that he first flew to Canada in. So if you go to his home to view his collection, he’ll proudly recall, in intimate detail, his personal connection with each plane.
He explains that throughout the journey there are literally many ups and downs, that sometimes you have to climb very steep hills and mountains. However, there is always the satisfaction of arriving at the top and enjoying the view from there. “When you do the camino you really start to understand that life is not about the destination but about the journey. I don’t think I really integrated that into my daily living. I don’t think I really truly understood that until I did the Camino de Santiago.”

Within his roles at Bruyère Continuing Care, The Ottawa Hospital and the new Regional Palliative Care Program, José has had to climb some very steep hills, but his resilience, passion and ability to see the big picture are helping him get to the top. His persistent hard work and unwavering leadership have been pivotal in establishing key programs to improve end of life care, and advancing hospice palliative care issues, not only in Ottawa, but Canada wide. It’s been a difficult journey to say the least.

When José arrived here 4 years ago the plan was to develop a very small inpatient palliative care unit at the General Campus. However, the biggest problem at that time, in his opinion, was the lack of hospice beds in the city- places to provide end-of-life care for patients who cannot be cared for at home or who do not wish to die at home. To put it into perspective, Ottawa has only 9 hospice beds at the Hospice at May Court and according to international standards it needs somewhere between 60 and 70. This explains why many patients who should be dying in a hospice are dying in acute care hospitals in our region (receiving care that is good but not focused on end of life and at great expense) and one of the reasons that patients at the end of life are accessing emergency departments. This lack of hospice beds is also limiting the ability of the 36-bed Acute Palliative Care Unit at the Elisabeth Bruyère Hospital to serve as an acute unit where patients with progressive incurable illnesses and complex needs are admitted for symptom control and not only for end-of-life care. Most acute palliative care units have discharge rates of 30% to 50%, but at Bruyère the discharge rate is about 18% (this has been going up in the last 3 years). This means that the acute palliative care unit is not supposed to be a place where people go only to die. There are many patients who could be admitted for a short time for symptom control and then be discharged again into the community. However, because of the lack of hospice beds, on any given day, about a third to half of patients on the unit are patients who should be in a hospice setting.

José opted to look at the issue from a larger systems perspective and realized that local changes would have very little impact on the broader system. As a result he went out and engaged many partners and stakeholders in the community and starting working on creating more hospice beds, which, in the long term, he believed would come back to benefit the hospitals. “As Division Head, Hospice services was not a direct responsibility of mine, it fell completely outside of my accountability. But it was so pivotal to success within the hospital and for the community, that I had to dedicate time to that.”

He focused his efforts on two things: changing the existing funding model for hospices and getting the hospice community united. In Ontario only 40% of the care provided at hospices is covered by public health care dollars, the other 60% is covered through fund raising and charity. Clearly the funding model was not one where hospice care was an integral component of the overall health
care system. “Because of this model, of the approximately 27 hospice facilities in the province, three quarters of them have been facing significant financial challenges despite providing important community services. Moreover, it was not possible to add more hospice bed capacity because in effect it meant to fund raise for several million dollars more every year. We had to change that model here in Champlain.” And that’s what they did. With excellent support from the LHIN and with an enormous amount of support from The Ottawa Hospital and the Montfort Hospital, José working with the Ottawa Hospice community, have successfully changed the funding model, the first LHIN in the Province to do so. This newly restructured funding model will reallocate funding so that now about 70% of the costs for caring for patients in a hospice will be covered by public health care dollars.

It is also important to remember that in addition to making a lot of sense from the perspective of what is best for the patient, it also makes a lot of sense from a health care systems perspective; instead of patients being cared for in acute care hospitals at about $1000 a day and sometimes more, care in a hospice costs about $400 a day. Plans are now underway to build a new hospice in the west end of the city and also to open up a new hospice as soon as possible to start meeting current needs in an existing facility such as a long-term care facility or retirement home. Building a new freestanding hospice requires considerable capital while using an existing facility reduces that significantly and also reduces the maintenance costs. The idea is that Ottawa Hospice Services will lease space in an existing facility and have its own staff, with appropriate hospice-level staffing and standards, providing care in the hospice. Once those two are in place, the next phase will look at opening a new hospice, probably in an existing facility, in the east end of the city.

The second challenge was getting all the different players to collaborate. Historically there were different providers, with the best intentions in mind, focused on looking after the interests of only their facilities or mode of practice. It made it difficult for funders such as the LHIN and philanthropists to provide funding to one entity without upsetting another. The different hospice providers in the city were competing for the same public and charity dollars. “We needed to change this, to look at this from a systems perspective and to ask the question what is best for the patient and family”. Despite some resistance from some quarters, The Hospice at May Court and Friends of Hospice merged this year to become a new entity called Ottawa Hospice Services and, with a partnership with Bruyère Continuing Care, the Ottawa Hospice Services is implementing the hospice plan for the city. There is now one single strong voice advocating for hospice services and collaborating closely with the LHIN and hospitals to achieve this. With continued support, by the end of 2014 they’ll be much closer to the target of 60 hospice beds and also make the acute palliative care unit more accessible for patients requiring a short hospitalization for symptom control before being discharged back home again.

José goes on to reflect on some of the biggest challenges facing hospice palliative care. One of them is the misperception that palliative care is only about the last days or weeks of life. This is very wrong. The World Health Organization defines palliative care as being appropriate for persons with “life threatening illnesses”. Many patients would benefit from a palliative care approach
much earlier in their illness trajectories, by having their symptoms controlled, fears addressed, quality of life improved and also appropriate goals of care discussed. The fear that many health professionals have that introducing this approach earlier in the illness may result in increased depression, anxiety and shortened life is unfounded. In fact, new studies are showing quite the opposite. In one large study patients with newly diagnosed advanced cancer of the lung who received palliative care early, alongside chemotherapy and radiotherapy treatments, had much better quality of life and lived longer than those patients who were referred to palliative care only when all the chemotherapy and radiotherapy treatments had been exhausted. “Because everyone, including society, patients and health professionals, is afraid of talking about death and dying, no one talks about it, and unfortunately patients, families and the health care system pay the price.” This price includes expensive treatments that at the end of the day do not provide many benefits and lack of planning and honest discussions, resulting in patients ending up in emergency departments and acute care hospitals.

José feels that while palliative care is demanding it is also very rewarding. It brings together many aspects of medicine and caring. In order to provide good palliative care one has to be able to integrate communication, history taking and physical examination with internal medicine, physiology, pharmacology, evidence-based care and whole person care. Whole person care includes knowing the person’s personal story and narrative, his or her wishes, values, fears and hopes and sources of courage or distress, including spiritual, religious and social backgrounds and needs. It requires cultural sensitivity. “I find how our different cultures and individual patients and families experience living and dying very interesting, often inspiring. The influence of cultures is fascinating, particularly how individuals and families integrate or discard these in their personal journeys. At the end of the day, palliative care is just good medicine and good care. It should not be provided only by palliative care specialist teams. All health professionals, from all specialty areas and disciplines, caring for someone with a life threatening or progressive incurable illness should incorporate a palliative care approach in their daily work and provide basic palliative care to their patients.

In October 2012, Dr. José Pereira was presented with the distinguished honour of the Queen Elizabeth II Diamond Jubilee Medal for his hard work and passion for Hospice Palliative Care within Canada.

Like most physicians with demanding roles, José is extremely busy. He tries to incorporate exercise in his daily routine. In the last 3 years, he has taken up boot camp as exercise, alongside cycling in the summer and swimming. “The boot camps start very early in the morning,... I’m not a morning person. 20 years ago I would never have believed that I would be waking up at 5:15 in the morning to go to boot camp...” The exercise he says is to compensate for his eating habits. “I love snacking on chocolate, cheese and bread, ...only the low calorie versions” he says with a smile. “My wife is a wonderful chef. We have lived in South Africa, Portugal, Italy and Switzerland and she integrates...
these various cuisines in her cooking. He grins when he says “I guess with those bad eating habits will never lose weight, I just try and stay neutral.”

His home is his sanctuary. There he is surrounded by his wife Odete and two teenage children, Xavier and Ciara, and links to who he is: Portuguese tiles, African artwork, and his beloved books, most of them historical or biographical. “I love being at home and being with the people that I really love and love me no matter what.” Admittedly, he is a self-proclaimed TV addict. “I love watching history and documentary channels. I have my own personal collection of documentaries. I’ve just finished watching a fascinating documentary on the American Civil War I knew so little about it before that. I like watching things I don’t know much about.”

To keep in touch with his artistic side, he spends time sketching or painting and plays folk guitar, a passion he shares with both of his children.

Dr. José Pereira is a remarkable and passionate man. He is driven by a vision that all citizens, and that includes both patients and families, should have access to palliative care at the right time, at the right place, by the right person. “If I were to look ahead 10 years from now I’m hoping that my legacy would be that I fully integrated palliative care within our daily health care, including initiating palliative care earlier in the illness journey. I hope I will have changed the perception of palliative care so that it is no longer a negative concept but instead shows the benefits it can bring.”

Up Close & Personal

TS  What is your favourite weekend activity?
JP  There’s nothing better than sitting back and watching a fantastic English premier league or Spanish la Liga soccer game with my son Xavier and my daughter Ciara.

TS  What’s the one thing about you few people know?
JP  That I worked as a painter painting apartments in Rome after I qualified as a physician. (By the way, I am not Italian. I am of Portuguese origin and was born and grew up in South Africa).

TS  What makes you laugh?
JP  I like looking at the absurd side of things; the Gary Larson or Monty Python perspective on life. I enjoy doing Monty Python impersonations. Some people who do not know Monty Python sometimes think I am weird. Mind you, some who do know Monty Python still think it’s weird.
What is your favourite movie?

My favourite movie is Zorba the Greek with Anthony Quinn. It has everything; from drama, tragedy and comedy to fantastic music and dancing. I hope someone does a remake of it soon. Dead Poets Society comes a close second, particularly its message of seizing the day (carpe diem). I recently saw another amazing movie called The Untouchables. It’s a French movie that challenges stereotypes.

What is your favorite time of day and why?

In Canada, it has been sunset. There is something mystical about it. My favourite colour is indigo blue and at sunset one often sees, just after the sun goes down, that gorgeous rich blue across the sky. In Africa my favourite time was noon because everything seemed to become very quiet, peaceful, restful, except for the odd sound of a cricket.

INNOVATIONS IN CLINICAL SERVICES

The Regional Geriatric and Community Intervention Program (RGCIP)

The Regional Geriatric and Community Intervention Program (RGCIP) aims to optimize the safety and independence of seniors while preventing hospitalizations. The integration of over 20 partner organizations has enabled this program to successfully implement and optimize an evidence-based model for Geriatric Emergency Management (GEM) in nine emergency departments (EDs) in the Champlain region. In addition, added resources provided by the RGCIP to community and specialized geriatric services, support expanded and urgent capacity for GEM referrals—an essential component of this program.

The RGCIP GEM model includes an emergency department electronic patient screening and identification process followed by a focused geriatric assessment performed by a specially trained GEM Nurse. As geriatric syndromes are identified, the GEM Nurse initiates early referral to specialized geriatric services and community supports for further assessment, intervention and in-home services, as indicated.

The GEM+ component comprises specialized geriatric services such as Geriatric Day Hospitals, Geriatric Assessment Outreach Teams and Geriatric Psychiatry Outreach services. It also includes expanded capacity for ED referrals in community support services such as the Going Home Program and Adult Day Programs. In this way the traditional division between emergency department care and community care is defeated and more continuous, coordinated care for at-risk seniors is achieved. Cross-sector collaboration is the focus of a Project Leadership Team, which convenes regularly to plan, evaluate and realize program activities.

Funded by the Ontario Ministry of Health and Long Term Care Aging at Home initiative, data-reporting includes volume, target and performance measures related to hospital and ED use. This program has been found to yield a relative risk reduction of subsequent ED
visit and hospital admission (30 days) of 25% respectively. ED length of stay is shorter than average for patients assessed by a GEM Nurse.

Since the program’s inception in 1995, the Division of Geriatrics has been instrumental in supporting the GEM model. The Division of Geriatrics plays a consultative role, assists with knowledge dissemination and through its linkages with the Regional Geriatric Program of Eastern Ontario, this program has grown to represent an innovative approach to bridging the gap between acute and community-based care. This ED / Community Care interface model enhances usual ED care for seniors, thus improving the care received and the safety, quality and durability of ED discharges for seniors at high risk for hospital admission. Of benefit to EDs and hospitals, this program prevents admissions, in turn impacting on Alternate Level of Care (ALC) stays and helping to alleviate hospital overcrowding.

The Ottawa Hospital CANVent Program

CANVent is an acronym for Canadian Alternatives in Non-invasive Ventilation. The clinic itself is housed at the Rehabilitation Centre but the Program is active throughout The Ottawa Hospital. The medical director is Dr. Douglas McKim and care is provided by the Charge Respiratory Therapist, Carole LeBlanc and by a number of expert Respiratory Therapists and Clinic Nurses. While the care of patients with Neuro-Respiratory complications has always been a responsibility of the Respiratory Rehabilitation Program, this component has grown tremendously to constitute at least half of the clinical care provided and has therefore evolved into the CANVent Program.

What is uniquely valuable about the CANVent Program is its central role within the Ottawa Hospital and the Community in identifying patients who are at risk of serious or life-threatening complications such as respiratory failure and working to prevent this. Through its work, the Program has raised the level of awareness among specialists in Internal Medicine, Respirology, Physical Medicine and Rehabilitation, Neurology and Critical Care, so that individuals with Neuromuscular Diseases (NMD), whether in hospital or the community are at high risk for respiratory complications and that education and non-invasive airway clearance strategies may significantly reduce or eliminate this risk. Patients have been referred from the Gatineau area as well as from great distances. These skills are not widely practised and indeed a number of patients travel from the Greater Toronto area to receive care in non-invasive airway management. These individuals have conditions, which include ALS, Muscular Dystrophy, Spinal Cord Injury, Multiple Sclerosis, and Post-Polio Syndrome.

The care that the CANVent Program provides offers critical support to patients in the community who would otherwise require Emergency visits or Critical Care admissions as a result of something as benign as an upper respiratory tract infection. Through an enhanced awareness, patients are identified, referred and evaluated for their risk for respiratory failure, sleep-related respiratory insufficiency and limitation in airway clearance. Simple but effective strategies are taught to patients and care givers in order to recognize illness, increase cough capacities and ensure adequate airway clearance. Patients are
taught to use a hand-held resuscitation bag or glossopharyngeal breathing to increase lung volumes above their own capacity (which is limited by muscle weakness or respiratory mechanics) in order to increase cough flows and to improve or maintain respiratory compliance. This skill alone may be sufficient to prevent a Critical Care admission for each patient at significant risk. Visual feedback is provided using the individual’s pulmonary function results to reinforce the effectiveness of the technique.

Individuals with significant neuro-respiratory limitation may in fact be experiencing respiratory failure when they are first evaluated or are at high risk for respiratory failure related to sleep. For patients with diaphragm weakness or respiratory muscle weakness, sleep and particularly REM sleep, may be associated with severe reductions in oxygen and elevation of carbon dioxide, which could be life-threatening. Due to the challenges and preferences of patients and caregivers, the CANVent Program provides entirely outpatient initiation of non-invasive ventilation (NIV), a treatment for which equivalent institutions require much more costly hospital admissions. Initiation of NIV is followed by overnight home oximetry, offered through the clinic as well as downloaded information from non-invasive ventilators to confirm adequate mechanical ventilation and make adjustments as required. This obviates the need for costly and inconvenient sleep studies in most patients. Most individuals are followed indefinitely through the CANVent Program. This support, combined with non-invasive airway clearance techniques, may be sufficient to prevent Critical Care admissions and prolonged invasive tracheostomy ventilation, which diminishes quality of life and contributes enormously to ICU costs while reducing access to Critical Care beds. Over 350 patients have benefitted from the entirely outpatient provision of NIV through the CANVent program.

In addition to the outpatient care provided, the CANVent Program works closely with inpatient units including the Critical Care areas in The Ottawa Hospital and the University of Ottawa Heart Institute in order to help transition patients from invasive endotracheal or tracheostomy ventilation. This may prevent discharge from Critical Care or hospital, to non-invasive ventilation which, due to its effectiveness but lesser complexity, may be critical in facilitating discharge back into the community. The CANVent Program has been integral to the development of weaning strategies in the Critical Care units to enable patients with spinal cord injury and others to leave the ICU and participate in life quality-enhancing rehabilitation. Patients with tracheostomy and non-invasive forms of ventilatory support are also assessed and recommendations and care are provided in hospital by the CANVent Program.

One of the unique skills and supports provided by the CANVent Program includes 24 hour NIV that includes nighttime mask ventilation and daytime NIV using a mouthpiece from a ventilator mounted to a patient’s wheelchair. A number of patients in Canada undergo unnecessary tracheostomy ventilation, which increases the complexity and cost of ventilation as well as potentially preventing a return to the community. In patients who simply need more than just nighttime ventilation but who are still able to speak, swallow safely and protect their airway tracheostomy, ventilation is rarely necessary. 24-hour NIV using a mouthpiece during daytime ventilation prevents unnecessary tracheostomy placement, unnecessary hospitalization and Critical Care admissions. Speech and swallowing abilities are enhanced and quality of life is improved particularly as the patient may remain at home.
Although only recently involved in research and the recipient of over $200,000 in grant support and a number of articles accepted for publication, the clinical experience and results of the clinical care have attracted over 25 invitations for International presentations and invitations to speak in almost every major city in Canada. Dr. McKim has chaired the Canadian Thoracic Society Clinical Assembly for Home Mechanical Ventilation and recently completed the first Canadian Guidelines on Home Mechanical Ventilation. The approaches to care pioneered by the CANVent Program have been adopted in a number of jurisdictions in Canada and Internationally. Medical Residents and Fellows in programs across Canada and some International trainees have requested training fellowships in the clinic in order to establish similarly successful services in their home institutions. While at the same time saving the Ontario health care system millions of dollars in Critical Care/Hospital/Sleep Laboratory costs, the CANVent Program continues to enhance the quality of life and survival of patients with Neuro-Respiratory illnesses in the Champlain Region and remains an example of academic, cost-effective and collaborative health care for a population of patients who might otherwise be forced to live in hospital using invasive ventilation and suffer from a seriously diminished level of health and wellness.


The Palliative Rehabilitation Program

To some, the concept of “palliative rehabilitation” may sound like an oxymoron as, unfortunately, too many health professionals and the public associate the concept of palliative only with end-of-life care (in the last few weeks or months of life). The World Health Organization and the American Society of Clinical Oncology have highlighted the importance of initiating a palliative care approach much earlier in the illness trajectory of someone with a life-threatening illness. This does not exclude treatments to control or even cure the disease; these can go hand-in-hand with palliation of symptoms, improvement of quality of life and goals of care discussions earlier in the illness trajectory. The Palliative Rehabilitation Program, a unique program that is receiving international attention, was designed specifically for those patients with progressive incurable illnesses but who still have many months of life remaining. Studies have shown that earlier rehabilitative interventions, focusing on exercise and nutritional rehabilitation while addressing symptoms and psychosocial well-being, provide inpatient benefits to patients.

The Palliative Rehabilitation Program is an 8-week, outpatient program that is hosted by Bruyère Continuing Care at the Élisabeth Bruyère Hospital. The program is designed for patients with advanced cancer, who are still mobile but who are experiencing a decrease in appetite, weight loss and loss of function. The team consists of an MD, Oncologist, RN, Social Worker, Occupational Therapist, Physiotherapist, and Dietician and the patients are seen individually by these 6 disciplines. Dedicated clinic and research personnel are a vital
part of the team. All team members assess the patient’s needs at an initial outpatient visit and the team develops a management plan that is tailor-made for the patient. Patients then return to the clinic twice a week for 8 weeks. The care includes an exercise program in one of the rehabilitation gyms at the Élisabeth Bruyère Hospital.

Dr. Martin Chasen, who is a member of the Department of Medicine and is both an oncologist and a palliative care physician, initiated the program. Dr. Chasen is the medical lead of the Palliative Rehabilitation program as well as the Medical Director of Palliative Care at The Ottawa Hospital Cancer Centre. The Élisabeth Bruyère Hospital provides funding for the nurse and allied health professionals in the team. The program also receives financial support from the Ottawa Regional Cancer Foundation and Dr. Chasen is the first incumbent of a newly established scientist position in Palliative Care Rehabilitation and Survivorship. The Bruyère Research Institute (BRI) in collaboration with the Division of Palliative Care hosts this position.

To date, a total of 110 patients have participated in the program since its inception in March of 2010. Evaluations of clinical outcomes across a number of clinical parameters are showing significant benefits to patients.

A pre versus post intervention analysis of the first 46 patients that have completed the program shows statistically significant improvements in the functional status, nutrition (measured by the Patient-Generated Subjective Global Assessment—PGSGA), coping thermometer and self-efficacy. There are also significant improvements in the multidimensional fatigue inventory and the six-minute walk (the mean distance increased from 364 to 431 metres). There is also improvement in several psychosocial outcomes.

The program is receiving international attention and there have already been invitations to present in countries such as Switzerland, Spain, Ireland and Israel. There have also been visits from clinicians in Denmark wanting to learn about this unique approach.

The American Society of Clinical Oncology has recently published a ground-breaking position paper on the role of palliative care within cancer care (Journal of Clinical Oncology 2012;30(8):880-887). It states:

“Provisional Clinical Opinion Based on strong evidence from a phase III TCT, patients with metastatic non-small-cell lung cancer should be offered concurrent palliative care and standard oncologic care at initial diagnosis. Substantial evidence demonstrates that palliative care—when combined with standard care or as the main focus of care—leads to better patient and caregiver outcomes. To this end, the Department of Medicine’s Palliative Rehabilitation Program, in collaboration with Bruyère Continuing Care, is at the vanguard of applying these principles and changing the perception that palliative care is only applicable in the last few days or weeks of life.”
The Cardiac Oncology Program

Cancer and the heart are becoming common terminology in both oncology and cardiology practices. With the evolution of systemic and targeted therapies in cancer treatment, it has become increasingly evident that damage to the heart may occur as a result of cancer treatment. Although cardiac toxicities associated with conventional chemotherapy are well known, the short- and long-term effects of targeted agents on the heart are less well understood.

The Cardiac Oncology Program was established at The Ottawa Hospital in 2008 by a multidisciplinary team consisting of a medical oncologist (Dr. Susan Dent), three cardiologists (Dr. Michele Turek, Dr. Christopher Johnson, Dr. Angeline Law) and a pharmacist (Sean Hopkins). This program encompasses three mandates: Clinical Service, Research, and Education. The aim of the clinical component of the program is the rapid assessment of cancer patients who are at risk of or have experienced cardiac toxicities from their cancer therapy. We are in the process of establishing bimonthly cardiac oncology rounds in order to facilitate the development of clinical care pathways for this patient population. The goal of the research component of the program is to develop a National cardiac oncology patient registry in order to facilitate the development of evidenced based guidelines for diagnosis and treatment of cardiac toxicity in cancer patients. In collaborating with basic scientists, we are in the process of establishing a translational research program that will evaluate the role of ‘novel’ biomarkers in predicting early signs of cardiac toxicity. The goal of the educational component of the program is to educate patients, practitioners, and health care professionals at various stages of training. The educational needs of trainees are currently met through clinical rotations supplemented by self directed learning activities and future efforts will focus on producing electronic learning resources. Future patient education activities will focus on web based information about the interactions between cancer therapies and the heart.

The Cardiac Oncology Program has made great strides since its inception. In October of 2008 the first multidisciplinary cardiac oncology clinic in Canada was established at The Ottawa Hospital. While the initial focus of this clinic pertained to women with early stage breast cancer exposed to chemotherapy +/- trastuzumab, the widespread adoption of targeted therapies in oncology has subsequently led to the referral of a much broader patient population. The clinic takes place three half days per months and to date over 450 patients have been evaluated. The clinic has gained recognition from several academic institutions across North America. This has led to the development of a 1-day preceptorship in Ottawa for health care professionals to facilitate the establishment of a cardiac oncology clinic in their respective centers.

In 2011, we established the Canadian Cardiac Oncology Network to bring together health care professionals interested in understanding how cancer therapies impact cardiac health. The Canadian Cardiac Oncology Network’s vision is to optimize cardiac care for cancer patients receiving potentially cardiotoxic therapies. The Network’s missions are to: 1) gain a better understanding of cardiac complications of oncology treatments, 2) develop early detection and intervention strategies to optimize cardiac health, and 3) optimize patient
outcomes by collaborating with allied healthcare professionals. To date, we have hosted two Canadian Cardiac Oncology Network conferences in Ottawa, with a growing interest from a number of health care providers including: oncologists, cardiologists, nurses, pharmacists, radiologists and basic scientists. The 3rd Annual Canadian Cardiac Oncology Network Conference will be held on June 20th-21st, 2013 at The Ottawa Convention Centre.

The Cardiac Oncology Program has also established the first Cardiac Oncology Research Fellowship at the University of Ottawa to commence in July 2013. This research fellowship is designed to provide trainees with the opportunity to increase their knowledge and expertise in the detection and treatment of cardiac complications related to systemic therapy (including chemotherapy and targeted agents). The program objectives include: 1) the development of an educational pathway to increase ‘health care provider’ awareness and understanding of the cardiac complications of cancer therapies; 2) the development of quality indicators for the assessment of the Cardiac Oncology Clinic; and 3) designing and implementing a pilot study to assess novel cardiac biomarkers to detect early cardiotoxicity in cancer patients exposed to cardiotoxic agents.

**Therapeutic Endoscopy Program**

The Therapeutic Endoscopy program at the Ottawa Hospital involves a group of four gastroenterologists trained in advanced endoscopic procedures. These advanced procedures are increasingly being used to not only diagnose diseases of the gastrointestinal system but also treat such diseases whereby in the past patients would undergo more invasive surgical procedure. In some cases these advanced endoscopic procedures are able to manage complex cases where a surgical procedure may not have been feasible or may have failed.

The Therapeutic Endoscopy group has also worked closely with oncologists and general surgeons in the management of patients with cancer, bariatric patients, as well as those with pancreato-biliary disease. This has been accomplished with the acquisition of several new technologies such as endoscopic ultrasound, balloon enteroscopy, choledocoscopy, and stone lithotripsy. The capability of these technologies has also been enhanced by working collaboratively with the Minimally Invasive Surgery group.

One such example includes the care of patients who have had previous gastric bypass surgery for the treatment of obesity. As a frequent consequence of obesity as well as the rapid weight loss that accompanies this procedure, gallstones may develop. While this complication is often easily treated with a minimally invasive technique involving the laproscopic removal of the gallbladder, there may be additional complications also arise from such gallstones. This includes the migration of these gallstones out of the gallbladder and into the common bile duct, thus possibly resulting in obstruction of the duct and infection.

Gallstones in the common bile duct are routinely treated by the Therapeutic Endoscopy group with Endoscopic Retrograde Cholangio-Pancreatography or ERCP. However,
when a patient has had a previous gastric bypass for obesity it is extremely difficult, if not impossible, for the endoscope to reach the common bile duct due to the altered anatomy caused by the this surgery. Although there are several described techniques in therapeutic endoscopy that have been described to remove gallstones from the bile duct in patients with prior gastric bypass; success is low and these techniques pose a significant risk to the patient. Similarly, despite technological advances in minimally invasive surgery, removal of these common bile duct stones can also be technically difficult and risky with surgery.

This clinical problem therefore lends itself to the opportunity for the Division of General Surgery and the Therapeutic Endoscopy group to collaborate in the management of common bile duct stones in a manner that is both safe and effective in the post-gastric bypass patient. Initially, at the time of laparoscopic surgical removal of the gallbladder for gallstones, the opportunity exists to place a tube through the abdominal wall directly into the patient’s stomach, which had been excluded (using staples) from endoscopic access at the time of the original bypass surgery.

There is now access to the excluded stomach through the surgically created tube that enters the abdominal wall of the patient and accesses the excluded stomach directly. The tract is then allowed to heal over a few weeks and it is then dilated to allow passage of the endoscope directly through the tube and into the excluded stomach. It now has direct access to the common bile duct, which was rendered inaccessible at the time of the initial bypass surgery. The endoscope can now easily and safely reach the common bile duct in order to remove the common bile duct gallstones. The endoscope is then withdrawn from the patient, as is the tube that was placed into the excluded stomach. The tract is then allowed to heal.

This type of collaborative procedure that involves both the Divisions of Gastroenterology and General Surgery are one of many examples where both technological advancements in endoscopic therapy as well as minimally invasive surgery have improved the care of patients at The Ottawa Hospital. Over the past five years the Therapeutic Endoscopy program has expanded its capabilities to perform this and many other procedures and service the region. A Therapeutic Endoscopy fellowship program has also been established 3 years ago to allow both Canadian and International trainees to gain expertise in these procedures and further advance the field.
AN INTERVIEW WITH
DR. GONZALO ALVAREZ
MD, MPH, FRCPC

CHILE—A three year old boy and his Spanish speaking parents stand in the airport terminal staring at the list of flights departing that day. It’s the mid 70’s, Chile is in the midst of a military coop and there are only four countries taking Chilean refugees. France, Sweden, Cuba and Canada - three of which have no available flights. So, with nothing more than three hundred dollars and a glimmer of hope, the Alvarez family takes the one and only flight. Destined for Ottawa. To embark on a new life. To start over.

“My grandfather gave us the money for the flights,” he recalls. “My parents told him to wait 3 months, tell anybody who asks that we’re going on vacation then sell everything. That’s how we’ll pay you back”. As he recounts the story of his family’s immigration to Canada, the help they received from the church and the struggles to rebuild, his voice becomes increasingly passionate. A telling clue that the extraordinary challenges his family faced during his early years have shaped the character and spirit of who Dr. Gonzalo Alvarez is today.

Forty some years later it comes as no surprise that Dr. Alvarez is passionate about giving back to those in need. His commitment and dedication to research and to improving the health of people suffering with tuberculosis in disadvantaged populations like in KwaZulu Natal, South Africa and in our own backyard in Nunavut, is perhaps a testament to his own family’s strength and their perseverance to carve out a better life.

His introduction to Global Health began as a medical student when he was given the opportunity to travel to Malawi, a tiny country in Africa where it took half a day for an ambulance to reach a person in need. Seeing first hand the challenges of providing medical care in isolated, impoverished areas changed the course of his life and career.

“Gonzalo’s expertise in tuberculosis is one thing, but his good nature, collegiality, optimism, hard work and perseverance are the reasons for his success in research, and in the public health of this old disease now returned. It is a pleasure to share his enthusiasm, learn from his internationalism, and watch his successes.”

— Dr. Bill Cameron
Division of Infectious Diseases

In the ten years that Gonzalo has been traveling to South Africa, what he’s experienced has had a tremendous impact on him. At Edendale hospital in KwaZulu Natal, 50 to 60 people (mostly young) were dying monthly of TB, a finding
Dr. Gonzalo Alvarez plays soccer everywhere he goes and makes a point of playing with the people that he's with. In South Africa he played every other day, even sometimes with patients and also on an organized team in the village of Malawi.
that he reported in a study published in the International Journal of TB and Lung Diseases. He refers to the epidemic as insane, “To this day, this experience continues to motivate me to strive to find solutions to these massive challenges.” During his time in South Africa he developed programs in sputum induction for earlier diagnosis, studied the early diagnosis of TB in HIV and also studied how to better identify people who need to be retreated for TB.

Most recently, Dr. Alvarez and his colleagues published findings in the *International Journal of TB and Lung Disease*. Findings showed that in an HIV infected population suspected of having tuberculosis, using an easily available blood test (C reactive protein), a negative result may rule out active TB. Further development of this clinical decision rule may allow doctors in places like KwaZulu Natal, where the disease is rampant, to quickly screen the hundreds of patients who line up daily and focus on those that truly need to be seen. “I would see people until I barely had enough energy to drive myself home and then I’d come back the next day and people would be sleeping in line. What we wanted to be able to do is to have a simple point of care test that could help the staff rule out TB in low probability people presenting to the clinic for TB work up, allowing us to focus resources on patients that had a much higher risk of having TB.”

Gonzalo feels that his personal strength is the ability to listen to the people that he serves, and to learn from them, to come up with scientific questions with them. It is only by becoming a student of these communities that he believes he can really contribute. “It’s often the ivory tower effect where we’re sitting here with other researchers coming up with questions, but I’m more of a guy who likes to get there and go on the front line and figure it out.”

But getting to the front line is not easy. Whether it is in geographically remote places like Nunavut where access in the winter is only by plane, or in South Africa where to this day racial isolation is still present, “There are so many challenges and barriers to gaining access to these populations. Progress is slow. And to some that may be frustrating and to many it’s slow enough that they don’t get involved. But I’m in it for the long haul.”

He’s humble about his contributions and feels incredibly privileged to have this job. He’s quick to point out that mentors like Bill Cameron, who first sent him to South Africa, and the late Peter MacLeod, paved the way for him. “Peter says to me ‘Gonzalo I’m retiring and I want to give you this because I know you’re going to be able to do something up there’. And he gives me the respirology consultant position in Nunavut—he paved the way for me”. So, armed with the knowledge and experience gained in South Africa he heads to Nunavut, to work with Inuit who are also fighting a battle with TB.

Gonzalo describes himself as ‘a simple average guy who works hard.’ Combine the extensive media coverage and the multiple peer-reviewed grants he has received for his TAIMA TB program and it’s quite clear that some of that hard work has paid off. “I’ve been on a pretty fast moving train this year, it’s been incredible. I’ve been pretty lucky but that’s not to say that I haven’t had four or five years where not much was happening. This business is a tough one. There was a point when I thought ‘if you can’t get this plane to come off the tarmac then maybe you should be doing something else.”’
Despite the recent success, when asked what he is most proud of he smiles from ear to ear and points to a photo of his wife Maryse and their three children, “I’m most proud of the trajectory of my family and my family tree. I’m most proud of my parents and the opportunities that they gave us by immigrating to Canada. Every decision I’ve made in my career is based on my family – that’s the way I define myself. It starts from home and I would give everything else up, because without a strong family unit you can’t lift…you can’t do other things…you can’t help other groups.” Clearly his family is his compass and in 2006 he brought them to South Africa to live for a year, explaining that “families grow together, and when you experience things together you become more of a unit.”

Gonzalo is, at present, in the writing phase of the TAIMA TB program and hopes to get a couple of papers published to share the knowledge gained by the program. He is also currently deploying a new CIHR funded knowledge translation grant by going to two other communities in Nunavut to see if the work can translate at that level. He has also deployed another CIHR funded study in Nunavut this year using a new state of the art diagnostic test to diagnose active TB that can provide a result in 2 hours instead of weeks to months using the current system.

“I owe a lot...a lot...a lot to this country for giving me the opportunity to do what I’ve done today because it’s clear in going home (Chile) after all this time and discussing this with my relatives, that based on the socioeconomic group we were in, that I would not have been able to go to medical school no matter how smart I was.”

Up Close & Personal

**TS: What actor would play you in a movie about your life?**
**GA:** I don’t know... I’m not good in the looks department so that’s why I can’t line myself up with any of these good-looking guys in the movies. I’m certainly not as suave as Dr. Amjadi who will be in a feature film any day now (referring to Dr. Kayvan Amjadi, profiled in the 2011-11 Annual Report).

**TS:** What are your favourite movies, sports heroes, bands or individual musicians?
**GA:** I love Bob Marley, he is one of my favourite musicians. His music is like fine wine or comfortable food. If ever I’m having a rough time, I throw that on and I love it. He’s a legend.
TS: If you could meet with anyone in the world for one day, who would it be? Why?
GA: My hero, I would meet with Madiba (Nelson Mandela)

TS: What is your favorite time of day and why?
GA: My morning runs are just absolutely brilliant. I run to feel good and because I would really like to be doing exercise and stuff well into my 70’s!

TS: What is your idea of a perfect day?
GA: A traditional Chilean barbecue with my family in Viña del Mar (Chilean coastal town)

GLOBAL HEALTH

The Department of Medicine continues to make significant contributions to Global Health, addressing the social determinants of health through our global health-related activities locally and internationally. The Department of Medicine, through medical education research grants from the University of Ottawa Medical Associates, has been a long-time supporter of establishing the evidence for curriculum and resource development for our trainees and our faculty undertaking international global health activities. New this year is funding to design and implement a formal evaluation of the comprehensive pre-departure training program that we have designed for undergraduate and postgraduate trainees. Starting this year, this training will be supplemented by evidenced-based peer-reviewed interactive online modules, freely accessible through the ACTION Global Health Network website (www.actionglobalhealth.ca). These modules address both CanMeds and Global Health Competencies, of importance for all trainees.

Anne McCarthy MD, FRCP C, DTMH
Professor of Medicine
Director, Office of Global Health, Faculty of Medicine, University of Ottawa
MEDICAL EDUCATION
Anchored by our Values

Tied to our Vision

Anchored by our Values
The Department of Medicine in collaborative partnership with the University of Ottawa Faculty of Medicine Academy for Innovation in Medical Education/Skills and Simulation Centre (AIME/ uOSSC), and continues to demonstrate support for, and success in, medical education.

The education leadership team includes a Vice-Chair Education (Dr. Erin Keely) and four directors (Undergraduate Dr. Heather Clark, Post-graduate Dr. Stephanie Hoar, Continuing Professional Education Dr. Heather Lochnan, Research and Development Dr. Sue Humphrey-Murto).

The Department of Medicine, primarily through the University of Ottawa Medical Associates, provides over $4 million annually to support teaching activities, leadership roles within the education portfolio, career educator awards, research/innovation grants and administration positions. Our success in education would not be possible without this strong financial commitment to medical education.

LEADERSHIP AND EXCELLENCE IN UNDERGRADUATE EDUCATION

Members in the Department of Medicine are deeply committed to quality undergraduate education. We provided approximately 30% of all undergraduate teaching hours and ePortfolio coaches within the Faculty of Medicine in 2011–2012.
Our members hold key leadership roles within the Faculty of Medicine including:

Vice Dean Undergraduate Medical Education: Dr. Melissa Forgie
Acting Vice Dean Postgraduate Medical Education: Dr. Jolanta Karpinski
Assistant Dean Student Affairs: Dr. Louise Laramée
Director of Curricular Delivery: Dr. Robert Bell
Pre-clerkship Director Anglophone stream: Dr. Heather MacLean
Director of Clinical Skills – Anglophone stream: Dr. Barbara Power
Director of Clinical Skills- Francophone stream: Dr. Louise Laramée
Lead for ePortfolio: Dr. Pippa Hall
Director, Distinguished Teachers Program: Dr. Robert Bell

The recently launched Distinguished Teachers Program within the Faculty of Medicine, is a two year program that recognizes teaching excellence and provides a community of teachers ongoing mentorship, enhancement of teaching skills, and opportunity of scholarship. The Department of Medicine has supported three of their outstanding teachers in the inaugural year of the program and five more will be joining this fall.

INNOVATIONS IN POSTGRADUATE EDUCATION

Our core Internal Medicine training program, lead by Dr. Cathy Code and her Associate Program Directors (Dr. Chris Johnston, Dr. Jim Nishikawa) is responsible for 70 trainees at the PGY-1 through PGY-3 levels. Under their leadership, our program received recommendation from the External Review Committee for full accreditation from the Royal College of Physicians and Surgeons of Canada. Strengths highlighted from the reviewers included: strong leadership, collegiality, the use of iPad technology and continued strong emphasis on research.

Several innovations were implemented this year within the Core Internal Medicine Training Program including a feedback tool for on-call professionalism issues and incorporation of simulation centre training into academic half days. Fifty residents participated in our first procedures OSCE, lead by Dr. Debra Pugh. The 5 station OSCE provided formative feedback on not just the ability to do technical procedures but also the collaboration, communication skills and medical knowledge required for effective patient care.

CONTINUING PROFESSIONAL DEVELOPMENT OF OUR FACULTY

Through the leadership of Dr. Heather Lochnan the Department of Medicine is revitalizing its Departmental Grand Rounds. Plans include increasing resident organized rounds and assigning semi annual rounds to address issues of Quality and Safety and other departmental priorities.
Highlights of Grand Rounds in 2011-12 included the inaugural Medical Education Lectureship named in honour of Dr. Ian Hart. Dr. Hart, who passed away in August 2012 was a recognized international leader in medical education, mentor to many within the department and an outstanding clinician. He founded the Canadian Association of Medical Education (CAME), The Ottawa Conference for Medical Education and was instrumental in bringing the Objective Structured Clinical Examination (OSCE) to North America. Dr. Ian Bowmer, from Memorial University of Newfoundland and the Medical Council of Canada provided a stimulating lecture entitled “International Medical Graduates—a National Resource; are we assessing the right competencies?”

Dr. Fred Hafferty from the Mayo Clinic, presented “Professionalism and the Hidden Curriculum: Contemporary Challenges” for the second annual Dr. John Seely Memorial Lecture. This lectureship is to honor the memory of Dr. Seely who championed the Professionalism role at the Royal College for the CanMEDs framework and was recognized nationally and internationally for his work.

RECOGNITION OF OUTSTANDING FACULTY

Members of the Department of Medicine are recognized both locally and nationally for their excellence in medical education.

The Meridith Marks Educator Award for Innovation and Scholarship in Medical Education, recognizing excellence and commitment to scholarship in medical education, was awarded to Dr. Nancy Dudek from the Division of Physical Medicine and Rehabilitation. Nancy has established herself as a national expert in evaluation and feedback through her many presentations and publications in high impact journals such as Academic Medicine. Those who know Nancy know her to be a loyal friend, a vocal advocate for her patients and colleagues and passionate about all aspects of her work. All of these qualities were ones that her mentor, Meridith herself, also so vibrantly demonstrated. See page 134 for a tribute to Dr. Meridith Marks.

Dr. Loree Boyle received the Department of Medicine Clinical Teaching Choice Award as nominated by the residents. Dr. Debra Pugh received the Teaching Skills Attainment Award from the Faculty of Medicine in recognition for her commitment to the development of her teaching skills.

The following members of our Department received national recognition for their contributions to education:

- D. Sue Dojeiji 2012 Canadian Association of Medical Education CAME Merit Award
- Dr. Robert Bell Canadian Society of Nephrology Educator of the Year Award
- Dr. Melanie Pratt Canadian Dermatology Association Resident and Fellows Excellence in Teaching Clinical Award
RESEARCH AND DEVELOPMENT IN MEDICAL EDUCATION

The Department of Medicine supports faculty members with career educator awards and provides $100K in research funding. Areas of focus within medical education include evaluation, outreach, global health and professionalism.

This year's successful Department of Medicine Education Research Grant applications were:

- Outcomes of UGME international global health electives: a multiphase, mixed-methods evaluation of student experiences (Dr. Anne McCarthy PI)
- Evaluating the Resident Experience: The Learning Environment for Professionalism Survey (LEP) (Dr. Anna Byszewski PI)
- The accuracy of first impression ratings in an OSCE station (Dr. Tim Wood PI)
- Impact of Resident Duty Hour Limits on the Professional Learning Environment of Residents and Faculty in the Department of Medicine; A Pre-Post Evaluation Using Concept Mapping (Dr. Heather Lochnan PI)
- Regional Education Activities for Community Hospitals (Dr. Pierre Cardinal PI)
- The Mini-Mini Clinical Evaluation Exercise - a shorter tool for competency based assessment in the work place (Dr. Susan Humphrey PI)

Our members are successful in disseminating their scholarly work at the local, national and international level.

Key publications include:


Hall P, Byszewski A, Sutherland S, Stodel EJ. Developing a sustainable electronic portfolio (ePortfolio) program that fosters reflective practice and incorporates CanMEDS competencies into the undergraduate medical curriculum. Acad Med 2012; 87:744-51


Karpinski J, Marks M. Rewarding development of teaching skills and educational scholarship. Med Educ 2011; 45:1150


WHAT’S NEXT?

The Department of Medicine will continue to support excellence and innovation in medical education through financial support, effective leadership and collaboration with the Faculty of Medicine, Academy for Innovation in Medical Education (AIME), hospital administration and regional partners. We are actively reviewing our in-house call policy and scheduling in anticipation of restricted residency duty hours. This provides an opportunity to carefully identify educational objectives and effective teaching strategies for on-call learning.

The opportunity for further integration of technology into the education of our medical students, postgraduate trainees and faculty will continue to be developed. The Ottawa Hospital has implemented iPads for delivery of clinical care. These are an integral part of the workflow for physicians and will now be available to clinical clerks during their Internal Medicine rotation. We will identify and/or develop learning resources for the iPADs to enhance education alongside clinical care.

Erin Keely MD FRCPC
Professor of Medicine
Vice-Chair, Medical Education
Outside of the hospital setting, Dr. Bob Bell is most comfortable running. Running outside in the summer, or on a treadmill in the winter, it’s an essential part of his routine and right now is preparing him for an upcoming marathon in Philadelphia.
Dr. Bob Bell has a special kind of energy. A powerfully calm energy that shines in his eyes and overtakes his expressions when he talks about teaching. In the world of education, as within many professions, the difference between being good and being great is loving what you do. By all accounts Dr. Bell is a great educator.

Like most medical teachers, he has no formal training in teaching and is completely self-taught. “It’s just my interest in teaching—my love of teaching—it’s what I enjoy the most. That’s all I bring to it.” Well that, and the sheer number of hours he’s clocked instructing medical students over his 20+ year career. According to Malcolm Gladwell, all experts become experts after 10,000 hours of doing anything. “I don’t know if I’ve completed 10,000 hours of teaching but I do know that you get better and better the more you do it. Any expertise I have is just from doing a lot of it.”

Despite his modest opinion about himself, he is considered by his colleagues to be the guru of innovations and state-of-the-art teaching methodologies. He has the ability to impart enthusiasm and connect with students in an unparalleled magical way of teaching.

Boredom being the enemy of education, Bob keeps his lectures entertaining. He engages students with legendary PowerPoint presentations, the use of props, and other interactive teaching methods—not exactly the ‘slot it in’ approach you may expect from someone with a burdened schedule and heavy clinical responsibilities.

“Bob is a true teacher at heart, dedicated and innovative, students love him, as attested in their high evaluations! I have had the honour to observe Bob in action, as I have asked him to do a session in the Link block for Professionalism, several years in a row now. It is a skit in true “Bob” style, for the medical students as they transition from the classroom to clerkship, introducing them to the rigors of ward work, donning the white coat, stethoscope and other paraphernalia, and all that comes with being a clerk on the ward. It is done with great humour, yet tastefully and it is always the high point of the session for the students.”

— Dr. Anna Byszewski
Division of Geriatrics
Bob recalls a time back in the early 90’s when the Division of Nephrology was facing a manpower crisis. At that time, he was responsible for all renal transplantation patients at the General Campus and there was an ever-increasing load of clinical, administrative and teaching activities. “I remember thinking, ‘once we get through this I’m going to devote time to doing what I really like’. And although I really like clinical work, I love teaching. I consciously decided that if the opportunities presented themselves at the Faculty I would take them.” And he did.

One of the roles that Bob is best known for is Director of the Distinguished Teachers Program (DTP), a role he was chosen for in 2002 by Dr. Geneviève Moineau, then Associate Dean UGME. The goal of this innovative 2-year program is to select and recognize excellent teachers, to provide them with extensive development and teaching opportunities as well as invite them to become part of a community of dedicated teachers within the Faculty. Having been the recipient of multiple Awards for Excellence in both leadership and medical education from the Faculty of Medicine, Dr. Bell was a clear and obvious choice.

“It’s a privilege to be able to do this, it’s just amazing to be working with and collaborating with the top teachers in our Faculty. The energy level and the passion for teaching is amazing.” Dr. Bell is excited about the large number of Department of Medicine members who are currently enrolled in this program and who will return as part of a network of passionate teachers—people that are innovating in education and people who want to apply scholarship to their teaching. “I never really thought that I would have a

“In developing the Distinguished Teacher Program, as Associate Dean for Undergraduate Medical Education, it was important to identify a director who was the epitome of excellence in teaching. The clear choice was Dr. Bob Bell. He is the one the students appreciate the most. He has the ability to simplify concepts so that everyone can understand, while telling jokes and complimenting everyone around him. He is the one, when he is teaching, that the francophone students sneak in to hear when he gives his “Star Wars” talk. He is the one that students, time and time again, ask to be the honorary keynote at graduation or at professionalism ceremonies. And I, as a teacher, continue to learn from him, on how to put the “POW” in my PowerPoints. Dr Bob Bell is definitely the teacher of teachers!”

— Geneviève Moineau
Vice-President, Education; Secretary to CACMS
great deal of impact on the future of this Department but through my role as the head of the DTP I can”.

The Department of Medicine’s and the Division of Nephrology’s support for teaching is exceptionally strong, including the direct support from the Department Head for things like the Distinguished Teacher’s Program. “Although we don’t talk about it, there’s matching funds to protect the time of these people so that they can teach and create educational innovations in a scholarly way and that comes 50/50 from the Faculty and the Department. Some Departments find that challenging but the Department of Medicine realizes its importance.”

While Bob is an exceptional leader, he must also be recognized as an innovator. He is dedicated to finding better ways to teach students, to improve the delivery of content and to create better tools. This makes his lesser-known role of Director of Curriculum Delivery for the undergrad program perfect for him. As the title implies, it concentrates less on content and more on style. It focuses on how people teach, and how they can adapt if their current teaching style is not working. As a component of this role, he provides one-on-one guidance with physician teachers to improve their delivery and helps them identify which teaching approach to use based on a given situation. “Next week, I’m meeting with someone from ENT to talk about a different way of doing a teaching session—doing it as team based learning instead of a lecture.”

Most recently, Dr. Bell and colleagues held a workshop at the Royal College’s 2013 International Conference on Residency Education in the use of technology in medical education. And lastly, you can’t mention Bob Bell’s name without someone referring to his infamous ‘Putting the POW in PowerPoint’ workshops. What started out in 1997 as a curiosity and a method of ‘cleaning up his handwriting’ has since turned into a three times a year maximum capacity Faculty Development session.

So where are Dr. Bob Bell and his innovative teaching methods headed? He hopes to disseminate them in a scholarly way by publishing them on line. “You don’t need to publish everything in a major education journal, you can disseminate your innovations in other ways. I also hope to attend more national and international meetings on medical education—something I haven’t really done yet. I’ve kept things pretty local as you can tell, because if you go on line and try to find me, you can’t.”
Up Close & Personal

TS: What is your favourite weekend activity?
BB: Bicycling. We live in Orleans so when the snow is gone we go along the bike paths from Orleans to the market. Have a cup of coffee in the market, maybe get some stuff for dinner there and bicycle back.

TS: What makes you laugh?
BB: Many things, television shows in particular. For example Fawlty Towers and Modern Family.

TS: What are you most proud of?
BB: I’m most proud of my family, my wife and my two kids, they’re amazing.

TS: What’s the one thing about you few people know?
BB: That when I was working in the summer during medical school I was tying rebar together, I’m very good at it. It was to make concrete beams. I went to medical school in Edmonton and I worked in Calgary during the summers where my family lived. I’m very good at it still to this day. It’s not exactly fun.

TS: What are your favourite movies?
BB: The Adventures of Robin Hood (1938 in technicolour)...it’s very good, I highly recommend it. Laurence of Arabia, and more recently, Midnight in Paris.
MEDICAL RESEARCH
Anchored by our Values

Tied to our Vision

Anchored by our Values
Research is fundamental to the mission of the Department of Medicine, which strives to create an environment that builds upon its research strengths, and that enables young investigators to establish world-class independent research programs. In 2011-12, many success stories exemplified this philosophy.

Research conducted within the Department of Medicine constitutes over 70% of the clinical research conducted within The Ottawa Hospital through the Ottawa Hospital Research Institute (OHRI). The Department is thereby proud to note that the OHRI is now recognized as one of Canada’s leading hospital research institutes, ranking 6th in the country for total research funding in 2009 to 2010, with growth in revenues from $88 M per year to $105 M per year from 2008 to 2010.

In the past year, the Department of Medicine continued to directly support its members by allocating salary awards for research, as well as operating grants for pilot projects, translational research, priority research grants, and fellowship awards. These unique awards, which comprise approximately $5M in annual research funding from the Department, fostered growth in key research areas, including Thrombosis, Respirology, Infectious Diseases, Nephrology and others. We are especially grateful to the members of the Research Advisory Committee (RAC) who met regularly throughout the year to implement these award programs and adjudicate the peer review process.

In 2011-12, the Department of Medicine (through the RAC) established a research mentorship program for new investigators. The program involves formal meetings between senior
researchers and promising young investigators to ensure that these scientists have every opportunity to develop their research ideas and eventually put them into practice to improve the health of their patients. In the coming year, the Department intends to expand this program to include mentorship of individuals at other stages in their research careers.

The Department of Medicine is particularly proud to note that one of its own researchers, Shawn Aaron (Respirology), was awarded the prestigious Dr. Michel Chrétien Researcher of the Year Award from the OHRI for his groundbreaking clinical studies on cystic fibrosis. Dr. Aaron received this award at the annual OHRI Gala Dinner in November 2011.

As you will read below, many highlights occurred in 2011-12 that exemplify the Department’s growth in research strength. One of the major events of the year was the opening of the Centre for Practice Changing Research (CPCR), which will enable more than 300 clinicians, researchers and staff in The Ottawa Hospital, CHEO and the University of Ottawa to work together to conduct clinical studies that will directly impact patient care. Accordingly, many researchers in the Department of Medicine have located to the CPCR, including members of the Division of Hematology (at the Ottawa Blood Disease Centre, housed in the CPCR). In the coming years, we can expect this consolidation of researchers to enhance training, collaboration and discovery.

Kevin Burns, MD FRCPC
Professor of Medicine
Vice-Chair, Research
“When Geny and I were in university we got dressed up to go to a Halloween party. Geny puts on my hockey equipment—she was a goalie. I was dressed in a tutu, earrings and had all her makeup on and stuff. So we arrive at the party and as we’re parking the car the cops pull up. One of them rolls down the window and starts talking to me. Then he turns to his partner and says ‘see I told you it was a guy—you owe me ten bucks’.”

Seated in a black leather armchair, sporting a well-cut navy suit and crisp white shirt, Dr. Rob Beanlands graciously shares this amusing story from his past. The scene he describes is in sharp contrast to the man occupying the corner office. Rob—never Robert—is the founding Director of the National Cardiac PET Centre, holds a University of Ottawa Research Chair in Cardiovascular Imaging Research, has 170 publications in peer-reviewed journals and has held $242.2 million in peer-reviewed grants. He is also PI and/or Co-PI on three other grants, totaling $171 million for an astonishing career grand total of $414 million in research funding. In addition to this, in April of 2012 he assumed the role of Chief of the Division of Cardiology.

Today is Monday—his swing day. He might see the odd patient or deal with administration issues. It’s the first day of an 80+ hour workweek and admittedly, he is not the poster boy for a healthy work/life balance. “When I told Geny about this interview and we read that question we both burst out laughing.” However, there seems to be some debate about that point. Rob comments that he doesn’t always have the best work/life balance, yet family is and always has been his number one priority. He will often fly halfway around the world to see his daughter Rachelle’s soccer game—a game she may not even play in, as a backup goalkeeper! He also makes sure to have dinner with his eldest daughter, Angela, just about every time he’s in the Toronto area on business, as she lives there while attending university. He’s in hockey pools (and plays hockey) with his son Nolan—an interest they both share.

Like many of his colleagues, Dr. Beanlands distributes his time between medical education, administration and research. He is one of the Department’s leading researchers, spending approximately 50% of his work week collaborating on multi-million dollar, multi-centre grants such as the Cardiovascular PET Molecular Imaging Research Program and the Canadian Atherosclerosis Imaging Network, both funded by the Canada Foundation for Innovation (CFI). Grants like these have helped establish Rob Beanlands, and by association, the University of Ottawa Heart Institute (UOHI) as an international research leader in non-invasive molecular imaging. In the world of medical research, reputations like this don’t come easy; in fact, according to Rob, they take the support of great leaders, strong collaborations and sheer determination. Fortunately for Rob, Ottawa has provided him with all of that.
Dr. Rob Beanlands loves to have a good time and is in his element when hosting his annual summer party for colleagues and staff.
Rewind to 1992 when Rob returned to Ottawa after completing his post grad studies in Toronto and a Nuclear Cardiology research fellowship in Michigan. At that time, the nation’s capital did not have a PET program - but what they did have was great leadership. “What drew me back was the attitude of the institute—to always be at the cutting edge, to be at the forefront. And the willingness to take chances on things and to get behind things they thought were important, in spite of potential upfront costs.”

With the support and mentorship of a few key players like Drs. Wilbert Keon, Lyall Higginson and Terry Ruddy, Rob began to build the infrastructure for a new PET program here in Ottawa. He developed a collaboration with Hamilton, which allowed him the use of their PET scanner. He visited other sites that already had well-established PET programs, like Montreal Neurological, and he hired a technologist (May Aung) and postdoctoral associate who back the PET physicist (Rob deKemp). Together, that small group of three gave birth to Ottawa’s first PET unit.

By the end of 1994, after having successfully negotiating with Siemens, the program had their own PET camera. In the coming years, this low-end camera would be replaced with a better model and the infrastructure would continue to expand with the addition of a radiochemist (Jean DaSilva) and a research manager (Linda Garrard). The fellowship program began to attract trainees from all over the world. “It’s like the fly wheel thing—once you start the momentum going you just keep building and it just keeps going and getting faster.”

Then, in 2002, under Rob’s guidance, the National Cardiac PET Centre opened at the University of Ottawa Heart Institute. It is still to this day the only Positron Emission Tomography facility in Canada and one of a handful worldwide dedicated to Cardiovascular Disease. This unique centre allows physicians and researchers to collaborate with other hospitals, research facilities and academic institutions to improve the application, tools and training involved in cardiac imaging. It is Rob’s greatest achievement to date.

After having established a solid foundation in PET imaging built on that first CFI investment, further support in 2007 allowed them to purchase the ‘Lamborghini’ of all PET cameras and a micro PET system, which was needed to test the tracers they were developing on animal models. All of this, Rob insists, was essential to move to the next stage, to bring the program to a really competitive level from a research perspective and to develop a uniquely Canadian Cardiovascular PET Molecular Imaging Program. This grant and parallel developments in CT led by Ben Chow, catapulted the Centre onto the world’s stage. With that CFI grant wrapping up and another one in for review, the Centre...
hopes to be adding a PET-MR device to their current state of the art technology portfolio.

Although it would seem that the success of the Program has been based primarily on the acquisition of new technology, it is the people who have made the biggest difference. The real crux for the Centre is finding out how this new technology improves outcomes, quality of life and cost of health care for patients. The grant that will establish this is currently at the mid-way point of a six-year support period and as Rob is quick to point out, utilizes randomized trials, a unique approach to this type of study.

What motivates Rob is people. “I love the gratitude patients show when you do your best for them. I also very much enjoy helping others especially younger colleagues and students succeed.” What motivates Rob as a researcher is a strong desire to be the very best in the world and to someday be placed in the same category as facilities in the US like the Mayo Clinic and Hopkins. Well that and an innate curiosity. Within the context of his role as the newly appointed Division Head he is ready to tackle this goal. To get there he hopes to incorporate his 3P principle. It is a philosophy based on Patients—to create a patients-first culture that embraces the entire academic spectrum. People—investing in the scholarly work and leadership development of the members of his division and encouraging them to be responsible for cardiovascular health in the entire region. And Partners—improving relationships and aligning priorities to remove the ‘what’s in it for me’ mentality.

“I think people sometimes get intimidated by Rob’s determination, expectations and his senior role in the organization—but he’s one of the most down-to-earth and kind-hearted people I’ve ever met!”
— Carrie Barlow
Administrative Assistant to Rob Beanlands

‘I went into my daughter’s classroom when she was eleven years old and watched her in action. This little guy was giving a speech and she was kind of encouraging him to not be shy and tell his best story—she was trying to help everybody; she was such a positive influence. I was so impressed that I pulled her aside afterwards and said ‘When I grow up I want to be just like you’. Given everything that Rob has accomplished so far and is in the process of accomplishing I think it’s safe to say that Rachelle’s Dad is in fact growing up to be just like her.
### Up Close & Personal

<table>
<thead>
<tr>
<th>TS: What makes you laugh?</th>
<th>RB: My kids, my wife Geny and a lot of my Colleagues—people make me laugh. Lyall Higginson always has a great joke in clinic, he makes me laugh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS: What's the one thing about you that few people know?</td>
<td>RB: I like lists. I have my top 40 favorite songs listed out on my iPhone and my son and I do this thing where we ask each other what our top 5 favorite things are.</td>
</tr>
<tr>
<td>TS: If you could only eat three foods a day, what would they be?</td>
<td>RB: Scallops, Raspberries and Milk Chocolate.</td>
</tr>
<tr>
<td>TS: If you could trade places with anyone in the world for one day, who would it be and why?</td>
<td>RB: I think it would be fun to be Geny for a day. I think Geny is amazing and I think it would be interesting to see our world from her perspective.</td>
</tr>
<tr>
<td>TS: If you could be a super hero, who would it be?</td>
<td>RB: Easy one: Spiderman because he has radioactive blood.</td>
</tr>
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INTERNAL RESEARCH FUNDING

In 2011–2012 the Department of Medicine ran two competitions for internal research funding and proudly granted awards to its members in the following categories:

Salary Awards
Dr. Jonathan Angel (Infectious Diseases) received a Mid-Career Research Salary Award.

Research Priority Grants
Drs. Carl van Walraven and Ray Saginur (General Internal Medicine, and Infectious Diseases, respectively) received a Clinical Priority Research Award for their grant entitled: “The Ottawa Hospital Outpatient Bacteremia (TOHOB) Study: The epidemiology and outcomes of outpatient bacteremias.”

Developmental Research Grants
Drs. Shirley Bush and Peter Lawlor (Palliative Care) were awarded a Developmental Grant entitled: “The preventative role of exogenous melatonin administration in patients with advanced cancer who are high risk of delirium: a feasibility study prior to a larger randomized controlled trial.”

Dr. Curtis Cooper (Infectious Diseases) in collaboration with Drs. Alexander Sorisky, Teik Chye Ooi and Mary-Anne Doyle (Endocrinology & Metabolism) was awarded a Developmental Grant entitled: “Evaluation of the influence of Hepatitis C Protease Inhibitor-Containing Antiviral therapy on insulin resistance and lipid profile.”

Dr. Dowlatshahi (Neurology) was awarded a Developmental Grant entitled: “Predicting early intracerebral hemorrhage using the dynamic CT-angiography spot sign.”

Dr. Todd Fairhead (Nephrology) was awarded a Developmental Grant entitled: “Immunity in patients receiving extensive haemodialysis versus conventional in-home haemodialysis.”

Dr. Marc Rodger (Hematology) was awarded a Developmental Research Grant entitled “Pulmonary Embolism Ambulatory Oxygen Saturation Correlation Study”

Dr. Alan Tinmouth (Hematology) was awarded a Developmental Grant entitled: “Safety and efficacy of a therapeutic platelet transfusion strategy in patients receiving outpatient-based care for myelodysplastic syndrome/acute myeloid leukemia.”
Developmental Team Grant

Dr. Avi Chatterjee (Gastroenterology) received a Developmental Team Grant to establish the Ottawa Pancreatic Cancer Research Group (OPCRG).

Research Fellowship Awards

Dr. Dylan Blacquiere (Neurology) received a 1 year research fellowship for a project entitled “Assessments of delays in presentation to stroke prevention clinics after TIA or minor stroke: identifying opportunities for system change”.

Dr. Mary-Anne Doyle (Endocrinology & Metabolism) received a 2-year research fellowship for a project entitled “Management for Endocrine Disorders in Hepatitis C Infected Patients”.

Dr. Esteban Gandara (Hematology) received a 1-year research fellowship for a project entitled “Evaluation of a peri-operative management protocol in patients treated with dabigatran”.

Dr. Nataliya Milman (Rheumatology) received a 2-year research fellowship for a project entitled “The applicability of International Classification of Functioning, Disability, and Health (ICF) to the field of vasculitis with a focus on developing ICF Core Sets for vasculitis.”

Dr. Yoko Schreiber (Infectious Diseases) received a 2-year research fellowship for a project entitled “Tuberculosis and blood-borne infection including HIV and Hepatitis C in Aboriginals of Canada, and specifically injection drug users”.

CANADA RESEARCH CHAIRS

In 2011-12 the following members of the Department of Medicine held Canada Research Chairs:

Dr. Marjorie Brand (Hematology)  Regulation of Gene Expression
Dr. Jeffrey Dilworth (Neurology)  Epigenetic Regulation of Transcription
Dr. Jeremy Grimshaw (Clinical Epidemiology)  Health Knowledge Transfer and Uptake
Dr. Michael Rudnicki (Neurology)  Molecular Genetics
Dr. Michael Schlossmacher (Neurology)  Parkinson’s Disease and Translational Neuroscience

Dr. Peter Tugwell (Rheumatology)  Health Equity
Dr. Kumanan Wilson (General Internal Medicine)  Public Health Policy
Dr. Rhian Touyz (Nephrology)  Hypertension
FINDINGS, DISCOVERIES AND BREAKTHROUGHS

Research led by Dr. Jonathan Angel (Infectious Diseases) could spare many people with HIV from having to take unnecessary antibiotics associated with major side effects. A systematic review by Dr. Angel and his colleagues showed that when viral levels are suppressed, it is safe to stop taking antibiotics to prevent pneumonia, even if there has not been an adequate improvement in immune function as measured by CD4 count. This research could change the current clinical guidelines, which recommend a higher CD4 threshold and don’t take viral levels into account. This could improve health and quality of life for many people with HIV, while also saving money for individuals and the healthcare system. The research was published in *PLoS One*.


Dr. John Bell (Medical Oncology) and team were in the news after publishing results of a ground-breaking clinical trial of a cancer-fighting virus. The study is the first to show that an intravenously-delivered viral therapy can consistently infect and spread within tumours without harming normal tissues in humans. It is also the first to show tumour-selective expression of a foreign gene after intravenous delivery. The research was published in *Nature*.


New Translational research led by Dr. Kevin Burns (Nephrology) at the Kidney Research Centre has uncovered the importance of an enzyme called ACE2 as a potential protector against the development of diabetic kidney disease, and as a possible urinary marker of disease in humans with kidney transplants. The research was published in *Kidney International* and *PLoS One*.


A study led by Dr. Mark Clemons (Medical Oncology) is changing how breast cancer is treated around the world. Dr. Clemons and his colleagues analyzed biopsies of breast cancer metastases from 121 women with recurring or progressing disease and found that in nearly 40% of the cases, the metastases expressed different biomarkers than the original cancer. Because these biomarkers can predict which cancers will respond to which treatments, the new test opened up new treatment options for many of the women (with a change in treatment for one in seven overall). The research was published in the Journal of Clinical Oncology.


Dr. Michel Chrétien’s (Endocrinology and Metabolism) group discovered a novel genetic variation in a Québec family that cuts their risk of cardiovascular disease by at least half. The variation was found in a gene called PCSK9, which Dr. Chrétien co-discovered in 2003. This gene is involved in cholesterol metabolism, and the variation results in lower levels of “bad” cholesterol. The study, which is a collaboration with l’Institut de Recherches Cliniques de Montréal, also suggests that such protective variations may be more prominent in the French Canadian population. Further research could lead to the development of novel cholesterol-lowering therapies. The research was published in Clinical Chemistry.


Research by Dr. Dar Dowlatshahi (Neurology), and others showed that a CT scan could help doctors predict which patients are at risk of continued bleeding in the brain after a stroke. This vital information paves the way for clinical trials that will investigate clotting medications that may be able to halt this bleeding and prevent some of the damage caused by these strokes. The study involved 268 patients from 12 centres in six countries. Dr. Dowlatshahi also contributed an important piece to the controversy surrounding the effect of cholesterol-lowering agents, statins, on the outcome and severity of bleeding strokes (intracerebral hemorrhages). His publication showed that statins may provide some protective benefit and completely discontinuing their use after a bleeding stroke may be harmful. The research was published in Stroke.

Research led by Dr. Alan Forster (General Internal Medicine) provided the most accurate measure yet of the impact of hospital-acquired C. difficile infection on length of hospital stays. Using The Ottawa Hospital Data Warehouse, Dr. Forster and his colleagues examined data from 137,000 TOH patients (including 1,400 with C. difficile). After controlling for severity of illness and timing of infection, they found that C. difficile increased the length of hospital stay by six days. Future research will help with the development of better infection control measures, and with estimating their cost-effectiveness. The research was published in the Canadian Medical Association Journal.


Research led by Dr. Marc Rodger (Hematology) raised interesting questions about the role of blood clotting in pregnancy. In a study published in the American Journal of Obstetrics and Gynecology (with editorial), Dr. Rodger and his colleagues found that a surprising two thirds of new mothers had evidence of blood clots in their pelvic veins a few days after delivery. This study involved just 30 patients, and none of them went on to develop serious blood clotting problems, so it is unclear what the results signify at this point. However, it is known that over 30% of all maternal deaths in Canada and the U.S. are due to pregnancy-related blood clotting. Dr. Rodger is currently leading a multi-national clinical trial looking at anti-clotting drugs in high-risk pregnant women after delivery.


Dr. Peter Tugwell (Rheumatology) published an article on biologicals for rheumatoid arthritis. Dr. Tugwell and his group looked at whether people who take a biological in addition to traditional disease modifying antirheumatic drugs will have a better chance of preventing irreversible joint destruction than those who do not. Further study is required to determine the benefits and safety of different biologicals and the paper suggests that clinical epidemiologists and pharmacoepidemiologists need to agree on developing national and international registries that provide such data. The research was published in the British Medical Journal.

Research led by **Dr. Carl van Walraven** (General Internal Medicine) suggested that contrary to popular belief, most urgent hospital readmissions cannot be blamed on medical errors or gaps in care. After analyzing records from nearly 5,000 patients from 11 Ontario hospitals, Dr. van Walraven and his colleagues found that just 16% of urgent readmissions were potentially avoidable – the rest were due simply to health problems. This research could lead to more reliable ways to measure and improve hospital quality. This research was published in the *Canadian Medical Association Journal*.


**Dr. Phil Wells** (Hematology) and others discovered that a fixed-dose regimen of rivaroxaban, an oral factor Xa inhibitor, has been shown to be as effective as standard anticoagulant therapy for the treatment of deep-vein thrombosis, without the need for laboratory monitoring. This approach may also simplify the treatment of pulmonary embolism. The research was published in the *New England Journal of Medicine*.


Research led by **Dr. Kumanan Wilson** (General Internal Medicine) showed that children are more likely to show up in emergency rooms 1–2 weeks after getting their first measles, mumps and rubella vaccine shot. However in the vast majority of cases, these reactions are self-limited and likely represent a normal immune reaction to the vaccine. Dr. Wilson and his team came to this conclusion after analyzing data from more than 350,000 children who received the vaccine. Using the ICES@uOttawa facility, they were able to link the vaccination records for children in Ontario with their emergency room visits. The research was published in *PLoS One*.


**Dr. David Picketts** (Neurology) and his team discovered that mice lacking a gene called Snf21 have brains that are 35% larger than normal. This research could lead to new approaches to stimulate brain regeneration and may provide insight into developmental disorders, such as autism and Rett syndrome. The research was published in *Developmental Cell*.

Dr. Michael Rudnicki (Neurology) and his team discovered that a protein called Wnt7a promotes the growth of muscle tissue in two distinct ways: by stimulating muscle stem cells to produce new muscle fibres, and by stimulating those muscle fibres to get bigger and more powerful. Dr. Rudnicki and his team described this first molecular pathway several years ago, and the second this past year. The finding represents the first example of a receptor being "wired" to different pathways at different levels of tissue development for a common purpose. This research could lead to the development of novel treatments for patients with muscle degeneration. The research was published in Nature Cell Biology.


Noteworthy Grants

Dr. Gonzalo Alvarez (Respirology) was awarded a grant from CIHR to investigate a novel rapid molecular test for TB. The grant will allow Dr. Alvarez and his colleagues in Montreal and Iqaluit to study the impact and cost-effectiveness of the test. It will complement a major tuberculosis prevention, treatment and research effort already underway in Iqaluit, under Dr. Alvarez’s leadership.

Dr. John Bell (Medical Oncology) was awarded a grant from CIHR for industry-partnered collaborative research, focusing on the development of oncolytic viruses for the treatment of cancer.

Four researchers were awarded grants from the Heart and Stroke Foundation of Ontario. The awards will support research directed towards improving treatment for pulmonary embolism (Dr. Marc Carrier [Hematology]), bleeding strokes (Dr. Dar Dowlatshahi [Neurology]), cancer and venous thromboembolism (Dr. Phil Wells [Hematology]) and cardiovascular disease (Dr. Teik-Chye Ooi [Endocrinology & Metabolism]).

Dr. Mark Clemons (Medical Oncology) and Dr. Christina Addison were awarded a major grant from the Canadian Breast Cancer Foundation. The grant will allow them to examine a novel therapy for bone metastases, involving an inexpensive antibiotic combined with currently used bone-targeting agents.

Dr. Jeremy Grimshaw (Clinical Epidemiology) received a Knowledge to Action grant from CIHR. Dr. Jeremy Grimshaw will be working to maximize the use of Rx for Change, an online database of evidence summaries concerning best practices for prescribing and using medicines.

Patients at The Ottawa Hospital will be the first in the world to receive an experimental stem cell therapy for septic shock, thanks to grants from the CIHR and the Stem Cell Network. The Phase I trial will be led by Dr. Lauralyn McIntyre (Critical Care), with help from a number of co-investigators, including Dr. Duncan Stewart (CEO of the OHRI), whose team has developed this novel treatment to reduce multi-organ injury in this disease.
Dr. Marc Rodger (Hematology) was awarded a major grant from the NIH entitled ‘A pilot study of LMWH for post-partum prophylaxis in women at risk of venous thromboembolism.’

CIHR Operating Grants 2011–2012

Dr. Shawn Aaron (Respirology): Strategies to Improve Diagnosis and Treatment of Asthma in Canadians, and Simvastatin Therapy for Moderate and Severe COPD (STATCOPE)

Dr. Paul Albert (Neurology): Transcriptional regulators of the 5-HT1A receptor gene

Dr. Gonzalo Alvarez (Respirology): TAIMA TB (STOP TB) in Nunavut Knowledge Translation Project

Dr. Jonathan Angel (Infectious Diseases): Regulation and Function of Soluble IL-7 Receptor Alpha (CD127) in HIV Infection

Dr. Louise Balfour (Infectious Diseases): The Canadian HIV quit smoking trial: Tackling the co-morbidities of depression and cardiovascular disease in HIV+ smokers

Dr. John Bell (Medical Oncology): Increasing vaccine manufacturing output using viral sensitiser technology

Dr. Marjorie Brand (Hematology): Hematopoietic transcription factors and their role in leukemogenesis

Dr. Patrick Burgon (Cardiology): Cardiac Manifestation of Laminopathies; elucidation of the functional role of a novel muscle enriched lamin interacting protein (MLIP) in the heart.

Dr. Kevin Burns (Nephrology): Translational Research on the Role of Tubular ACE2 in Kidney Disease Progression

Dr. Michael Gollob (Cardiology): Reversal and Attenuation of Cardiac Glycogen Storage Disease: A Potential Treatment

Dr. Jeremy Grimshaw (Clinical Epidemiology); Dr. Cochrane: developing online learning modules from Cochrane reviews

Dr. Jeremy Grimshaw (Clinical Epidemiology); Paul Hendry: Bridging the gap between Knowledge Translation and Continuing Education for Health Professions: A Regional Approach

Dr. Frans Leenen (Cardiology): Molecular Dissection of Brain Mechanisms Contributing to HF post MI.

Dr. Paul MacPherson (Infectious Diseases): The HIV Tat Protein Removes the Interleukin-7 Receptor from the Surface of CD8 T-Cells
Dr. David Park (Neurology): Mechanisms of DJ-1 in an aging model of Parkinson Disease, and Role of cell cycle signals in neuronal death

Dr. Derek So; Alexandre Stewart (Cardiology): Reassessment of anti-platelet therapy using individualized strategies — Association of genetic variants to adverse outcomes in clopidogrel treated patients after percutaneous coronary intervention: the RAPID AGAP study

Dr. Alexandre Stewart (Cardiology): Translational derepression during ischemia

Dr. Alan Tinmouth (Hematology): Safety and Efficacy of a Therapeutic Platelet Transfusion Strategy in Outpatients

Dr. Kumanan Wilson (General Internal Medicine): Developing a framework for applying the precautionary principle for blood transfusion safety decisions.

Dr. Christopher Kennedy (Nephrology): Validating Nox5 as a target for diabetic renal complications

Dr. Michael Rudnicki (Neurology): Satellite Stem Cells from Skeletal Muscle for the Treatment of Neuromuscular Disease
Dr. Marc Carrier begins his day at 6:02 am—not 6:00 am, because according to him, that extra two minutes makes it just a little bit easier. He packs the same lunch everyday (one apple, one apple juice, one granola bar and a ham sandwich). He drops his daughter off at daycare the minute it opens and by 7:30 am arrives at the office, purchased black coffee in hand. Don’t be fooled by the lack of variety in his morning routine, he’s by no means a boring guy. And, when it comes to his role as a Hematologist and researcher, Marc embraces the variety each day brings. “What I like about my job is that it’s really different, I do all sorts of things in a day, there is no day that is the same. I never know what’s going to happen.”

With only four years of research under his belt, Marc is already recognized both nationally and internationally as an expert in venous thromboembolism and cancer. His publication record has been prolific. Since coming on staff in 2008, he has had 53 peer-reviewed publications (plus 3 accepted)—many in prestigious journals including the *Annals of Internal Medicine*, *British Journal of Medicine* and *CMAJ*. He holds a Tier 2 Research Chair in Venous Thromboembolism and Cancer from the University of Ottawa and a New Investigator Award from the Heart and Stroke Foundation of Canada. He is currently the Principal Investigator on four peer-reviewed clinical trials. It’s been four short years and without question, Dr. Carrier is an exceptional individual with an already exceptional career.

So, how did this medical student who was initially afraid of blood, achieve so much in such a short period of time? Answer: The perfect work environment. “The reason why I was able to start, and get an edge compared to other folks is because of the environment. As a member of the thrombosis team, I was part of a well oiled machine, Marc (Dr. Marc Rodger) and Phil (Dr. Phil Wells) worked for years to build up that program and when I came in everything was already in place.” He attributes much of his momentum and motivation to the dynamic leadership of these two mentors. As part of a division focused on becoming the world’s best, Marc feeds on the drive he sees in others. “You need to be willing to build new

“Dr. Carrier’s research program in the two-way link between venous thrombosis and cancer will no doubt lead to important innovation and practice change for patients who suffer from cancer and one of its most important complications, venous thrombosis.”

— Dr. Marc Rodger
Chair Division of Hematology
The Royal Oak has been a gathering place for Dr. Marc Carrier since his days as a hematology resident. He goes there to celebrate special events and milestones and has been known to stop by for beer, pub food and a little jocularity with friends and colleagues.
knowledge but you need to be nested and mentored to do that. If you don’t have the right infrastructure, the right environment, you won’t be successful even if you put a lot of energy into it.”

Having day-to-day access to world-renowned clinical epidemiologists like Drs. David Moher and Dean Fergusson doesn’t hurt either. These individuals provide Marc with an expert knowledge base within which to tap. “These folks could give me in 5 minutes the answers I’m looking for.” This informal, casual, collegial environment, Dr. Carrier says, leads to a constant exchange of ideas, a better platform to build on and ultimately better potential for grants. Of course, you also need to be driven and supported. It takes approximately 24 to 48 hours to sit down and write a grant; that time needs to be protected to ensure the grant doesn’t suffer and ultimately nor does the funding. “Enjoying research is one thing but being supported is the most important.”

Marc also possesses an extraordinary level of perseverance. Driven by the need to find answers to numerous questions faced by the tertiary care hospital in which he works, he tenaciously applied and reapplied for grants, showing just how much he believes his research can someday change practice. It took 11 attempts to get initial funding for his Screening for Occult Malignancy in Patients with Unprovoked Venous Thromboembolism Trial (SOME Trial), a study that compares two strategies for detecting cancer in patients with unprovoked blood clots. The results he hopes will provide a more definitive answer as to whether routine cancer screening tests are adequate or if a more comprehensive strategy should be used. “Not everybody is happy with my trial though; they think it’s a waste of time or money. When I started the SOME Trial people told me it would never be funded, that we would never be able to enroll patients. But what I kept telling them is, ‘if it is truly negative like you say, then we’ll stop spending the money on extensive screening and save Canada a lot of health care resources and if it’s positive then we’re actually going to save lives.’” Regardless of what the critics had to say, Marc stayed the course and to date has received $856K in funding and the trial is currently at 60% enrollment for a total of 800 patients.

Dr. Carrier has received similar criticism to the blood thinner trial he’s collaborating on with Dr. Rebecca Auer. The trial examines whether or not giving low molecular weight heparin (LMWH) to patients with colon cancer around the time of surgery can decrease the chance of their cancer spreading to other organs and coming back. “So this is a little bit of a shift for medical oncologists and surgeons to think that maybe these blood thinners are doing a little bit more than what we expected. I’m not saying it’s chemotherapy but I’m saying it’s probably a very benign intervention. Often things that are changing our way of thinking are the best and most likely to change practice.”

Locally, Drs Carrier and Auer have started enrolling patients and are in the process of opening new sites in Montreal, Toronto and eventually British Columbia. By the end of 2015, they expect to have the required 1075 patients enrolled. “What we’re proposing is very left field, so people are saying there is no way you are going to change patient outcomes with blood thinners around time of surgery. We really think so.” Critics be on notice.

Success, he says, will be writing the papers and hoping that people will read and use
them in their clinical practice—regardless of the outcome. “It’s nice to be recognized by your peers if you’re getting grants, but at the end of the day, if your work is helping to move forward and change practice a little bit, then you can improve better patient care; that’s success at the end of the day. When I’m older I want to say, ‘I was the one that helped figure that out’ and since then maybe patients survived longer or were cured of their cancers more, or we were able to pick up their cancer sooner and that made a difference and hopefully helped globally.”

The biggest barrier ahead, Marc says, is to maintain momentum. Fortunately he finds it easy to stay focused on his goals and, although difficult at times, has learned to say no to things that aren’t in line with his career path. This can sometimes prove to be difficult for somebody just starting out. This past year, Drs Phil Wells and Kevin Burns developed a mentoring program for junior investigators that helps young physicians (in particular young researchers), find their voice to say no. Marc participates in this program and meets every six months to review his career goals, grants and other responsibilities. Most recently, his mentors encouraged him to give up his role as Program Director for the Hematology Postgraduate Program, a role he had agreed to fill for one year. They pointed out that at this stage in his career it just wasn’t the right time.

As to any regrets so far, Marc has few. “I don’t think that I would change anything, but like everybody else, I guess you give up a lot of things when you’re passionate about your work like weekends at the cottage and more personal time. But I don’t think I would change anything in my life... I’m very happy with my job, maybe I would have more hair, maybe that’s the only that I would change—that damn gene!”

"Not only will Marc’s research activities continue to strengthen the already successful thrombosis research group, but he will also play an important role in training new clinician investigators."

— Dr. Jonathan Angel
RAC Committee Member
Up Close & Personal

TS: What was the last book you read?
MC: Motley Crüe autobiography, it was very interesting. I didn’t realize the impact they had back in the 80’s, I’m amazed they’re still alive.

TS: How many minutes does it take you to get from the Civic Campus to the General Campus?
MC: I’m slow, it’s 13 minutes but that’s because I have a Toyota Corolla. I’m sure Phil can do it in probably less than 10 minutes. It’s 13 minutes if I go through Sunnyside to avoid traffic. If you go to the Queensway you can do it faster but it’s really dependant on Queensway traffic. I’m a conservative man so I always take Sunnyside that way I know I’ll always be here in 13 minutes.

TS: What’s your favourite funny story about yourself, embarrassing or otherwise?
MC: I’m francophone right... so you know how people always talk about astrology and what sign are you. So for years and years until very recently I used to say to people that I was a virgin. I didn’t realize it was Virgo.

TS: And no one corrected you?
MC: I guess they just thought it was making sense for a French-Canadian guy to say. Since then I’ve thought, “How many people have I said that to?”

TS: If you could only eat three foods a day what would they be?
MC: Beer (barley), coffee, anything that goes on a BBQ... I BBQ everything, breakfast, lunch and dinner.

TS: What is your favorite time of day and why?
MC: Weekend mornings while I’m drinking my first cup of coffee. I really like the silence at that time.
HONOURS AND AWARDS

Annual OHRI Research Awards recipients:

- **Dr. Shawn Aaron** (Respirology) was awarded the *Dr. Michel Chrétien Researcher of the Year Award* for his groundbreaking work on cystic fibrosis.

- **Dr. Rashmi Kothary** (Neurology) was awarded the *Dr. J. David Grimes Research Career Achievement Award* for his pioneering research on neuromuscular disease.

- **Dr. Jean-Simon Diallo** was awarded the *Dr. Ronald G. Worton Researcher in Training Award* for his promising work with Dr. John Bell (Medical Oncology) on novel drugs that manipulate the growth of virus-based cancer therapeutics and vaccines.

**Dr. Rob Beanlands** (Cardiology) received a Tier 1 Research Chair in Cardiovascular Imaging from the University of Ottawa, Faculty of Medicine.

**Dr. John Bell** (Medical Oncology) received the Canadian Cancer Society’s prestigious Robert L. Noble Prize for outstanding achievements in cancer research. Dr. Bell has led a number of initiatives aimed at developing oncolytic virus-based cancer therapies.

**Dr. Curtis Cooper** (Infectious Diseases) was selected to receive the Glen Hillson Award from the Canadian Treatment Action Council in recognition of his excellence in support of HIV-related human rights and advocacy issues, particularly with respect to ensuring that people with HIV have access to liver transplants. Dr. Cooper has conducted extensive research in this area, including a recent systematic review that showed that contrary to popular belief, people with HIV fare just as well after liver transplantation as people without HIV.

**Dr. Michel Chrétien** (Endocrinology & Metabolism) was promoted from Chevalier to Officier in l’Ordre national de la Legion d’Honneur de la Republique francaise. The award recognizes Dr. Chretien’s exemplary contributions to France-Canada relations, particularly in scientific research. Dr. Chrétien is known around the world for his prohormone theory and the discovery of pro-protein convertases.

World-renowned cardiology researcher, **Dr. Peter Liu** (Cardiology), was appointed as Scientific Director at The University of Ottawa Heart Institute. He will lead the Institute’s research endeavours.

**Dr. Duncan Stewart** (Cardiology) presented the Sarrazin Award Lecture at the Canadian Society for Pharmaceutical Sciences annual symposium. His talk, based on his ground-breaking research in cell-based therapeutics, was entitled: “Towards Modern Therapeutics for Pulmonary Vascular Disease: Inspiration from New Mechanistic Insights.”

**Drs. Anthony Tang** and **George Wells** (Cardiology) won a national award for answering the question: does a next-generation pacemaker save the lives of people with moderate heart failure? They led a study across 3 continents that showed powerful evidence the little device does save lives in those with less severe heart failure. The two received
a 2011 Top Achievements in Health Research Award from CIHR and the Canadian Medical Association Journal.

Dr. Rashmi Kothary's (Neurology) University Health Research Chair from the University of Ottawa and the OHRI was renewed for another 5 years. Dr. Kothary’s award recognizes his excellence in neuromuscular disease research.

RESIDENT RESEARCH DAY

Resident Research Day continued to be an important part of the Department of Medicine’s ongoing dedication to provide a strong academic research environment for our trainees. Committed to enhancing a resident’s educational experience and providing a mentoring relationship with faculty members, this annual event, chaired by Dr. Alan Forster, provided an opportunity to better understand the connection between research and clinical care.

Many thanks to Dr. Robyn Tamblyn (McGill University), our keynote speaker, for sharing her perspective of how to improve the efficiency of the healthcare system.

Drs. Kevin Burns, Marc Rodger, Curtis Cooper and Alan Forster donated their time and research expertise in the judging of 31 poster presentations and Drs. Burns, van Walraven and Forster selected the oral presentation winners—many thanks to all of them.

Judged to be the Best in 2011:

- **Dr. Nita Guron:** Oral Presentation Award Winner (PGY2)
  Title of Project: Clinical Outcomes in ST-Elevation Myocardial Infarction Patients Treated with the Pharmacoinvasive Strategy in the Ottawa STEMI Program
  Supervisor: Dr. Michel Le May, Ottawa Heart Institute

- **Dr. Xiaofu Zhu:** Oral Presentation Award Winner (PGY3)
  Title of Project: Systemic Treatment Decision Making for Patients with Stage I and II, Hormone Receptor Positive, HER2/neu Negative Breast Cancer
  Supervisors: Drs. Nadine Graham, Susan Dent, Xinni Song

- **Dr. Andrea Mazarova:** Oral Presentation Award Winner (Clinical Fellow)
  Title of Project: Effect of Dietary Sodium Restriction on Progression of Chronic Kidney Disease
  Supervisor: Dr. Ayub Akbari
• **Dr. Mylène Côté:** Poster Presentation Award Winner (Core Internal Medicine)
  Title of Project: Teaching Procedural Skills in Context: A Procedural Skills Curriculum for Senior Internal Medicine Residents
  Supervisor: Dr. Debra Pugh

• **Dr. Natasha Kekre:** Poster Presentation Award Winner (Clinical Fellow)
  Title of Project: Factors Associated with the Avoidance of Red Cell Transfusion after Hematopoietic Stem Cell Transplantation
  Supervisor: Dr. David Allan
PATIENT QUALITY & SAFETY
Anchored by our Values

Tied to our Vision

Anchored by our Values
“Providing quality care that is responsive to individual patients needs and values”

Patient quality and safety is one of the four priorities of the Department of Medicine. In 2010, the Department of Medicine created a patient safety and quality committee to support this initiative. The committee continues to meet on a regular basis with the goal of undertaking initiatives that will result in improvement in patient care at The Ottawa Hospital.

Current projects include:

1. **Referral Process**: The committee identified the need for a standard approach to new patient referrals for outpatient clinics at The Ottawa Hospital. A questionnaire was distributed to all divisions within the Department of Medicine to identify the strengths and weaknesses of the patient referral process within each respective division. Based on the results of this survey the committee will make recommendations on a standardized referral process which can be utilized by all divisions. This standardized approach will lead to more efficient and efficacious referral of patients to our outpatient clinics.

2. **Hand-over Tool**: The development of a hand-over tool for physicians was identified in 2011 as an important patient safety and quality initiative. The introduction of modified work hours for residents (which is expected to commence in early 2013) has increased the committees resolve to develop a tool that will facilitate the safe and efficacious transfer of patient information (between physicians) during the evening and weekend.
call periods. We are currently reviewing “handover tools” that are being utilized in other health care institutions to determine if we can adapt modified versions of these tools for our institution.

3. **PQ&SC Grant Competition**: In May, 2012 The Department of Medicine held the 1st Patient Quality and Safety grant competition. The response to this first competition was overwhelming. The grant sub-committee received 17 applications and awarded approximately $125,000 to 6 successful applicants. Projects included: improving the care of patients who require temporary interruption of anticoagulation; avoidance of readmission to hospital; improving patient safety using single apheresis platelets for patients undergoing Bone marrow transplantation; implementation of standardized best practices for reducing diabetes foot ulcer risk; quality indicators for colonoscopy and analysis of use and cost of nasopharyngeal swabs at The Ottawa Hospital. The results of these quality improvement projects will be presented at the Department of Medicine patient quality and safety rounds in the fall of 2013.

The Department of Medicine and it’s partners are dedicated to ensuring the best (and safest) quality of care for our patients. The PQ &SC will continue to work over the coming year to ensure our patients receive the best and safest care possible.

_Susan F. Dent, MD FRCPC_

Associate Professor of Medicine
Vice Chair, Patient Quality and Safety
What do Pixar Animation Studios, Microsoft’s Initial Public Stock Offering, The Oprah Winfrey Show and Dr. Gary Garber all have in common? Their road to glory all began in the year 1986 and undeniably each and every one of them, through their influence, has had a lasting impact on the world today.

In early 1986, Gary Garber joined the Department of Medicine and became the first full-time infectious disease physician at the old Ottawa General Hospital. He embraced his role as a neophyte right out of the gate, recognizing the enormous potential for development within this subspecialty and would go on to play an instrumental role in the rapid expansion of personnel and programs within his division starting with the formation of the Comprehensive Multidisciplinary AIDS Care Clinic, an Ontario’s first in 1987. As the first hospital and university ID division head, a position he would hold for 20 years, his influence and ability to identify areas of need led to the development of numerous programs and regional networks (TB, Hepatitis C, Clinical Investigation Unit, Infection control)—all of which are still having a lasting impact on patient care today. He has held several influential roles, including the first Chair of University of Ottawa Medical Associates (UMA), Vice Chair of Patient Quality & Safety for the Department of Medicine and founding Director of the Ontario HIV Treatment Network. He also was an original member of the Provincial Infectious Disease Advisory Committee (PIDAC). Based on this catalytic track record and a long-standing interest in the appropriate use of antibiotics, Gary recently spearheaded The Ottawa Hospital’s Antimicrobial Stewardship Program and is putting it on the map, as its current Director.

The whole ‘antimicrobial stewardship’ movement started developing in the US over the last five years, and about two years ago guidelines began to come out through various learning societies with reference to the importance of these programs.

“Throughout his time as Head of Infectious Diseases, Gary established a strong and cohesive division dedicated to excellence in patient care and to research. I think one of his greatest legacies will be his success in cultivating a cooperative and mutually supportive division that welcomes varied interests and builds on its strengths.”

— Dr. Paul MacPherson
Division of Infectious Diseases

Recognizing that this would become the wave of the future and possibly a forthcoming accreditation issue, Dr. Garber

AN INTERVIEW WITH
DR. GARY GARBER
MD, FRCPC, FACP, FIDSA, CCPE

Department of Medicine 2011–12 Annual Report

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What could be the worst-case scenario for someone who tends to shy away from the limelight? Perhaps being the center of attention while a photographer is snapping shots of you in the locker room at your weekly men’s league hockey game. Even though Dr. Gary Garber received plenty of ribbing, he handled it like a pro.
approached hospital administration and encouraged them to catch the wave early. “Since the Program launch in 2011, antimicrobial stewardship has become a mandated program for hospital accreditation effective 2013.”

Their program goes beyond the typical model and is much broader than some of the programs out there. Gary and his team are not only focusing on healthcare practitioners in the intensive care unit but on the wards as well. When most sick people come into the hospital they are often given antibiotics in case an infection is part of the patient’s problem. This is a reasonable initial approach given that it takes time to figure out what the cause of the problem is—but, when a physician gets more information, they need to evaluate whether or not prolonged use of the antibiotic is of continued benefit. “Physicians spend a lot of time on sick people and once the patients are stable, we MD’s often avoid rocking the boat. Our Program is trying to change how physicians look at the use of antibiotics; to get them to look at the fact that these meds have an incredibly potent role when needed but that antibiotics have to be treated with the respect they deserve.” Gary points out that continued misuse of antibiotics may be causing potential harm due to side effects, the emergence of resistant bacteria, or C. difficile colitis. Thus overuse of antibiotics is a patient quality and safety issue.

In Gary’s 25 years of practicing medicine he’s been fortunate enough to identify opportunities where patient care could be improved, and this program is no different. Results from the initial pilot projects showed that the antimicrobial stewardship interventions, which are above all the usual care, reduced the use of antibiotics by 25% and costs by about 40% with absolutely no negative impact on patients. “I think the impact, in terms of the cost and utilization, surprised a lot of people who were somewhat skeptical; the good thing is that now more people want to participate.”

And with this success comes the demand to expand. The next phase will see the program being rolled out on a broader scale, including implementation in other units, presentations at weekly Internal Medicine Rounds and interdepartmental collaboration. By targeting certain treatment guidelines and through continued education and reinforcement, Gary hopes the uptake of optimal antimicrobial prescribing practice will continue to improve. He has also reached out to the LHIN (Local Health Integration Network), proposing the development of a Regional program for antimicrobial stewardship. This would provide support to hospitals in the region that don’t have expertise in infectious diseases and microbiology.

As Director, Gary sees his role as a champion of the program, firstly advocating to Senior Management because their continued support is pivotal for the program to succeed. Secondly, advocating to his colleagues—to help them recognize and identify that the program’s principles are value added to patient care and ensure support for the pharmacists “…our incredibly talented people who work on the team. I’ve got an A-team but they run into barriers and I have to be their champion as well. To make sure that they get the resources they need to do the job.”

Having spearheaded new initiatives many times before, Gary is well aware that when you have a new idea like this, people aren’t going to just throw money at it. You’re going to have to sell it; you’re going to have to convince people why the idea is good and why it’s worth pursuing. Gary is by no
means the stereotypical salesman, never boisterous or pushy, he relies on his calm demeanor and vast experience to get his message across. All the while keeping in mind that the goal at the end of the day is always improved patient care.

Reflecting on an already outstanding career, Dr. Garber feels fortunate to have had the chance to work with outstanding people and to learn so much from his patients. It has allowed him to constantly challenge himself, and everyday he is a little bit humbled by the people he works with and the patients he cares for. “I hope I’ve been a catalyst in terms of taking some of my ideas and turning them into action oriented projects that have had impact.” He believes that there’s a lot to be said for the synergy of ideas and that we sometimes underestimate the importance of the team; how a good idea, once bounced off a colleague, has the potential to become a much better idea. By putting the right teams together and encouraging an interdisciplinary approach, he says, it can make all the difference in the world. He is quite modest in describing his contributions and very happy to give others credit, he finds it difficult to talk about himself and his many achievements. “I’m not a person who strives for the limelight. You read these profiles and they’re cool but it’s almost like you’re writing them so your mom can be proud.”

Up Close & Personal

TS What is your favourite weekend activity?
GG Skiing in the winter, biking in the summer and hockey year round.

TS What one word would you use to describe yourself?
GG Boy I struggled with this one…but I think probably the best word would be optimistic.

TS What’s your favourite funny story about yourself, embarrassing or otherwise?
GG I would say my golf game.

TS What was your favourite toy/game as a child, and why?
GG As a kid it was probably playing with Lego. I guess it was the idea that you could build things and you could change them, that you could take the exact same toy and it could be something different everyday.

TS If you could only eat 3 foods a day what would they be?
GG If I had to have a steady diet of 3 things they would be from the essential food groups. Fruits like melons and berries, omelets and ice cream (probably mint chocolate chip).
DIVISIONAL REPORTS
Anchored by our Values

Tied to our Vision

Anchored by our Values
DIVISIONAL REPORTS

CARDIOLOGY

63 Faculty Members • 14 Residents • 18 Fellows

Clinical Activities

Drs. Marino Labinaz and Chris Glover expanded the Transcutaneous Aortic Valve Insertion (TAVI) Program. Dr. Labinaz performed Ottawa’s first mitral clip procedure. The University of Ottawa Heart Institute (UOHI) performed its first biodegradable PCI Stent. Dr. Alexander Dick initiated the chronic total occlusion retrograde reperfusion procedure. Dr. Mike Froeschl performed Ottawa’s first transarterial renal sympathectomy, a collaboration with Dr. Marcel Ruzicka, Nephrology. The division saw a major increase in volume of ablation for complex (mostly atrial fibrillation) ablation related to improving technology/expertise as well as a major increase in clinical volumes in echocardiography at UOHI and The Ottawa Hospital (TOH), General Campus, led by Drs. Ian Burwash and Michele Turek. The division acquired 3D-capable echocardiography equipment to increase utilization during transthoracic and transesophageal examinations. Drs. Lloyd Duchesne and Rick Davies established diabetes protocol to optimize diabetes diagnosis and management for cardiac inpatients. Dr. Rick Davies established the Post Discharge Management Clinic (PDMC) for patient assessment post discharge. In May we established a Clinical Task Force to enhance inpatient care and quality improvement. There was growth of the Cardio-Oncology Clinic.
led by Drs. Michele Turek and Chris Johnson in collaboration with Oncology. We currently have a Cardiac CT scan RFP submitted and expect the results at the end of this year. We are also planning to submit an RFP for a Cardiac MRI by years end.

Looking forward, plans for 2013 include a UOHI inpatient heart failure service and a TOH heart failure service.

Programs Impacting the Community

Recovery of Spontaneous Circulation Program (ROSC) is a new outpatient program that follows cardiac arrest patients. This program has already shown improved outcomes and we currently have an in-press publication to that effect. Dr. Kwan Chan helped lead the development of the echocardiography practice guidelines for Ontario and these will be implemented as standards of practice as part of the governments initiative for more appropriate uses of diagnostic testing. This will be the lead program as Ottawa has exemplary utilization compared to other regions in the province. We have introduced the Acute Coronary Syndrome (ACS) and Congestive Heart Failure (CHF) care maps across the Champlain LHIN that have helped to standardize hospital discharge management for patients with these conditions. We have also established a program that takes a regionalized approach to Telehome Monitoring of cardiac conditions throughout the Champlain LHIN with these conditions. Dr. Michael Gollob and others have developed a set of national guidelines for the use of genetic testing in the clinical evaluation of inherited cardiac arrhythmias associated with sudden cardiac death that will be implemented for patients with these conditions. Drs. Pablo Nery and David Birnie have established a Provincial Cardiac Sarcoidosis Registry to look at diagnosis and management of this condition. A National Registry is currently underway.

Programs Impacting Global Health

Dr. Marino Labinaz initiated collaboration with Qingdao Municipal Hospital in Qingdao, China to establish a new heart institute and improve quality of cardiac care in collaboration with Dr. Thierry Mesana (Cardiac Surgery) and Heather Sherrard (UOHI).

Educational Activities

In addition to his role a postgraduate program director, Dr. Chris Glover was named Education Director on the Division of Cardiology leadership team. Dr. Ian Burwash published a paper in Canadian Journal of Cardiology on CCS/CSE Guidelines for training and maintenance of competency in adult echocardiography. Dr. Michele Turek participated in and organized the 2nd Annual Canadian Cardiac Oncology Network Conference held in Ottawa. Drs. Mike Froeschl and David Birnie organized the Eastern Ontario Cardiovascular Summit - a regional cardiac symposium, June 2012. Dr. Rob Beanlands chaired the Molecular Function and Imaging Symposium, June 2012. Dr. Ian Burwash was appointed by the Royal College of Physicians and Surgeons of Canada as Co-Chair of the AFC
(Area of Focused Competence) Working Group in Adult Echocardiography. In addition to her role as Assistant Dean of Student Affairs, Dr. Louise Laramée was appointed Francophone Director of Clinical Skills, University of Ottawa. Dr. Mike Froeschl received the American College of Cardiology Foundation Teaching Skills Award for Workshop for Emerging Faculty. Dr. Chris Glover received the 2011 Award of Educational Advancement and Innovation in Postgraduate Medical Education, University of Ottawa. Dr. Derek So received the UOHIAMO Postgraduate Teaching Award and Dr. Lloyd Duchesne received the UOHIAMO Undergraduate Teaching Award. Together with the division of Medical Oncology we have established the first Cardiac Oncology Research Fellowship at the University of Ottawa to commence in July of 2013.

Research Activities

Members of the division had $6,000,000 in grants for 2011-12 (5 personal support awards, 3 CFI infrastructure grants, >35 grants-in-aid, team, program and operating grants).

Key Peer-reviewed Grants

So D (PI). CIHR. Reassessment of Anti-Platelet therapy using Individualized Strategies - Modifying Acute Coronary Syndrome Algorithms based on Genetic and Demographic Evaluation: The RAPID-MANAGE study

Birnie D (PI). CIHR. Bruise Control: Bridge or continue coumadin for device Surgery randomized Controlled Trial.

Davis D (PI). CIHR. Second generation cardiac cell therapy: Combination and genetic tailoring of stem cells in ischemic heart disease.

Mielniczuk L. HSFO. Right Ventricular Substrate Metabolism as a Predictor of Right Heart Failure in Patients with Pulmonary Arterial Hypertension.

deKemp R, Ruddy T, Beanlands R, Chow B. CIHR. Collaborative research initiatives (RbARMI, cMICE [collaboration with Nordion], IMAGE-HF, CAIN)

Noteworthy Publications

Members of the division published over 100 peer-reviewed articles this past year. Key publications include:


Honours and Awards

- Dr. Lyall Higginson received the Canadian Cardiovascular Society Lifetime Achievement Award
- Dr. Robert Roberts received the Canadian Cardiovascular Society Research Achievement Award
- Dr. Michele Turek received TOH Clinician Recognition Award for 2012
- Dr. Ben Chow received the University of Ottawa, Faculty of Medicine Award of Distinction and Service
- Dr. Derek So UOHI Investigator of the Year Award 2012
- Dr. Ben Chow received the UOHIAMO Research – Clinical Science Award
- Dr. Darryl Davis received the UOHIAMO Research – Basic Science Award
- Dr. Ian Burwash holds the position of President-elect of the Canadian Society of Echocardiography
- Dr. Ian Burwash named to the Editorial Board of the Journal of the American Society of Echocardiography
- Dr. Kwan Chan was appointed to the Cardiac Care Network Task Force on Standards for Provision of Echocardiography in Ontario
- Dr. Haissam Haddad founding Vice-Chair of the Canadian Heart Failure Society
- Dr. Lisa Mielniczuk appointed to Health Quality Ontario Working Group for Heart Failure
- Dr. Terry Ruddy received the Research Day Development Award
- Dr. Girish Dwevidi received a CIHR Banting Fellowship (Dr. Ben Chow Supervisor)
- Dr. Myra Cocker received a HSFC Fellowship (Dr. Rob Beanlands Supervisor)
CRITICAL CARE

17 Faculty Members • 3 Residents • 13 Fellows

Clinical Activities

Critical Care delivered clinical care to over 1000 critically ill patients at both the Civic and General Campus Intensive Care Units (ICU) in 2011. Critical Care also maintained a strong presence in managing acute in-patient emergencies with the Rapid Assessment of Critical Events (RACE) team, present at both the General and Civic sites. Critical Care also expanded its scope of clinical care for high-risk patients in the Neuroscience Acute Care Unit, in direct collaboration with the Division of Neurology and Department of Neurosurgery.

Programs Impacting the Community

Both REACHout and the Research In Action Nunavut program have directly impacted clinical care at both community hospitals. Critical Care envisions both initiatives having portability and applicability to all institutions wishing to institute system-level change to clinical care for critically ill patients.

Educational Activities

The following represents some of the Critical Care-led innovations in medical education for 2011:

REACHout: A collaborative project and feasibility study to improve the care of critically ill patients of the Champlain LHIN
Delivery of optimal care for critically ill patients requires a well-coordinated system of infrastructure, policies, and clinical tools to support care teams and individuals. As part of a system level intervention, a needs assessment and gap analysis of the current practices at Cornwall Community Hospital (CCH) and of the collaborative processes between CCH and The Ottawa Hospital (TOH) was completed. The Development/Deployment and Evaluation phase is now underway. The REACHout initiative represents a system-level tool for knowledge translation that potentially will bridge medical education to effect change in clinical care.

Research to Action in Nunavut - Applied Workplace Solutions for Nurses
In October of 2008, Health Canada’s Office of Nursing Policy provided funding to the Canadian Federation of Nurses Unions (CFNU) and partner agencies to develop pilot projects across Canada aimed at improving nurse retention and recruitment through various workplace improvement schemes. Each of the provincial partners contributed funds and/or in kind support to the projects. The initiative was entitled, “Research to Action: Applied Workplace Solutions for Nurses” (RTA Project). The Nunavut Research to Action (RTA)
project operated between November 2009 and March 2011 at the Qikiqtani General Hospital (QGH) in Iqaluit and focused upon nurses and recent graduates who provide in-patient, emergency and operating room services. This educational initiative, much like REACHout, seeks to translate knowledge gained through medical education to directly impact care of the critically ill patient.

**Royal College of Physicians and Surgeons of Canada Simulation Instructor Training (SIT) Course – Dr. John Kim and Dr. Pierre Cardinal** in collaboration with experts in medical education, curriculum design and simulation instruction, have both contributed their expertise in simulation education and curriculum design to enable the creation of a national simulation instructor course curriculum. This RPCSC course will enable centers across Canada and beyond to train faculty members to establish successful simulation training programs.

Critical Care maintained a strong presence in Undergraduate and Postgraduate clinical education by providing rotations to 66 medical students and 268 residents in training in 2011.

The Critical Care Training program trained a total of 13 Fellows in 2011. A fully integrated Simulation Instructor training program was created in 2011, and continues to expand on Critical Care’s successes in medical education in the training of its Fellows.

**Research Activities**

Critical Care continues to maintain a successful translational research program, despite a very small faculty size. 177 patients were enrolled in randomized clinical trials, with an additional 74 patients enrolled in observational trials.

From a faculty perspective, nine Principal Investigator research grants and eleven co-Investigator grants were awarded in 2011, totaling over $1.5 million.

**Key Peer-reviewed Grants**

Seely A (PI), McIntyre L (co-I). CIHR. Weaning and Availability Evaluation (WAVE) a multicenter evaluation of altered heart rate and respiratory rate variability to predict extubation failure.

McIntyre L (co-I). CIHR. Realities, Expectations and Attitudes to Life Support Technologies in Intensive Care for Octogenarieans: The REALISTIC 80 Study.

Hébert P (co-PI), McIntyre L (co-I). CIHR. Age of Blood in the Resuscitation of Critically Il Patients (ABLE Trial)

McIntyre L (co-PI). PSI. PE-METRICS: Pulmonary Embolism Methodology, Epidemiology and Treatment in Critical Care Study.
Noteworthy Publications

A total of 26 peer-reviewed publications were authored by Critical Care faculty in 2011. Key publications include:


Honours and Awards

**Drs. David Neillipovitz, Hilary Meggison** and **Rakesh Patel** were awarded The Ottawa Hospital Guardian Angel award for 2011, in recognition of their exemplary roles as advocates for patient care at The Ottawa Hospital.

A Fond Farewell

The Canadian Critical Care and Respirology community lost both a valued member and dear friend when **Dr. Richard Hodder** suddenly passed away in April 2012. While Rick will be missed by all, his impact in both medical education across Canada and abroad, and his impact in championing both the Respirology and Critical Care programs in Ottawa, will long be remembered. In honor of both the impact of his clinical and academic work, the Critical Care Annual Research Day has now become the Rick Hodder Annual Scholarship Day, beginning in June 2012.
IN MEMORIAM

It was with great sadness and heavy hearts that we announce the sudden passing of our close friend, colleague and mentor, Dr. Rick Hodder on Tuesday, April 17th, 2012.

Born in Toronto in 1946, Dr. Hodder completed his MSc in Astrophysics from York University in 1972 and was for a brief time a scholar with the National Research Council studying radio astronomy. He eventually switched to medicine and graduated from the University of Toronto in 1975. He completed his residency training in internal medicine and critical care in both Toronto and Auckland, New Zealand before completing his Royal College of Physicians and Surgeons of Canada (RCPSC) certifications in Internal Medicine (1981) and Respirology (1982) in Toronto.

Dr. Hodder joined the Ottawa Hospital in 1982 as a staff Respirologist and Intensivist. Dr. Hodder established the Critical Care Program at the Ottawa Hospital and was the first Chief of the Department of Critical Care. He served as Professor of Medicine at the University of Ottawa, was a former medical advisor to the Lung Association of Ottawa Carleton and was past President of the Ontario Thoracic Society. In 2005 Dr. Hodder was appointed as Canada’s first Chief Examiner for Critical Care Medicine by the RCPSC and in 2010, the RCPSC appointed Dr. Hodder with Founder Status in Critical Care Medicine.

In addition to his active interest in clinical research, Dr. Hodder published over 100 articles and abstracts on various aspects of pulmonary and critical care medicine and has authored numerous book chapters. His book “Every Breath I Take: A Guide to Living with COPD” is popular with patients and practitioners alike and is used as a textbook in COPD Educator training programs across Canada. Dr. Hodder was recognized in Critical Care & Respirology circles both nationally and internationally as a renowned medical expert, innovative educator and entertaining lecturer.

It is clear that the world of Critical Care and Respirology have been touched by Rick in countless ways and will truly miss his valued contributions. Those of us who had the privilege of knowing him and working with him, are thankful for having the opportunity.
DERMATOLOGY

19 Faculty Members • 14 Residents • 1 Fellow

Dermatology has been a Division within the Department of Medicine at both the Civic and General Hospitals since the 1960s. Since amalgamation to form The Ottawa Hospital in 1998 Dermatology has been an active division at both the General and Civic campuses, providing mainly ambulatory care, inpatient and emergency consultation services. The division manages approximately 16,044 out-patients annually and performs an estimated 400 in-patient consultations. In addition we see close to 3,000 patients at the Children’s Hospital of Eastern Ontario and additional patients at Elizabeth Bruyère and St. Vincent’s.

Clinical Activities (New or Developing)

A Rheumatology/Dermatology clinic was started in June 2012. Dr. Simone Fahim is operating this clinic in collaboration with Dr. Doug Smith in the Rheumatology clinic at the Riverside Campus. This will provide coordinated patient care and clinical research opportunities.

Dr. Jillian Macdonald returned to Ottawa in July 2011 and has taken on operation of the Mohs clinic three days a week. Mohs Surgery provides a uniquely high cure rate with exceptional tissue sparing to patients with complex primary and recurrent non-melanoma skin cancer.

The total estimated number of in-patient consultations performed annually by dermatology within The Ottawa Hospital = 400.

Educational Activities

Our Residency Training Program is the gem of our Division. We have successfully trained nearly 80 dermatologists since the inception of this program in 1967. This program has always been fully accredited by the Royal College of Physicians and Surgeons. Our Program Director for the academic year of 2011/12 was Dr. Nordau Kanigsberg. We provide a full spectrum of clinical and academic opportunities for our trainees. Our clinics include adult general and paediatric dermatology, as well as specialty clinics for cancer, contact dermatitis, psoriasis, Mohs surgery, melanoma-pigmented lesion, and leg ulcer. In addition our residents attend clinics in Iqaluit with Dr. Robert Jackson, and are supported for numerous electives around the world. We provide strong one-on-one mentorship for all our residents. In addition we provide classroom and clinical teaching for medical students and residents from other specialties.
Research Activities (Key Peer-reviewed Grants)

**Pratt M.** (in collaboration with Dr. Peter Hull — University of Saskatchewan) Epithelial Genetics Unit, University of Dundee, Dundee Scotland. Filaagrin Mutations and Cell-Mediated Allergic Contact Polysensitization Study.

**Fratesi L, Gavigan, Fong, Elliott, Pratt M.** (in collaboration with Dr. John Elliott, University of Alberta). CDF. What Causes Hair Dye Allergy — Does the Immune System or Genetics Play a Role

Noteworthy Publications

Members of the division published 14 peer-reviewed articles this past year including:


Glassman SJ. Vitiligo, reactive oxygen species and T-cells. *Clin Sci (Lond)* 2011; **120**: 99-120


Colantonio S, Becker J. Pancreatic Panniculitis. *CMAJ* 2012; **184**(2):e159

Beecker J. Fixed Drug Eruption due to fluconazole. *CMAJ* 2012; **184**(16):675-

Honours and Awards

- **Dr. Melanie Pratt** and **Dr. Harvey Finkelstein**: represented our Division as Royal College Examiners in Dermatology in 2011.

The Future

We plan to focus on malignant dermatologic disorders since the prevalence of skin cancers is increasing and the cure rate for malignant melanoma is directly related to early recognition and appropriate treatment. Inflammatory conditions such as severe psoriasis and complex eczematous disorders and chronic wounds are very disruptive to human function and comfort and will also be a priority for the division. These cancerous, inflammatory and ulcerative conditions can be managed more optimally, given a better practice environment. To effectively address these challenges, we are developing a Dermatology Centre (The Centre) within The Ottawa Hospital. The Centre will be located on the fourth floor in the Parkdale Clinic building at the Civic campus, where our Mohs surgery and aging phototherapy units are currently located. The Centre will be in alignment with The Ottawa Hospital priorities: cancer, minimally invasive care, tertiary care, and chronic disease management.
As detailed below, this centre will allow us to manage effectively, the challenges noted above and to facilitate the further development of academic dermatology in Ottawa.

Existing services will be upgraded. This will include Mohs micrographic cancer surgery, phototherapy, contact dermatology, the melanoma-pigmented lesion clinic, cutaneous ulcer service, and general dermatology.

New elements and services will be added. This will include a melanoma rapid diagnosis and management clinic, solid organ transplant clinic, teledermatology and a psoriasis systemic treatment clinic.

Translational clinical research will be nurtured and expanded and a clinical trials unit will be added.

An education centre will promote the transfer of knowledge and skills relevant to dermatology for dermatologists in practice, our residents, medical students, and the general public.

An implementation plan including fundraising and a preliminary financial analysis are initiated. This plan promotes approaches such as keeping patients out of hospital by providing comprehensive outpatient care and diagnosing malignant melanoma when it is curable and relatively inexpensive to treat.

The Division is excited about the new centre and the positive impact it will have on patient care.

ENDOCRINOLOGY & METABOLISM

21 Faculty Members • 2 Residents • 1 Fellow

Clinical Activities

The Division of Endocrinology and Metabolism provides 20,000 outpatient visits per year at the Foustanellas Diabetes and Endocrine Centre at the Riverside Campus and inpatient consultation services at both the General and Civic Campuses. In addition to this, we provide multidisciplinary clinics in pituitary disorders (Civic Campus), cystic fibrosis-related diabetes (General Campus) and Obstetric Medicine (General Campus).
This past year we implemented two new multidisciplinary clinics:

1. **University of Ottawa Heart Institute Diabetes Clinic**
   The Division of Endocrinology and Metabolism and the Division of Cardiology previously collaborated on the Glucose Study, a quality assurance project examining the care of patients with diabetes and acute coronary events. A need for more systematic identification, early treatment and follow up of diabetes patients with heart disease were identified. As a result of this, a dedicated post discharge diabetes clinic was established in November 2011 at the University of Ottawa Heart Institute led by Drs. Amel Arnaout and Rick Davies.

2. **Endocrinology & Metabolism and Nephrology Cooperative Treatment Strategy**
   Patients beginning peritoneal dialysis often have challenges managing their diabetes that worsens dialysis effectiveness and infection rate. Under the leadership of Drs. Dora Liu and Deb Zimmerman, we have implemented a process whereby patients are cared for by a dedicated Endocrinologist to proactively control glucose levels.

We are committed to improving the access to specialist services for family physicians and patients in the Champlain region. We now have three members actively providing telehealth from our dedicated telemedicine office. We have doubled the number of telehealth visits from 554 in 2009–2010 to 1005 in 2010–2011.

The **Building Access to Specialists through eConsultation (BASE) Project** has improved access to 14 specialties across our region. Under the leadership of Drs. Erin Keely and Clare Liddy (Dept. of Family Medicine), in collaboration with the Champlain LHIN, we have piloted a web-based eConsultation service. Over 400 eConsultations have been submitted to 14 specialties, 13% of these were directed to Endocrinology & Metabolism. Both the primary care providers and specialists are highly satisfied with the service. In over 40% of the cases, the need for a face-to-face consultation has been avoided.

Our members are leading the region towards **improved in-hospital care for patients with diabetes**. Dr. Janine Malcolm and Sharon Brez (Advanced Practice Nurse) have shared best practices, lessons learned and innovative tools implemented in The Ottawa Hospital with regional community hospitals. In addition, they are spearheading a regional initiative to improve screening and timely access for people with diabetes related foot concerns. They were awarded a Department of Medicine Patient Safety and Quality Improvement grant in 2012 to support this project.

**Educational Activities**

The Division of Endocrinology and Metabolism provides education across the spectrum of undergraduate, postgraduate and continuing professional development. We have a fully accredited Endocrinology and Metabolism training program led by Dr. Janine Malcolm. Several innovations have been successfully implemented this year including expanded evaluation strategies with the introduction of the Mini CEX and multisource feedback. The 7th Annual Endocrine and Diabetes CME for primary care doctors was another success.
with attendance by 113 physicians, and 20 healthcare professionals. This year the focus was on common endocrinology and metabolism problems faced by primary care physicians in their day-to-day practice.

This past year, two members of the division have taken on major leadership roles within the Department of Medicine—Dr. Heather Lochnan is now the Director of Continuing Professional Education and Dr. Erin Keely is Vice-Chair, Education.

Our members are active in medical education research. Dr. Lochnan is leading two innovative research projects using Concept Mapping—one exploring the barriers to reporting lapses in professionalism and a second, supported by a Department of Medicine educational research award, to identify the concerns of residents and faculty around restricted residency duty hours. Concept mapping ensures stakeholder participants are integrally involved in the identification of critical concerns and in the prioritization of strategic initiative to address these concerns. Dr. Malcolm is developing and validating a rating tool for inpatient medical consultations.

**Research Activities**

Our research enterprise encompasses cellular and molecular studies through to clinical research and models of health care delivery in the domain of diabetes, obesity, metabolism, and endocrinology. We are closely linked to the Chronic Disease Program of the Ottawa Hospital Research Institute (OHRI) led by Dr. Alexander Sorisky, and we contribute to the vascular health priority of the OHRI and the Department of Medicine.

Many of our MD and PhD researchers are funded by respected peer-review agencies, including Canadian Institutes of Health Research, Heart and Stroke Foundation of Canada, and Canadian Diabetes Association. In addition, we participate in trials funded by the pharmaceutical industry to evaluate new therapies that hold promise for the care of our patients in the future.

We are a specialty site within the Canadian Clinical Trial Network for type 1 diabetes research recently established by the Juvenile Diabetes Research Foundation in conjunction with the federal government. This provides a unique opportunity for patients with type 1 diabetes in the Ottawa area to participate in innovative clinical research. The first of several trials is now underway in Ottawa.

As part of our collaboration between adult and pediatric divisions within the University of Ottawa, we organized a joint research retreat with our Division and the CHEO Division of Endocrinology and Metabolism in March 2012, involving our faculty and residents. This event highlights new research findings presented by members from both divisions, with a view to appreciating the distinct as well as the common themes between adult versus pediatric populations within various domains. This year, new data with respect to osteoporosis and childhood cancer were presented. The retreat also provides a valuable forum for our trainees to present works-in-progress, and to receive broad feedback from
faculty in both divisions attending the retreat. Finally, it is also an opportunity for us to invite outside speakers, and this year, Dr. Zemin Yao, Chair of Biochemistry, Microbiology & Immunology, shared his insights on ‘Apo C-III — Implication in Metabolic Disorders’.

Research collaborations have continued with the Division of Nephrology, the Division of Infectious Diseases and the Department of Biochemistry, Microbiology & Immunology.

Members of The Division of Endocrinology and Metabolism had $3,324,081 in grants for 2011–2012.

**Key Peer-reviewed Grants**

**Sorisky A.** CIHR. Atherogenic adipocyte dysfunction induced by TSH.

**Scott F.** CIHR. Mechanisms of gut involvement in dietary protection from autoimmune diabetes.

**Zha X.** HSFO. Molecular mechanisms of calcineurin signaling in ABCA1 function.

**Chrétien M. Ooi TC.** Mayne J, Mbikay M. CIHR. PCSK9 in cholesterol homeostasis: the key role of phosphorylation and hormone status.

**Dent R** and McPherson R. CIHR. Metabolic and genetic determinants of obesity and obesity related phenotypes.

**Noteworthy Publications**

Members of the Division of Endocrinology and Metabolism published 55 peer-review articles this past year. Key publications include:


**Molgat AS, Gagnon A, Sorisky A.** Macrophage-induced preadipocyte survival depends on signaling through Akt, ERK ½, and reactive oxygen species. *Exp Cell Res* 2011; 317: 521-530


**Honours and Awards**

- **Dr. Janine Malcolm**, **Dr. Mary-Anne Doyle**, **Dr. Erin Keely**, **Sharon Brez**: 1st Prize, TOH Quality Awards 2011 for the outstanding efforts in the implementation of the preprinted insulin orders.

- **Dr. Teik Chye Ooi**: Recipient of the 2011 Distinguished Mentor Award of the Faculty of Medicine.

- **Dr. Robert Dent**: Recipient of the Queen’s Diamond Jubilee Medal for work in Obesity treatment and research.

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**GASTROENTEROLOGY**

14 Faculty Members • 7 Residents • 1 Fellow

**Clinical Activities**

The Division of Gastroenterology is a strong clinical group with expertise in Therapeutic Endoscopy, Inflammatory Bowel Disease and management of Liver Disease. We provide daily 24 hour inpatient and Emergency Room care for patients with Gastrointestinal bleeding and have several endoscopic therapeutic procedures which we can employ to stop bleeding almost immediately. With the increased use of anticoagulation, this service is in high demand. In addition, our services are frequently required to insert PEG feeding tubes for patients unable to maintain oral nutrition. Our therapeutic endoscopists frequently collaborate with the Surgical Department and Cancer Care Physicians to insert esophageal or rectal stents in patients with impending malignant obstruction, preventing need for surgery. **Dr. Avi Chatterjee** is currently collaborating with Radiation Oncology in a project assessing the placement of Fusibials for pancreatic cancer treatment. **Dr. Ramy Abaskharoun**, in collaboration with the Bariatric team of The Ottawa Hospital, have developed a new endoscopic approach to removal of common bile duct stones in patients with a previous Roux-en-Y surgery. (see clinical initiatives section for more detail).
The GI Division is now also participating in the Endoscopy Schedule at The Kemptville Hospital. This will lead to enhanced collaboration between the 2 centres and improve access to care for patients of the Champlain District.

**Dr. Richmond Sy** and **Dr. Lili Oliveira** have expertise in management of patients with Inflammatory Bowel Disease and have more than 150 patients on treatment with immune-modulators. We are in the process of developing a multi-disciplinary clinic for care of these patients, in collaboration with Colo-rectal Surgery, IBD nurses and dieticians with special interest in this patient population.

**Dr. Linda Scully** and **Dr. Thomas Shaw-Stiffel** manage a large patient population with chronic liver disease and in collaboration with the University of Toronto and McGill University manage more than 100 of these patients pre- and post-liver transplant.

**Educational Activities**

The Division of Gastroenterology has a strong GI Fellowship Training Program. We had 42 applicants for 2 positions last year. All of our Canadian graduates have passed the Royal College Examination in the past 5 years and our program was renewed this past year with a very high rating. We also have a new Program in Therapeutic Endoscopy and our recent trainee is now in practice in Thunder Bay. We are also training an Internal medicine physician from Jamaica in Gastroenterology, at their request. Jamaica is very underserviced in this specialty and **Dr. Dawkins** has recently joined us and will train here for 2 years. She is funded by the Government of Jamaica.

The Division of Gastroenterology organizes and teaches the majority of the GI Block for the Second Year Medical students. This block is highly rated by the students and we are becoming more active in the French stream with **Dr. Sylvie Gregoire** taking over this portfolio.

**Dr. Ralph Lee** has completed his course work for his Masters in Medical Education at the University of Dundee, Scotland. Dr. Lee is a member of the Canadian Association of Gastroenterology Education Committee and e-Portal committee. **Dr. Nav Saloojee** has just been accepted into the Distinguished Teacher Programme at the University of Ottawa.

**Dr. Richmond Sy** was an invited speaker at the Society of Obstetrics and Gynaecologists of Canada Annual meeting, June 2012. **Dr. Shaw-Stiffel** and **Dr. Sy** have organized an excellent annual course “An update in Liver and Inflammatory Bowel Disease” with several speakers from our Division as well as experts from other Universities. This meeting, held in Ottawa, was attended by many Ontario Gastroenterologists.

**Dr. Richmond Sy** is an Examiner in the Gastroenterology section for the Royal college of Physicians and Surgeons of Canada.
Research Activities and Grants

Dr. Avi Chatterjee has started monthly research rounds for the GI Division members and trainees. He has a full-time research assistant and had two summer students to help with data management.

Our members are involved in several collaborative projects:


Shaw-Stiffel T. (collaboration with The Infectious Disease group) studying the factors enhancing the uptake of hepatitis C treatment through a multidisciplinary Clinic.

Oliveira L. (regional Co-chair of a Canadian group of Inflammatory Bowel Disease specialists) developing a series of quality indicators for the Management of IBD patients.

Chatterjee A. (collaboration with Dr. S Aaron of Respirology) studying the incidence of colorectal polyps in patients with Cystic Fibrosis.

GERIATRIC MEDICINE

10 Faculty Members • 3 Residents

Clinical Activities

In 2011, the Division of Geriatric Medicine concentrated on three main clinical priorities:

1. The development of a Senior Friendly Hospital Initiative at The Ottawa Hospital (TOH). This initiative is supported by Senior Management of TOH and will focus on the:
   A. Identification, Assessment and Management of Delirium.
   B. Improved Mobilization of Seniors to Prevent Iatrogenic complications of hospitalization.
2. The early assessment of hip fracture patients to help prevent, assess and manage post-operative Delirium.

3. An Enhanced Geriatric Consultation Team that includes a Geriatric Nurse Specialist, a Physiotherapist, and a Geriatrician. The goal is to help consulting teams in their management of the complex frail elderly.

The next steps for 2012-2013 will be to identify seniors admitted to hospital that are at high risk for becoming ALC and whether early intervention can change outcomes.

The Geriatric Emergency Management (GEM) Program has continued to expand and develop over the past year. This year GEM assessments were completed on over 3,500 older adults across the Champlain LHIN. The program continues to meet and/or exceed the performance measurement targets set by the Champlain LHIN and in the province. See clinical initiatives section for a detailed program description.

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**Programs Impacting the Community**

The Regional Geriatric Program of Eastern Ontario continues to provide excellent leadership in the community in its shared vision to optimize the health and independence of older people in the Champlain Region.

**Dr. Nahid Azad** is part of the Expert Task Group that developed a REGIONAL INTEGRATED HEART FAILURE STRATEGY for the Champlain LHIN. She is also part of a Health System Research Award through the Ministry of Health and Long Term Care that is looking at gender and equity issues in chronic illnesses.

**Dr. Frank Molnar** presented to the House of Commons Standing Committee on Health on chronic diseases such as dementia. He has also been interviewed by the media and has had several articles in the Ottawa Citizen about the impact of Aging and Dementia on the Community.

**Dr. Frank Molnar** is the Representative for the Canadian Geriatrics Society on the National Wait Times Alliance and is the Senior Editor and Author of sections on Dementia and Aging of the CMA Fitness-to-Drive Guidelines. He is working with a Federal MP on advocacy for a national dementia plan and is the Co-author of the Alzheimer Society of Ontario’s Provincial Report on Dementia.

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**Educational Activities**

The Division of Geriatric Medicine is actively involved in Education at all levels—Undergraduate, Postgraduate and CME.

Geriatrics continues to be actively involved in education at the Undergraduate level both in terms of administrative responsibilities and delivery of education.
• Dr. Anna Byszewski is the Anglophone Co-Director of the Professionalism Curriculum for Years 1 & 2 at the University of Ottawa. She is also the Assistant Anglophone Co-Chair of the “E-Portfolio” Program.

• Dr. Bill Dalziel is the content expert of the core teaching of Geriatric Medicine during the Integration Block.

• Dr. Barb Power is the Anglophone Director of Clinical Skills Program at the University of Ottawa. This program is for 1st and 2nd year Medical Students and includes Interviewing Skills; Physical Skills Development; the Community Preceptor Program and Link Block which is the first month of Clerkship. Dr. Power is actively involved in the national Clinical Skills Group and is presently involved in a research study looking at the use of standardized patients to teach clinical skills

• Dr. Nahid Azad has developed educational activities focused on the integration of Gender and health.

The Ottawa Geriatric Medicine training program is known to be one of the best in the country. Two residents are presently in the program and they are actively engaged in Educational and Research activities.

The Regional Geriatric Program (RGP) hosted its annual Geriatric Education Day “Upstream” in March 2012 and welcomed Dr. Samir Sinha as the Keynote Speaker. It was evaluated highly and well attended by over 300 Healthcare Professionals.

The RGP’s Regional Geriatric Rounds continues to expand and routinely over 40 satellite sites connect by OTN to the live sessions hosted at the The Ottawa Hospital Civic Campus. These presentations occur monthly.

The Geriatric Division is a strong participant in the training of CCAC assessors within the local LHIN as well rural in the province.

Research Activities

The main focus of research in the Division is on Dementia and Its Impact on Driving; Transitions of Care; Delirium and Cardiovascular Disease in Elderly Women.

Key Peer Reviewed Grants


Dalziel WB. Ontario Trillium Foundation. Dementia Healthline Feasibility Study.
Lochnan H, Byszewski A et al (co-I) Department of Medicine Medical Education Research grant. Impact of resident duty hours limits.

Power B. U of Ottawa, Faculty of Medicine, Undergraduate Medical Education. Innovation in Clinical Skills.

Azad N. Federation of Medical Women of Canada. Breaking the Silence: Managing Your Promotion

Noteworthy Publications

Members of the division published 12 peer-reviewed publications in 2011–2012 with notable publications in high impact journals including:


Azad N, Bouchard K, Mayhew A, Molnar F. Predicting attendance factors and safety of a rehabilitation program for elderly women with Congestive Heart Failure. J Geriatr Cardiol 2012; In Press


Honours and Awards

• Dr. Lara Khoury was the first physician to participate in The Ottawa Hospital Leadership Academy, a comprehensive program that provides participants with leadership insight and actionable tools, focusing on personal, human and organizational leadership skills. Dr. Khoury felt that the program has greatly helped to improve her skills in leading others, while ensuring that she maintains a proactive approach to championing The Ottawa Hospital’s vision and goals.

• Dr. Frank Molnar is the Secretary-Treasurer of Canadian Geriatrics Society. He is the Co-founder and Associate Editor-in-Chief of the new Canadian Geriatrics Society on-line CME journal.

• Dr. Nahid Azad is the President of the National Federation of Medical Women.
HEMATOLOGY

20 Faculty Members • 8 Residents • 9 Fellows

Clinical Activities

Opening of the Ottawa Blood Disease Centre — Building on the strengths of all aspects of the Division of Hematology, both literally and figuratively, we opened the Ottawa Blood Disease Centre in May 2012. This world-class facility gives a home to our internationally recognized centre of excellence and will better equip us to improve patient care, accelerate life-saving research and help us train tomorrow’s leaders in Blood Disease.

Prior to the opening of the Ottawa Blood Disease Centre our team was dispersed in nine locations in 6 buildings on two campuses. This new facility brings our hematology doctors and allied health professionals together, working under one roof. Doctors, pharmacists, nurses, scientists and support staff will be crossing paths on a daily basis to interact to improve blood disease patient care. Early 2013 our patients will also benefit from new outpatient ultrasound, lab and clinic facilities just adjacent to the Blood Disease Centre.

This Centre also brings all of our trainees together alongside the faculty, enhancing our ability to develop tomorrow’s leaders in Blood Diseases.

The Ottawa Blood Disease Centre is now the hub for Blood Disease research in Ottawa, supporting our world-class scientists. We recently recruited one of the top scientists in the world in blood clotting disorders, Dr. Grégoire Le Gal. Dr. Le Gal did advanced research training here in Ottawa and fell in love with our country, city and program. A key factor in his decision to move his family from France to Ottawa was the opportunity to work in a new world-class facility. The synergies developed by bringing our scientists together and recruiting new scientists will lead to important discoveries that will alleviate suffering for future generations of patients with Blood Disease around the world.

Hematology Ward consistently scores highest in patient satisfaction at The Ottawa Hospital (TOH)

The Ottawa Hospital routinely conducts patient satisfaction surveys on inpatient wards. For the last 12 out of 12 months and indeed for several years now, our Hematology ward (5West) has ranked the highest in patient satisfaction of all TOH wards. This achievement is a source of great pride within the Division and is yet another marker of the excellence of our program.
Programs Impacting the Community

The Regional Thrombosis Program continues to grow. We now do over 50 telehealth visits or consult per month and provide five satellite clinics per week. In total we now care for patients by over 16,000 visits per year, closer to home, in the language of choice, with a service that has 24/7/363 access. Champlain LHIN is the place to be if you get a DVT or PE.

Educational Activities

Learning/Acknowledging/Celebrating our past “History of Hematology in Ottawa” exhibit — Concomitant with the opening of the Ottawa Blood Disease Center the Hematologists, led by Dr. Lothar Huebsch, developed an exhibit that highlights the accomplishments, the people and the places of Hematology in Ottawa over the last 60 years. The first trained Hematologist to establish in Ottawa was Dr. Ken Smiley who trained with Maxwell Wintrobe (yes, the guy whose textbook in Hematology we all own) and then returned to Ottawa in 1952. Did you know that: 1) Dr. Smiley was the first to transfuse a unit of frozen blood?, 2) In 1989, Ottawa performed the second (minutes from being first!) unrelated bone marrow transplant in Canada?, 3) Ottawa led the NEJM RCT published in 1989 that led to PLEX becoming standard of care for TTP?, 4) the ubiquitously internationally used Wells rules were born and initially validated in Ottawa? And much more... Come by for a look!

Hematology Residency Training Program celebrated its 20th anniversary in May 2012. Cutting the cake were the founding program director, Dr. Bertie Aye with our first trainee, our own Dr. Bence-Bruckler with many of our prior Program Directors, teachers and trainees in the audience.

Dr. Dimitri Scarvelis has assumed the role of Program Director June 1st, 2011 replacing Dr. Marc Carrier who ably chipped in for a year.

Research Activities

The Division recruited three more MSc (Epi) trained members bringing our total to 10 out of 20 Division members leading practice changing clinical research programs. Stay tuned because more are coming. We are proud to lead The Ottawa Hospital in proportion of clinical researchers in a single Division- 50%!

We are excited to boast that we received $9,322,045 in unique peer reviewed funding in the period between June 2011 and July 2012. Per capita surely competitive with any Division of Hematology in the world.
Key Peer-reviewed Grants

Atkins H. (co-PI) MS Society of Canada. Long Term Outcomes of Patients that received stem cell transplant for MS- Clinical Radiological, Neuropsychological and Health Utility Evaluations.

Carrier M. (co-PI) CIHR. Randomized controlled trial of anticoagulation vs. placebo for a first symptomatic isolated distal deep-vein thrombosis (IDDVT): the CACTUS – PTS Trial.

Carrier M. (PI) HSFC. The Management of Subsegmental Pulmonary Embolism: A Prospective Cohort Study (SUSPECT/SSPE).

Tinmouth A. (co-PI) CIHR. Safety and efficacy of a therapeutic platelet transfusion strategy in outpatients.

Wells PS. (PI) HSFC Analysis of Pro-coagulant markers for the prediction of therapeutic failure during anticoagulation in cancer patients at high risk for recurrence of Venous Thromboembolism: A Pilot Study

Noteworthy Publications

Over the last year our Division members have published 82 unique peer reviewed publications. Listed below are a sample of the high impact papers and those that show our collaborations in action.


**Honours and Awards**

- **Dr. Lothar Huebsch,** 2011 TOH Physician Clinician Recognition Award. Who wouldn’t want to be looked after by the current “eminence grise” in Hematology in Ottawa? Years of experience are combined with a constant thirst for new blood knowledge, a never ending energy and enthusiasm to share that knowledge and a caring and compassionate soul.

- **Leah Shaw,** Administrative Assistant, Division of Hematology, who works with Dr. Sabloff was the Recipient of the Compass Award for her kind compassionate care and living The Ottawa Hospital’s values.

- **Dr. Marc Carrier** was awarded a prestigious and competitive Heart and Stroke New Investigator Award.

**INFECTIOUS DISEASES**

19 Faculty Members • 4 Residents • 2 Fellows

**Clinical Activities**

**Dr. Gregory Rose** and **Dr. Raphael Saginur** have developed an Infectious Disease Clinical Program at Bruyère Continuing Care focusing on chronic wound management.

**Dr. Gary Garber** has developed a nationally recognized Antimicrobial Stewardship Program that has resulted in a significant reduction in antimicrobial drug usage while maintaining excellent clinical outcomes. Dr. Garber is profiled in the Patient Quality & Safety section of this annual report.
Dr. Mark Tyndall has been expanding HIV clinical care at the Mission Shelter and the Sandy Hill Community Health Centre in order to increase involvement of the Division in the provision of care to people with addictions and mental health illnesses.

**Educational Activities**

The faculty remains active participants in undergraduate and postgraduate teaching. The clinical consultative service and outpatient clinics are consistently regarded by house staff as exceptional educational experiences.

Nurturing of prospective clinician-scientists is one of the important goals of the program, reflected in the success of recent graduates in obtaining external national peer reviewed research fellowships.

Drs. Bill Cameron and Mark Tyndall have developed a program with the Georgetown Public Hospital and the University of Georgetown in Guyana to operate a primary care clinic with a focus on infectious diseases. This has resulted in new opportunities to provide education to health care providers in Guyana by supporting Canadian physicians to work with colleagues from that country.

**Research Activities**

The division has been active and productive in research with several themes of focus.

The Hepatitis C research group led by Dr. Curtis Cooper participated in a groundbreaking international study in HCV antiviral therapy in HIV-HCV co-infection that has doubled HCV treatment success rates (61% versus 27%).

The HIV basic sciences programs led by Drs. Jonathan Angel and Paul MacPherson continue to be National leaders in HIV pathogenesis and vaccine development.

The bacteriology basic sciences group led by Drs. Gary Garber and Craig Lee continue to focus on the pathogenesis of Trichomonas vaginalis and chancroid infections.

Drs. Kathryn Suh and Virginia Roth have been leading research into better preparing hospitals for the increasing risk of antibiotic resistant organisms, including refocusing VRE control measures to improve infection control standards for all patients. They receive funding from the Canadian Nosocomial Infection Surveillance Program.
Research Activities (Community Based)

Dr. Curtis Cooper has led the expansion of the Viral Hepatitis Community Liaison Program based on a shared model of HCVV Care with community-based clinics in Ottawa. This program has been initiated and has begun to achieve the goals of increasing access to HCV education, work-up and treatment for HCV patients in Ottawa and region.

Dr. Mark Tyndall has been active in the promotion and development of harm reduction programming for people who use drugs in Ottawa. He has been leading a group of public health and community members who are committed to operating a supervised injection site in Ottawa.

Key Peer-reviewed Grants

Angel JB. CIHR. Regulation and function of soluble IL-7 receptor alpha (CD127) in HIV Infection.

Cameron DW. Ontario HIV Treatment Network. A Randomized Control Clinical Trial of Micronutrient & Antioxidant Supplementation in Persons with Untreated HIV Infection. The Maintain Study


Noteworthy Publications

Members of the division published 73 peer-reviewed publications in 2011–2012 with notable publications in high impact journals including:


Crawley A, Angel JB. The influence of HIV on CD127 expression and its potential implications of IL-7 therapy. Semin Immunol 2012; 24(3): 231-240


Honours and Awards

- Dr. Jonathan Angel 2012 John M. Embil Mentorship Award in Infectious Diseases, Canadian Foundation for Infectious Diseases.

- Dr. Yoko Schreiber receiving Department of Medicine Research Fellowship Award.

**INTERNAL MEDICINE**

26 Faculty Members • 5 Residents (PGY4)

The Division of General Internal Medicine is active academically and clinically. The division supports the healthcare system by directly caring for patients who have acute and complex illnesses. This is accomplished in an academic atmosphere in which we develop innovative methods to train physicians and monitor the performance of the healthcare system.

Clinical Activities

In-Patients — The Division of General Internal Medicine cares for a large volume and proportion of TOH in-patients, mostly in the setting of the Clinical Teaching Units. There are six units, three at each of the Civic and General campuses. These include fourteen monitored (Civic eight and General six beds) and four telemetered beds (Civic). Over five thousand patients were admitted to the CTU's over the past twelve months. Almost all are referred from The Ottawa Hospital Emergency Department. There is also a 30-bed non-teaching unit, supervised by attending physicians from the Division and staffed by 4 Physician Assistants. In addition to the in-patient units, General Internal Medicine
provides an inpatient consultation service to other departments and divisions, staffed by a designated attending physician and by senior medical residents. These units act as first responders to Emergency Room requests and triage for admission from other wards and the ICU.

**Out-Patients** — General Medicine out-patient clinics are conducted at two sites, General and Riverside. The clinics include a specialized preoperative evaluation assessment unit for patients with known medical illness. These clinics are operated under the guidance of Drs. James Chan and Krista Wooller. We have two longitudinal clinics for GIM fellows and will be starting four Rapid Referral Clinics, which will decant patients from the CTUs and the emergency room. Dr. Heather Clark has been instrumental in developing this initiative. As well as General Medical clinics, our medical staff participate in special interest clinics namely Medical Complications of Pregnancy, HIV, Diabetes, Pulmonary Hypertension, Thrombosis and Weight Management.

Divisional members participate in the Champlain UHN e-consult pilot project. Dr. Alison Dugan acts as the Consultant Internist for Baffin Island and the administrative liaison between The Ottawa Hospital and the Nunavut Specialist Physician Group.

**Administration Roles**

General Internal Medicine members have assumed a variety of leadership roles.

- **Dr. Cathy Code**: Secretary Treasurer TOH medical staff.
- **Dr. Alan Forster**: Scientific Director of Performance Measurement at The Ottawa Hospital and Medical Director at the Ottawa Hospital Centre for Patient Safety. He is also an Executive in Residence at the Telfer School of Management.
- **Dr. Glen Geiger**: Chief Clinical Information Officer, The Ottawa Hospital.
- **Dr. Alan Karovitch**: President of the North American Society of Obstetric Medicine and Vice Chair of finance for the Department of Medicine, University of Ottawa.
- **Dr. Steve Kravcik**: Medical Evaluator for Extraordinary Assistance Plan, Public Health Agency of Canada.
- **Dr. Leanne Reimche**: Senior Clinical Evaluator in Biologic and Genetics Therapy at Health Canada.
- **Dr. Jeff Turnbull**: Chief of Staff at The Ottawa Hospital.
- **Dr. Carl van Walraven**: Site Director ICES at the University of Ottawa.
**Educational Activities**

The division of General Internal Medicine remains very active in important educational endeavors.

- **Dr. Craig Campbell**: Director of the Office Professional Affairs at the Royal College of Physician and Surgeons of Canada.
- **Dr. Heather Clark**: Division Program Director and Internal Medicine Clerkship Chair at the University of Ottawa.
- **Dr. Cathy Code**: Core Internal Medicine Program Director, Department of Medicine, University of Ottawa.
- **Drs. Vladimir Contreras-Dominguez and Isabelle Desjardins**: Associate Directors Medicine Clerkship, University of Ottawa.
- **Dr. Gianni D’Egidio**: Will spend 8 months at University of Toronto completing his Master’s degree in Human Factor Engineering.
- **Dr. Steve Kravcik**: Chair of Faculty Appeals Committee University of Ottawa.
- **Dr. Jim Nishikawa**: Associate Program Director (Core) Internal Medicine Program University of Ottawa and Internal Medicine examiner performance auditor at the Royal College of Physician and Surgeons of Canada.
- **Dr. Debra Pugh**: Director of the Ottawa Exam Centre; Vice Chair of Central Examination Committee, Medical Council of Canada
- **Dr. Claire Touchie**: Chief Medical Education Advisor at the Medical Council of Canada.
- **Dr. Krista Wooller**: Director of Link Block at the University of Ottawa.
- **Clinical Scholars**: We currently have two clinical scholars and a third starting in January 2013 with an emphasis on Medical Education and curriculum development and simulation.

**Research**

The division has maintained an internationally recognized active research program.

Areas of interest include patient safety, resource utilization and public policy. This work is facilitated by both The Ottawa Hospital comprehensive Data Warehouse (largely developed by members of General Internal Medicine) and the ICES satellite centre. The physicians primarily involved are well funded by peer reviewed agencies and have a very impressive publication record.
The division is also active in medical education research. Areas of focus include student and resident assessments, procedure skills and feedback processes.

Dr. Kumanan Wilson continues to hold the Canada Research Chair in Public Health Policy.

Key Peer-reviewed Grants

The members of our division have been very successful in obtaining grants for a variety of research endeavors.

Chan J, Pugh D, Touchie C. Department of Medicine Education Grants. The Accuracy of First Impression Ratings in an OSCE station.

Forster A. CIHR. Accuracy of using automated methods of adverse events detection.


Pugh D. TOHMAC Innovation Grant. Interactive Online Learning for Staff Physicians in Ultrasound Guided Central Venous Catheter Insertion for a Standardized Approach at The Ottawa Hospital.

Van Walraven C. TOHMAC innovation grant. The Ottawa Text Classification Project (OTCP). Derivation and Validation of Text Classification Algorithms to Identify Important Radiological Abnormalities in the Ottawa Hospital Data Warehouse

Wilson K. Canadian Institutes of Health Research. Infant outcomes in the first year of life associated with maternal H1N1 vaccination

Noteworthy Publications

Members of the Division of Internal Medicine published 58 peer-review articles this past year. Key publications include:


Van Walraven C, Wong J, Forster AJ. Derivation and validation of a diagnostic score based on case-mix groups to predict 30-day death or urgent readmission. *Open Medicine* 2012; 6(2); 90-100

Van Walraven C, Wong J, Forster AJ. LACE+ index: extension of a validated index to predict early death or urgent readmission after hospital discharge using administrative data. *Open Medicine* 2012; 6(2); 80-89


**Quality and Collaboration**

General Internal Medicine has been actively involved in many Ottawa Hospital quality projects. Some highlights include.

**The Ottawa Hospital**: Quality Improvement Project. Examining factors of readmission rates in General Internal Medicine.

**Dr. Alan Forster**: Recently spearheaded a prospective adverse events surveillance project that was completed on our Clinical Teaching Unit this year.

**Dr. Glen Geiger**: Has spearheaded a project using iPads that will improve the circle of care on General Internal Medicine Clinical Teaching Units.

**Dr. Alan Karovitch**: Involved in the TOHAMO innovation grant proposal project “Enhancing Addiction Supports for Hospitalized Patients with Pre-Existing Drug Dependency”.

**Dr. Krista Wooller**: Accepted into a Physician Leadership Program: “Improving Quality and Patient Safety”. The program is the result of a partnership between The Ottawa Hospital and the Telfer School of Management.

The members of General Internal Medicine were the first physicians to participate in other pilot projects including CPOE and e-med reconciliation.

**Honours and Awards**

- **Dr. Loree Boyle** received the Department of Medicine, University of Ottawa Resident Clinical Teaching Choice Award.

- **Dr. Gianni D’Egidio** was honored by the Internal Medicine Residents with the 2011–2012 Clinical Teaching Award.
• Dr. Isabelle Desjardins received the Healthcare Education Scholars Program (AIME) Fellowship.

• Dr. Samantha Halman was a 2012 recipient of the Department of Medicine’s Medical Education Research bursary award. The award supports Clinical Scholars in the Department of Medicine who have an academic focus in Medical Education.

• Dr. Debra Pugh won the W. Dale Dauphinee Fellowship award from the Medical Council of Canada. Dr. Pugh also received the Teaching Skills Attainment Award.

• Dr. Claire Touchie received the Department of Medicine Vision Award.

• Dr. Jeff Turnbull was honored with the United Way Ottawa’s Community Builder of the Year award for co-founding the Ottawa Inner City Health project. He also received an honorary Doctorate of Law from Carleton University.

MEDICAL ONCOLOGY

22 Faculty Members • 6 Residents • 5 Fellows

Clinical Activities

The Ottawa Hospital Cancer Centre (located at the General Campus of The Ottawa Hospital and The Irving Greenberg Family Cancer Centre at the Queensway-Carleton Hospital) provide world class Medical Oncology care for the Champlain LHIN Region of Ontario. Unique to The Ottawa Hospital Cancer Centre is our Triage Unit which assesses medical oncology patients with urgent medical issues. It is one of only a few fully operational Cancer Centre triage units in all of Canada, and substantially reduces Emergency Room visits by cancer patients.

The Cancer Centre employs 32 outpatient chemotherapy nurses and 33 clinic nurses, and also operates a 33 bed inpatient program.

The number of new medical oncology patients seen by the division continues to grow at an average rate of 6% per annum, with 4,783 new medical oncology patients seen in 2011 and a projected number of 5,628 by 2014/15. There were approximately 22,000 patients (new and follow-up) who visited the Cancer Centre from July 1st, 2011 to June 30th, 2012. Over 4300 were patients seen at the new Irving Greenberg Family Cancer Centre.
In addition to their dedication in providing excellence of care, our physicians gave numerous presentations as invited speakers and participated in many continuing medical education activities at regional, provincial, national and international levels.

Programs Impacting the Community

The Division oversees systemic therapy of cancer for all patients in the Champlain LHIN. To facilitate patient access, we operate clinics and treatment facilities at the Irving Greenberg Family Cancer Centre in the west end of Ottawa, as well as overseeing chemotherapy delivery at centres in Pembroke, Renfrew, Winchester and Hawkesbury.

Educational Activities

The Divisional education leaders continued to evaluate and enhance our programme to fulfill our commitment to train exemplary medical oncologists. The Medical Oncology Fellowship Program, directed by Dr. Tim Asmis, strives to provide clinical and research programs to further develop skills of junior Medical Oncologists. Medical Oncology is a rapidly evolving specialty, where trainees require further training in specialized disease site groups and research to promote their careers as academic physicians. This program usually admits candidates who are fully qualified in Medical Oncology. Candidates are mentored in grant application, clinical trial design, multidisciplinary care and research methodology. Currently the program has 5 fellows, and is seeking to expand to 8 for 2013.

The Medical Oncology Residents Program, directed by Dr. Neil Reaume currently has six medical oncology residents. The Division provides extensive educational opportunities in both outpatient and inpatient settings. Members of the Division are strongly committed to excellence in teaching.

Research Activities

The research of the Division encompasses clinical, translational and basic cancer research. The Division has over 200 open trials with approximately 60 actively accruing. This activity is supported by 42 clinical research staff. Sixty five percent of the trials are Co-operative Group and Investigator-led and 35% are industry led trials. Embedded in the clinical trials group is the Investigational New Drug (Phase 1) Group, which is rapidly developing an international reputation for high quality and effective new anti-cancer drug development. This activity has led to numerous publications in high impact journals.

In the area of translational research, cancer clinical researchers have worked collaboratively with the OHRI, Department of Medicine, Department of Pathology, the Methods Centre, Ontario Institute of Cancer Research and NCIC CTG researchers to enhance cancer research in the Division. In addition, there are collaborations developing further with researchers at MD Anderson Cancer Center and McGill University. These include collaborations with Drs. Jim Dimitroulakos, Christina Addison, Ian Lorimer, John Bell.
Michelle Turek, Michael Rudnicki and Phil Wells among others. These collaborations have enhanced the translational components of ongoing or proposed clinical trials.

Recent highlights include:

The establishment and consolidation of a dedicated cardio-oncology clinic (led by Drs Susan Dent and Michele Turek). This is the first such clinic in Canada and will enhance the care and research of cancer patients with cardiac disease and patients receiving therapies that are potentially cardiotoxic. This endeavor led to the establishment of The Canadian Cardiac Oncology Network, the success of which has resulted in an annual Canadian Cardiac Oncology Network Conference that is held in Ottawa.

The High Impact Clinical Trials Grant from the Ontario Institute of Cancer Research (PI: Dr. Glen Goss) has allowed the initiation of a number of translational research projects. These include the evaluation of the cisplatin resistance factor ATF3 and its potential clinical application (Drs. Jim Dimitroulakos and Goss); the evaluation of therapeutic strategies to inhibit bone metastases (Drs. Christina Addison, Mark Clemons and Sekhon) and assessment of new mechanisms of resistance to Epidermal Growth Factor inhibitors in lung cancer.

The ongoing investigator led clinical trial of erlotinib and rosvustatin in squamous cell carcinomas (Drs. Goss and Dimitroulakos), with the evaluation geranylgeranyl pathway.

Dr. Mark Clemons received 2 grants from Canadian Breast Cancer Foundation for the study of bone metastases in woman with breast cancer.

An oncolytic virus program in GI cancers (Drs. Derek Jonker, John Bell and Rebecca Auer).

Dr. David Stewart and Dr. Michael Rudnicki have been working on establishing molecular profiling of tumors as both a research tool and part of the clinical care of cancer patients.

As we move into the 2012-2013 academic cycle, the Division of Medical Oncology is well placed as a national leader in oncology research, with chairs in Thoracic Oncology, Gastro-intestinal Oncology and Investigational New Drug development at the NCIC CTG. We anticipate increasing our links with researchers in the Department of Medicine, OHRI and the national and international research community.

Key Peer-reviewed Grants


Bell J, Atkins H (PIs) Goss G(co-applicant). Canadian Oncolytic Viral Consortium. Manufacturing and Clinical Trials
**Clemons M** (PI) Bouganim N, Dranitsaris G, Hopkins S, Dent D, Cella D (co-I). Canadian Breast Cancer Foundation - Ontario Region. A randomized, double-blind, placebo-controlled, Phase III trial evaluating the palliative benefit of either continuing pamidronate or switching to second-line zoledronic acid in breast cancer patients with high-risk bone metastases (The Odyssey Trial)


**Noteworthy Publications**

Division members published 84 peer reviewed publications in 2011–2012 with notable publications in high impact journals including:


Honours and Awards

- **Dr. Tanya Di Valentin**: University of Ottawa Fellowship Competition (Health Services)
- **Dr. Demetrios Simos**: CAMO-CIHR (Fellowship in Translational Research)
- **Dr. Roanne Segal**: The Ottawa Hospital Quality Award; Breast Cancer Intake Project
- **Dr. Roanne Segal**: Going the Extra Mile Award; Department of Medicine
- **Dr. Paul Wheatley-Price**: Chemotherapy in the oldest old: The feasibility of cytotoxic therapy in the 80+ population. CAMO abstracts 2012 – second prize (first author **Dr. Shelly Sud**, supervisor **Dr. Wheatley-Price**)

**NEPHROLOGY**

19 Faculty Members • 2 Residents • 8 Fellows

**Clinical Activities**

Nephrologists, working in teams with their colleagues in other health disciplines, provide care across the spectrum of Kidney Disease. We are the largest clinical program in Ontario, and are a centre of expertise in several areas, including vascular access (in collaboration with Interventional Radiology & Vascular Surgery) & peritoneal dialysis access (in collaboration with Urology).

Leaders from the Division, and the Nephrology program administration, play key roles in the Ontario renal Network, that is taking over management and funding of Kidney Disease care in Ontario.

Sustained Low Efficiency Dialysis (SLED) is an initiative undertaken by the Division of Nephrology in association with the Department of Critical Care Medicine. We have piloted this alternative to CRRT in 15 ICU patients at the Civic campus and are now ready to expand to the General campus this Fall and the Heart Institute next Spring.

In collaboration with the Division of Cardiology, a new program of Renal Sympathetic Radioablation was successfully initiated. This very new innovation provides a new option for treatment of severe drug-resistant hypertension.
Several years ago our dialysis program initiated an innovative “new Star Unit” for patients starting dialysis. This program provides patients with intensive education and care that directs them to the best treatment in the best location. This year, that unit was moved to the Riverside campus, to be adjacent to the Home Dialysis Unit. Collaboration between these units is expected to lead to increased patient independence, and more patients pursuing dialysis at home.

Programs Impacting the Community

We have expanded our teleghealth clinics, and now provide consultations and follow-up to patients in Cornwall, Hawkesbury and multiple communities in Nunavut.

With the help of Home care nurses from CCAC, we keep more patients out of hospital on home peritoneal dialysis.

We participate in fund raising activities for patients with kidney disease including: Alive to Strive, Steering Towards Hope, Kidney Foundation Walk.

Educational Activities

Nephrologists are heavily involved in teaching at the undergraduate and post-graduate level, and play major roles in the administration of the Faculty of Medicine, University of Ottawa including:

- **Dr. Bob Bell**: Director of Unit 1 Undergraduate curriculum
- **Dr. Bob Bell**: Director, Distinguished Teacher Program Undergraduate Medical Education
- **Dr. Bob Bell**: Director of Curricular Delivery, Undergraduate Medical education
- **Dr. Jolanta Karpinski**: Acting Vice Dean, Postgraduate Medical Education
- **Dr. Jolanta Karpinski**: Clinician educator, specialties unit, Royal College of Physicians & Surgeons of Canada
- **Dr. Stephanie Hoar**: Dept of Medicine — Chair of Postgraduate Education Committee
- **Dr. Ann Bugeja**: Content Expert Unit 1 (Eng)
- **Dr. Pierre Antoine Brown**: Content Expert Unit 1 (Fr)
- **Dr. Cedric Edwards**: Director of Nephrology Subspecialty Program
This year we inaugurated an innovative series of seminars to cover core curriculum topics for junior residents rotating through the Nephrology service.

We have expanded our Clinical Fellowship program, and now offer post-specialty training in Transplant & Home Dialysis.

Research Activities

It was a very successful year for peer-reviewed grant support.

Drs. Kevin Burns, Paul Hebert and Christopher Kennedy were each successful in getting renewal of their CIHR operating grants to support basic science studies focused on the pathogenesis of diabetic nephropathy.

The members of the clinical research arm of the Kidney Research Centre have also been successful in competition for project grants and are active in enrolling patients in many clinical trials.

Total research salary support awards for 2011-12 = ~ $1 M (includes research fellowships, studentships, Department of Medicine salary awards for research).

Key Peer-reviewed Grants

Burns K. CIHR. Translational Research on the Role of Tubular ACE2 in Kidney Disease Progression.

Hebert R. CIHR. Tubular Dysfunction in Diabetes: Role of PGE2/EP Receptors.

Kennedy C. CIHR Validating Nox5 as a target for diabetic renal complications.

Knoll G. CIHR ICES Kidney Dialysis and Transplantation Program.

Zimmerman D. Baxter Clinical Evidence Council — PD. A pilot study to develop a predictive tool for assessing the risk of peritoneal dialysis technique failure for patients receiving Peritoneal Dialysis therapy.

Noteworthy Publications

It has been a very productive year, with 84 manuscripts published including:


**Honours and Awards**

- **Andrea Mazarova**: Department of Medicine Resident Research Day Winner of the Award for Oral Presentation-Clinical Fellow.
- **Bob Bell**: Canadian Society of Nephrology 2012 Educator of the Year award.
- **Kevin Burns**: The Harold W. Ashenmil Award from The Kidney Foundation of Canada.
- **Rhian Touyz**: Appointed as Fellow of the Canadian Academy of Health Sciences.
- **Rhian Touyz**: Robert M. Berne Distinguished Lecturer of the American Physiological Society.
Clinical Activities

While most stroke inpatient care remained consolidated at the Civic Campus of The Ottawa Hospital (TOH), a smaller stroke unit was launched at the General Campus to help ensure best stroke clinical care practices are delivered to all TOH inpatients—through uniform implementation of the stroke clinical pathway, admission orders, training for NIHSS scoring, dysphagia and depression screening, etc. The stroke clinic has put in place models of care that have proven very effective in both stroke prevention and acute management, as reflected in greatly improved door-to-needle times for tPA, reduced stroke rate after TIA and low stroke readmission rates. The Division of Neurology has continued its fruitful collaboration with The Champlain Regional Stroke Network, helping to develop and implement highly successful stroke prevention, education and best practice programs across the Champlain LHIN.

The Division also continued to support initiatives to provide education and support for specific patient groups in the community, notably in Multiple Sclerosis, Parkinson’s disease, Dystonia, Huntington’s disease, and Stroke. The Division reaches out to support the Baffin-Ottawa program, through regular trips to Iqaluit by Dr. De Meulemeester and neurology residents.

The Neuro-Observation Area opened 4 new beds and was renamed the Neurosciences Acute Care Unit, reflecting an improved model of care that stresses multidisciplinary collaboration, implementation of caremaps and continuing education in neurocritical care. In addition to neurology and neurosurgery MRP teams, patients now have the benefit of daily rounding with an acute care consultant.

Education Activities

The Residency Training Program, under the leadership of Dr. De Meulemeester was highlighted as an area of excellence in an external review of the Division. All six graduating residents passed their Royal College exams and the Program was awarded a 5th recruitment position for the Canadian Resident Matching Service. Our chief resident (Dr. Daniel Lelli) won the Department’s 1st Peter MacLeod Resident Ambassador Award. This award will be given annually to a resident who consistently demonstrates all CanMEDS roles, is highly respected and leads by example.

The Division of Neurology continues to show leadership in Undergraduate medical education. Dr. Heather MacLean, in addition to her role as Unit III Leader has accepted the position of Director of Pre Clerkship at the Medical School. Three neurologists are now
enrolled in the Distinguished Teacher Program: Dr. Heather MacLean, Dr. Beth Pringle and Dr. Chris Skinner. An education research project on the topic of “trainee perception in neurology education” was awarded funding by the Academy for Innovation in Medical Education (AIME).

The second Congress of the Canadian Stroke Network was held in Ottawa in October 2011. It featured prominent representation from the Division of Neurology in scientific presentations as well as lectures and seminars.

Dr. Chris Skinner completed a sabbatical at the Russian Space Agency in Moscow to study the neurological and sleep disorders associated with long duration space flight.

Dr. Michael Schlossmacher, Clinician Scientist in the field of Parkinson’s disease, has spearheaded the MD/PhD program at the University of Ottawa and was the leading author in a publication outlining its inception and performance report for 2009–12.

Research Activities

Dr. Antoine Hakim accepted the position of Founding Director for the University of Ottawa Brain and Mind Institute, with the mission to “advance research aimed at understanding the causes and improving both prevention and treatment of cognitive impairment through translational research, across the lifespan”. Key research themes will be:

- Genetic, Social & Economic Determinants of Cognitive Function
- Vascular Disease and Stroke
- Neurodegenerative Conditions

This far-reaching endeavor will be supported by over 100 researchers and clinical investigators in related fields of neuroscience in Ottawa, with the declared intent to participate of 11 University of Ottawa Institutions, including major Faculties (Medicine, Science, Education, Social Sciences), research institutes (OHRI, Mental Health Research, EBRI) and hospitals (Montfort, CHEO). The uOBMRI has already announced research and training grant opportunities and will be launching a major funding drive in collaboration with the University of Ottawa in 2012.

The Ottawa stroke research group has had a successful year in several domains: Clinical Decision rules for TIA/minor stroke (Dr. Michael Sharma), imaging of intracerebral hemorrhage (Dr. Dar Dowlatshahi, recipient of a research funding from the Heart and Stroke Foundation), investigator-initiated multicenter trials (Dr. Grant Stotts), neuroimaging of ischemia (Dr. Matthew Hogan).
Members of our Division (notably Dr. Michael Schlossmacher, recipient of a Canada Research Chair Award and Dr. David Grimes, Director of Parkinson’s Clinic) have spearheaded important developments in the field of Parkinson’s disease, in collaboration with the Ottawa-based Parkinson Research Consortium:

- Study of the biochemical link with alpha-synuclein and acid beta-glucosidase genes
- Unraveling the role of LRRK2 gene in Parkinson’s and the innate immune system
- Role of CSF testing for alpha-synuclein in PD and related degenerative movement disorders. The Ottawa ELISA assay has been commercialized and is being used in international cohort studies.
- Design and successful publication of the first edition of Canadian Guidelines on Parkinson’s disease, under the editorial leadership of Dr. David Grimes.

In parallel, our faculty has been very successful in linking with the community to raise funds for research, notably through PIPR (Partners Investing in Parkinson’s Research) and a major private $1 million donation (Barghava Fund).

**Key Peer-reviewed Grants**

- **Renaud LP**. CIHR. Converging circadian and arousal signaling in thalamic paraventricular nucleus.
- **Hogan MJ, Freedman MS**, et al. CIHR / NIH. Chronic Cerebrospinal Venous Insufficiency in Relation to Multiple Sclerosis.
- **Freedman MS** Multiple Sclerosis Society of Canada. Long term outcomes following immunoablaive therapy and autologous stem cell transplant for poor prognosis multiple sclerosis.
- **Dowlatshahi D**. HSF. Predicting Early Intracerebral hemorrhage Expasion using the Dynamic CTA Spot Sign.
- **Schlossmacher MJ**. CIHR. Validation of the lysosomal cathepsin enzymes as targets for brain disorders linked to alpha-synuclein deposition.
- **Sharma M**. HSF. Efficacy and cost-effectiveness of cost-free pharmacotherapy for smoking cessation for high-risk smokers with cerebrovascular disease.
Noteworthy Publications

Members of the division published 64 peer-reviewed articles this past year. Key publications include:


**Freedman MS, Ucelli A.** Neurorepair with mesenchymal stem cells: Hope or hype? *Lancet Neurol* 2012; **2**(11):123-125


NUCLEAR MEDICINE

6 Faculty Members • 4 Residents

Educational Activities

The Residency Training program was approved by the Royal College of Physicians and Surgeons of Canada as of July 1, 2010, with Dr. Laurent Dinh as the Program Director and champion of this effort. The program now has 5 residents, one PGY3, two PGY2 and two PGY1.

Research Activities

Monthly research meetings have been established. Research projects have been assigned to the residents.

Key Peer-reviewed Publications

Members of the division published 9 peer-reviewed articles this past year including:


PALLIATIVE CARE

Clinical Activities

This year saw a noteworthy growth in the Division’s clinical services. At The Ottawa Hospital Cancer Centre there are now 5 half-day clinics per week at the General Campus and 2 at the Irving Greenberg Family Cancer Centre campus. This provides increased access for patients to these services at a time that studies are showing earlier integration of palliative care in cancer care when patients are receiving treatments to control their diseases provides improved quality of life and even survival. In March the team implemented a Rapid Triage service (a nurse and physician) at the Cancer Centre to provide rapid palliative consultations for urgent cases. The clinics at both campuses received a total of 704 new referrals in the past year.

The number of referrals to the new Palliative Care consultation teams at the Queensway Carleton (QCH) and Montfort Hospitals has been increasing; 319 new referrals and 1,520 visits at the QCH during the last year and 322 at Montfort (May to March).

The number of new referrals to the Division’s Supportive and Palliative Care in-patient consult teams at the General and Civic Campuses remains high; a total of 2,664 referrals were made in the last year with a total of 16,709 visits. Ninety-five percent of all referrals are seen within 24 hours.

An increasing number of patients with non-cancer diagnoses are being referred to our hospital- and community-based consult teams: 65%, 62%, 42% and 37% of referrals in the last fiscal year to the Montfort, Civic and Queensway Carleton Hospitals and the Bruyère Community Consult team (PPSMCS) respectively. This speaks to the increasing awareness of the palliative needs of patients with diagnoses such as end-stage heart, lung, renal, neurological and dementia-related illnesses.

The Palliative Rehabilitation Program provided its 8-week program to 88 patients this past year. The program’s research has shown significant improvements for patients across several physical, nutritional, symptom, psychological and well-being parameters.

Several quality improvement projects were undertaken this past year. These included the Rapid Triage project at the Cancer Centre, a review of palliative sedation practices and documentation at the Bruyère Palliative Care Unit, the development of a standardized consult note template for the The Ottawa Hospital teams, and the further development of the database for the Queensway Carleton Hospital and Montfort Hospital teams.

Two goals for the forthcoming year are the realization of the “Difficult Discussions, Better Decisions” Project and the activation of a project, in collaboration with the Division of Cardiology, to improve palliative care provided to patients with end-stage heart disease at the University of Ottawa Heart Institute. The “Difficult Discussions” Project is a 3-hour
workshop to enhance the skills of residents and clinicians in initiating advance care planning and palliative care discussions earlier in the illness trajectory. The development of the curriculum and video-taping of the learning videos was undertaken this past year.

Programs Impacting the Community

The Division is an active partner in the region and province through the Division Head’s roles in the Champlain Regional Hospice Palliative Care Program, the Ottawa Hospices Services Plan and Cancer Care Ontario’s (CCO) Palliative Care Program. The Champlain Local Health Integration Network (LHIN) approved a plan for a new 10-bed hospice in the city as part of a larger long term plan to have 3 hospices in the city. The Division has been a central hub for CCO’s Mentorship Project.

Programs Impacting Global Health

The Division provided advice and support for the establishment of a new regional palliative care program in Madeira, Portugal. Amongst others, it trained the physician lead of that project and worked with the Madeiran Health Ministry. Drs. José Pereira and Peter Lawlor have also served as visiting professors to the Catholic University of Portugal and the University of Lisbon, Portugal. The Palliative Rehabilitation Program has received significant international attention and institutions in Denmark, Israel, Ireland and Switzerland have shown interest in emulating this program.

Educational Activities

There were two noteworthy highlights this past year; a) the initiation of the Ottawa Palliative Online Project to develop a suite of online learning opportunities; and b) the implementation of the C-SPE (Coached Simulated Patient Encounters) project. This project uses a new approach to the use of simulated patients; faculty serves as coaches instead of taking on an examiner role as occurs in the traditional OSCE or SOO format.

Research Activities

The highlights this past year included the initiation of a program of research on delirium in patients with advanced cancer (Study to Understand Delirium in Palliative Care or SUNDIPS) and the holding of two CIHR-funded international research meetings; one on the consultation/shared care role and the other on the humanities in palliative care and medical education.

The Division has two research streams; clinical and education. The clinical stream includes three main areas of research (Delirium, Palliative Rehabilitation and Nutrition, and Service Planning) while the education stream has three (Interprofessional Education, Assessing Palliative Care Competencies, and Learning Methods). The research program has grown and the Division now has 7 research assistants supporting Division members.
across the various research areas. The Division continues its links with both the Bruyère Research Institute and the Ottawa Hospital Research Institute and has received excellent management and statistical support from both.

**Key Peer Reviewed Grants:**

**Chasen M, McEwen S, Fitch M, Egan M.** CIHR. Partners in Cancer Rehabilitation Research: Canada and Beyond.


Pereira J et al. CIHR Knowledge Synthesis Grant. A Synthesis of Instruments and Approaches to Evaluate Palliative Care Related Competencies

Hall P et al. CIHR Planning Grant. The role of the arts and humanities in the education of health professionals: What is the impact?


**Noteworthy Publications**

Members of the division published 31 peer-reviewed publications in 2011–2012 with notable publications in high impact journals including:


**Honours and Awards**

- **Dr. José Pereira**: Ontario Medical Association’s (OMA) Award of Excellence for a Palliative Care Physician
- **Dr. Pippa Hall**: Faculty of Medicine, University of Ottawa, 2011 Education Award Compétence “professionnel” (voie francophone) for demonstrating a high level of professionalism
- **Dr. Pierre Allard**: Department of Medicine, Jeff Turnbull Contributions to International Medicine Award

**PHYSICAL MEDICINE & REHABILITATION**

16 Faculty Members • 9 Residents • 1 Fellow

The Division of Physical Medicine and Rehabilitation continues as the primary rehabilitation services provider in the Champlain LHIN, providing specialized world class inpatient, outpatient and outreach care for patients with amputations, brain injuries, spinal cord injuries, stroke, chronic lung disease, respiratory disorders, complex neurologic disorders, multiple sclerosis, complex orthopaedics, chronic pain, and communications disorders. We strive to improve our patients’ quality of life and to foster safe and independent living.

**Clinical Activities**

We have over 100 inpatient beds located at Élisabeth Bruyère, The Ottawa Hospital General Campus and The Ottawa Hospital Rehabilitation Centre (TOHRC). The majority of the patients admitted to our inpatient programs gain the skills and confidence needed
to return home. In addition to the active inpatient programs which admitted and discharged over 1,000 patients last year, we have a busy outpatient program that registers over 50,000 patient visits per year.

**Educational Activities**

PM&R is a 5-year direct entry RCPSC accredited residency program. The RCPSC accreditors have dubbed the uOttawa PM&R program as the “model for the country”. PM&R successfully matched 2 new PGY-1’s in the 2012 CaRMS match. We look forward to welcoming Dr. Jennifer Shi and Dr. Scott Cook to our program next year.

PM&R is actively involved in the undergraduate curriculum. PM&R residents and faculty have acted as primary MSK and Neuro block lecturers and as Clinical skills tutors throughout the year. PM&R is actively involved in the link block placements at TOHRC and Élisabeth Bruyère and accommodates numerous trainees from across Canada.

**Dr. Sue Dojeiji** is a diligent supporter of the educational curriculum. She is the Chief Examiner for the RCPSC PM&R National Fellowship Examination (Term 2010-2014). **Dr. Anna McCormick** was a 2012 RCPSC PM&R Fellowship Examiner. **Dr. Dojeiji** also works as an education consultant at the RCPSC supporting the mandate of The Office of Education and the CanMEDs initiative.

**Programs Impacting the Community**

The CanVent program, a pulmonary rehabilitation non-invasive interventional program for persons with neuromuscular diseases, enhances patients’ quality of life in the community, reduces the requirement for tracheostomies and the need for acute care admissions. **Dr. Doug McKim**, CanVent Medical Director, has shared these results with the Champlain LHIN.

**Dr. Jeff Blackmer** continues his work as Executive Director of the Office of Ethics, Professionalism and International Affairs for the Canadian Medical Association. He is also the Chair, Canadian Expert Working Group, Pharmaceutical Sponsorship of Continuing Medical Education; a Member of the International Board of Directors, Canadian Pharmaceutical Advertising Advisory Board; and President-Elect, Canadian Association of Physical Medicine and Rehabilitation.

**Dr. Nancy Dudek** is an active member of the Advisory Council for the Canadian Paralympic Committee — Changing Minds, Changing Lives. **Dr. Sue Dojeiji** is a Paralympic Advisor for the Canadian Centre for Ethics in Sport. **Dr. Hillel Finestone** is an Ottawa Board Member for the Stroke Survivors Association. **Dr. Lynne MacGregor** works with the Canadian Paraplegic Association (CPA) and TOHRC staff to develop resources for patients with SCI.
Programs Impacting Global Health

On October 26, 2011, TOHRC was thrilled to host Rick Hansen as part of the 25th Anniversary “Many in Motion” cross-Canada tour. TOHRC staff and patients were among the 7,000 Canadian medal bearers. The Rick Hansen Foundation has raised over $250 million. Its mandates are to advance SCI research towards a cure, facilitate accessibility and inclusivity for persons with SCI and other disabilities, and to change minds so we view and appreciate the potential of persons living with a disability.

Research Activities

In 2011-12, PM&R and TOHRC forged a formal research relationship with the Canadian Forces to conduct ground breaking research on civilian and Canadian Forces personnel, using the innovative CAREN rehabilitation virtual reality system.

In addition to the existing areas of scholarship in basic sciences (effects of immobility in the Bone and Joint Laboratory), clinical (brain injury, stroke, amputee, pulmonary rehabilitation), epidemiology (driving) and medical education (in-training assessment, communication skills program development), new areas of scholarship emerged in PM&R in 2011–2012.

Dr. Mark Campbell successfully obtained a uOttawa International Research Fellowship in Leeds, UK. He will conduct genetic and cellular based research on osteoarthritis. He will join the PM&R Faculty in October 2013 as a Clinician-Investigator. The Institute for Rehabilitation Research and Development facilitated a comprehensive review of the controversial Mild Traumatic Brain Injury (mTBI). This review will form the foundation for an innovative clinical and research program at TOHRC. No integrated program for mTBI exists in Canada.

Key Peer-reviewed Grants


Noteworthy Publications

Members of the division published 25 peer-reviewed publications in 2011–2012 with notable publications in high impact journals including:


Dudek NL, Marks MB, Wood TJ, Dojeiji S, Bandiera G, Hatala R, Cooke L, Sadownik L. Quality evaluation reports—can a faculty development program make a difference? Medical Teacher 2012 In press.


Honours and Awards

- Dr. Sue Dojeiji: 2012 CAME, Certificate of Merit.


- Dr. Meridith Marks: 2011 CAPM&R Award of Merit (highest honour bestowed by our national speciality society); 2012 Inaugural CAME Foundation President.

- Dr. Deanna Quon: 2012 CAPM&R Paper of the Year (first prize for research project “The Experience of Patients Who Have Chosen Elective Lower Limb Amputation” — D. Quon, N. Dudek, M. Marks, M. Boutet, L. Varpio).
IN MEMORIAM

“Aspire to excellence. Keep an open mind. Be persistent. Help others to be the best they can be.” Dr Meridith Marks, “Philosophy on Education” from her 2008 Full Professor Teaching Dossier.

Born and raised in Cape Ray, Newfoundland, Meridith was instilled with a solid foundation for education. She was encouraged to pursue whatever she wanted, as long as she always did her best. She never disappointed. She completed a Kinesiology degree (Waterloo University, 1982), followed by one year in Clinical Methods in Orthotics and Prosthetics (George Brown College, Toronto, 1983). During her time at George Brown, she worked with a young patient with spina bifida. This interaction sparked her interest in working with persons with disability; she pursued Medicine with that specific goal in mind.

Following her Medical Degree (Memorial University of Newfoundland, 1987), she completed her Physical Medicine and Rehabilitation Residency training (University of Ottawa) and became a Fellow of the Royal College of Physicians and Surgeons of Canada PM&R (1992). Meridith began her career as a Physiatrist at The Rehabilitation Centre in 1992. She became the medical director of the Amputee Rehabilitation Program. She was instrumental in rebuilding the program and was recognized formally by her team for her steadfast efforts to improve the lives of persons with an amputation.

Pushing herself to be the best she could be, Meridith found an interest in education. She completed a Masters of Higher Education (University of Toronto, 1999). She quickly identified a scholarship interest in Faculty Development and Clinician-Educator Career Development. She wanted to help other teachers and educators to be the best they could be; she wanted to pass on the enthusiasm she had for education to others.

Over the years, she was engaged actively in numerous local, national and international education initiatives and working groups (uOttawa Professional Affairs Career Pathways, EFPO, CanMEDS, CLIME, CAME, to name a few). She held a number of leadership positions (PM&R Program Director, Director of the Office of Faculty Development, Assistant Dean of Professional Affairs, CAME President, CAME Foundation Inaugural President).
Perhaps Meridith’s greatest and proudest academic accomplishment was founding the Academy of Innovation in Medical Education. As the Assistant Dean of AIME, she promoted scholarship and innovation in Medical Education. She was committed to excellence in Medical Education and promoted it actively as an academic pursuit. She set high standards and produced excellent results. Also, Meridith was keenly aware of Clinician-Educators’ need to be recognized and supported in their work; she developed strategies to ensure this occurred consistently. Through her generosity of spirit, she mentored a generation of Educators across Canada.

Meridith was renowned internationally for her interest and expertise as a Physiatrist and as a Clinician-Educator in Faculty Development. She received numerous clinical, teaching and education awards including the PAIRO Excellence in Clinical Teaching Award, Ottawa Capital Educator’s Award, AFMC Exemplary Contribution to Faculty Development in Canada, and the CAPM&R Award of Merit, the highest honour bestowed by our national speciality society. The culmination of her accolades came when she received the 2010 CAME-Ian Hart Award for Distinguished Contributions to Medical Education in front of her family, friends and colleagues in St John’s, Newfoundland. The “Bayman” t-shirt was worn proudly that evening.

On Sunday, April 22, 2012, Dr. Meridith Marks, Professor, Physiatrist, Educator, Mentor, Friend and Newfoundlander, succumbed to brain cancer. Her philosophy of aspiring towards excellence is the cornerstone of the PM&R Residency Program and Division. This is Meridith’s legacy. We will never forget. We will miss her deeply.

— Sue Dojeiji MD MEd

To learn more about Dr. Meridith Marks’ Philosophy on Education and the CAPM&R Meridith Marks Award for Excellence in Education, go to: http://www.capmr.ca/meridith-marks-award.

To learn more about the Department of Medicine Dr. Meridith Marks Educator Award For Innovation and Scholarship in Medical Education, contact Dr. Erin Keely, Vice-Chair of Education, at ekeely@toh.on.ca.
RESPIROLOGY

13 Faculty Members • 5 Residents • 1 Fellow

Clinical Activities

The Division of Respiratory Medicine offers general respirology outpatient clinics situated both at The Ottawa Hospital (Civic and General Campuses) as well as in community clinics in Ottawa and in the surrounding area. We serve as a tertiary care referral centre for the Champlain LHIN and for other areas of Eastern Ontario and Western Quebec.

We have a 16 bed inpatient unit at The General Campus of The Ottawa Hospital. Patients admitted to this unit are diverse and can include patients with interstitial lung diseases, obstructive lung diseases, CF, lung cancer patients, post lung transplant patients, and patients with neuromuscular diseases who may be chronically ventilated.

Our division has numerous subspecialty clinics offering state of the art care to patients in our region. We hold a pulmonary hypertension clinic weekly at The University of Ottawa Heart Institute, there is a weekly cystic fibrosis clinic, there are several weekly sleep clinics, and there are bi-weekly pleurex clinics, lung cancer assessment clinics, neuromuscular diseases clinics, and bi-weekly tuberculosis clinics. Division members run an inpatient and outpatient pulmonary rehabilitation unit at The Ottawa Hospital Rehabilitation Centre, as well as an outpatient chronic ventilatory management unit for patients with neuromuscular diseases.

The division has 18 sleep medicine beds at The General and Civic Campuses for overnight polysomnograms. Diagnostic and therapeutic bronchoscopies occur every weekday morning at both campuses and usually last for ½ day sessions. Medical pleuroscopies are done twice weekly by Dr. Kayvan Amjadi in the endoscopy suites. Endobronchial ultrasound guided biopsies of lung lesions and mediastinal lymph nodes are done regularly by Dr. Amjadi and Dr. Nga Voduc, as are airway stent insertions and airway laser therapy for endobronchial tumors.

Programs Impacting the Community

The Pleurex program has enabled patients with malignant pleural disease to be treated as outpatients and in the home, rather than needing to be admitted to hospital. The CF adult program takes care of 115 patients with cystic fibrosis from Eastern Ontario and West Quebec.
Programs Impacting Global Health

Dr. Gonzalo Alvarez has been very active in promoting smoking cessation and TB prevention in Nunavut, Canada as well as in Pietermaritzburg, South Africa (he is profiled in the Clinical Care section of this report). Dr. Smita Pakhale is leading up a tobacco cessation program in rural India.

Educational Activities

The Division of Respirology is highly committed to medical education at all levels. We provide elective rotations in respirology for interested medical students and residents in addition to a respirology training program and subspecialty fellowships.

Elective Rotation in General Respirology:
We offer 2-4 week elective rotations in clinical respirology. In the course of the rotation, the trainee will join the respirology housestaff team and participate in outpatient clinics, inpatient consultations and care of patients admitted to the specialized respirology inpatient service. The rotation will include exposure to pulmonary function testing, respiratory procedures (bronchoscopy, thoracentesis) and chest imaging. The exact content of the rotation will be tailored to the level and learning objectives of the trainee.

The elective rotation is open to all residents, as well as 3rd or 4th year medical students who have completed their clerkship rotation in Internal Medicine. Interested trainees are encouraged to contact us as soon as possible, as enrolment is limited in order to provide an optimal educational exposure for all housestaff.

Respirology Training Program:
The University of Ottawa offers a 2 year (PGY 4-5) respirology training program, for residents who have completed 3 years of core internal medicine training. We strive to offer the best possible clinical and academic training in adult respirology, in a collegial and friendly environment. Our trainees benefit from a broad range of clinical exposures and an extensive educational curriculum. The clinical experience includes general respirology and specialized outpatient clinics, in both hospital- and community-based settings. Trainees are exposed in all relevant areas of respiratory medicine including sleep, critical care, interventional pulmonology, cystic fibrosis, pulmonary rehabilitation, and respiratory infectious diseases.

All trainees participate in the medical school curriculum, providing lectures and leading learning groups for medical students of all levels. Scholarly activity is encouraged. Mentorship and formal training in clinical research is offered.

The curriculum is designed to provide comprehensive training in all aspects of general respirology, with the flexibility for each trainee to tailor their education experience to best suit their unique career goals. Our trainees graduate to successful respirology careers in both academic and community settings.
Fellowship Training in Sleep Medicine and Interventional Pulmonology:
For residents who have completed training in Respirology, we offer separate 1-year fellowships in Sleep medicine and Interventional Pulmonology, under the supervision of Drs. Douglas McKim and Kayvan Amjadi respectively.

Research Activities
Research in the Division of Respiratory Medicine is focused in the areas of clinical research, and clinical and population epidemiology. Our research faculty is growing and has been very productive in recent years. Since 2003 members of our faculty have published first-author research publications in: The NEJM, Lancet, JAMA, Annals of Internal Medicine, CMAJ, The American Journal of Respiratory and Critical Care Medicine, as well as many other subspecialty journals. Members of our group hold a large number of peer-reviewed research grants from CIHR, The Ontario Thoracic Society, The Canadian Cystic Fibrosis Foundation, Public Health Agency of Canada and The Canadian Cancer Society.

Key Peer Reviewed Grants


Aaron S (PI). CIHR. Simvastatin therapy for moderate and severe COPD (STATCOPE).

Aaron S (PI). CIHR. Strategies to improve diagnosis and treatment of asthma in Canadians.

Aaron S (PI). CIHR. Dissemination and implementation of a lung transplant decision aid.

Noteworthy Publications
Members of the division published 32 peer reviewed articles this past year including:


Honours and Awards

- Dr. Aaron won the 2011 Ottawa Hospital Research Institute Dr. Michel Chrétien Researcher of the Year Award.

**RHEUMATOLOGY**

11 Faculty Members • 2 Residents • 1 Fellow

**Clinical Activities**

Operating out of The Arthritis Centre on the 6th floor of the Riverside campus, the Division continues to provide out-patient care to a large number of patients with particular focus on inflammatory joint disease and advanced therapeutics, connective tissue diseases, osteoporosis, pregnancy-related issues and vasculitis. Between 1000 and 1200 patients are seen each month. We provide consultation coverage for inpatients, outreach clinics in the Ottawa valley and Baffin Island and Dr. Doug Smith is involved in the LHIN e-consultation project. Dr. Nataliya Milman is establishing a vasculitis clinic and collaborating in a national and international database. A combined Dermatology and Rheumatology clinic has been established to enhance patient care and facilitate training in the two disciplines.

**Programs Impacting the Community**

The second annual National Capital Bone and Joint Day for family physicians was held on June 1, 2012 and this again was a very successful event. The Advanced Therapeutics Program oversees the care of approximately 1000 patients on biologic agents for treatment of chronic inflammatory rheumatic diseases. We are now joining a provincial initiative to monitor use and safety of these agents (the Ontario Biologics Research Initiative). The annual Rattle me Bones fundraising run is in its 19th year. Every year 2000 people are involved. Dr. Smith is a member of the organizing committee and the title sponsor of the event is supporting rheumatology research. A portion of the funds raised go to
an endowment fund in the foundation. Interest from this fund goes to support patient care and research in arthritis. To date over $900,000 has been raised.

**Educational Activities**

Faculty members are involved in educational activities at all levels of undergraduate and postgraduate medical education. Dr. John Thomson has taken over the role of Program Director and we are proud to have 2 new subspecialty residents at the PGY-4 level; Dr. Ines Midzic and Dr. Rajanjot Gill. Dr. Susan Humphrey-Murto continues to play a significant role in educational scholarship as a Senior Research Associate with the Academy for Innovation in Medical Education (AIME.) Dr. Smith provides regular educational sessions for patients with Systemic Autoimmune Rheumatic Diseases and their families.

**Research Activities**

Dr. Peter Tugwell continues to be prolific in the areas of Knowledge Synthesis and Translation by Cochrane Canada, equity evidence aids and improving delivery of primary care for vulnerable migrants. Dr. Humphrey-Murto is involved in a number of projects examining different aspects of OSCEs and other forms of evaluation.

**Key Peer Reviewed Grants**

- **Tugwell P** (co-PI/Senior Investigator). CIHR. Knowledge Synthesis and Translation by Cochrane Canada.
- **Tugwell P** (PI/Senior Investigator). CIHR. Equity Evidence Aid: Dissemination and Evaluation.
- **Tugwell P** (co-PI/ Senior Investigator) CIHR. The Last Mile Project: Improving the Delivery of Primary Care for Vulnerable Migrants.
- **Humphrey-Murto S** (co-PI/ Senior Investigator). Department of Medicine Education Grants Program. The accuracy of first impressions ratings in an OSCE station.

**Noteable Publications**

Members of the division published 38 peer reviewed articles this past year including:


Honours and Awards

- Dr. Milman is in the second of 2 years of funding through the UCB/Arthritis Society research fellowship program. She is completing her Masters degree in Clinical Epidemiology and is expected to join us in a full-time academic position in July, 2013.