

The Surgical Spotlight

ON ALUMNI, FACULTY, RESIDENTS & FRIENDS OF THE DEPARTMENT OF SURGERY



EVENTS AND STORIES FROM FALL 2011

FORTY-FIVE NEW RESIDENTS IN SURGERY



Ron Levine

A fantastic cohort of new residents has beaten the competition to enter the Gallie Program in July, 2011. They have diverse and interesting backgrounds.

The Department of Surgery continues to grow with expansion of the number of trainees in many of the surgical specialties. The expertise and enthusiasm of their teachers and resident colleagues promises that our residents will be the best taught ever.

Forty-five residents have entered the department. Thirty-seven have come through the CaRMS match and are Canadian Medical School graduates. Six have come through the IMG match and include Canadians who have studied abroad and are returning to Canada for their surgical training as well as Permanent Residents who have obtained their MD in foreign countries and will be practicing in Ontario. Two are visa trainees, who will return to their home country following training. What a great gift this diverse group of bright young minds brings to our department. Welcome new residents!

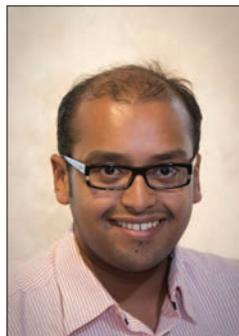
Ronald H. Levine, MD
Director, Postgraduate Surgical Education
Department of Surgery



Daniel Abramowitz – GS



Mohammed Al Jughiman – CS



Abdulrahman Aldakkan – NS

INSIDE

Forty-five New Residents in Surgery	1
Chair's Column- <i>Transforming Surgery: Beyond the Cutting Edge Department of Surgery Strategic Plan 2012-2017</i>	4
2011 Annual Department of Surgery Address	5
Responsible Innovation in Cardiac Surgery	7
Teaching and Evaluating Surgical Skills	9
Residents' Corner: <i>Synthesizing International Development and Surgery</i>	10
Jordan Van Orman Enters Cardiac Residency	11
Mark Bernstein Appointed to the Greg Wilkins Barrick Chair in International Surgery	12
Canadian Plastic and Reconstructive Surgery Rocks Vancouver!	13
An Effective Business Plan for Neurosurgery	15
Excerpts from Bryce Taylor's book - 'Effective Medical Leadership'	17
The Lister Lecture: Regenerating the Lung	19
Reducing Toxicity of Tumor Treatment	20
UofT Neurosurgery Hits It Out of Central Park!	21
Christopher Forrest Appointed as Interim Chair Division of Plastic and Reconstructive Surgery	22
The K. Wayne Johnston Visiting Lecture	23
New Staff: <i>Anand Govindarajan, Marcelo Cypel, Manuel Dibildox, Paul Karanicolas</i>	24
Announcements	
UHN Mourns Passing of Robert Buckman	26
In Memoriam: <i>Leith Garrett Douglas, Abhijit (Ab) Guha, Jim McCutcheon</i>	
The New Executive Committee of the Department of Surgery	28
The Stereotactic and Functional Fellowship at the Toronto Western Hospital	29
Robert Maggisano named the Inaugural University of Toronto, Department of Surgery Chair in Vascular Surgery at Sunnybrook	29
Editor's Column	30
Awards/Achievements and Honours	31



Ryan Austin – PS



Lucas Bristow – OS



James Byrne – GS



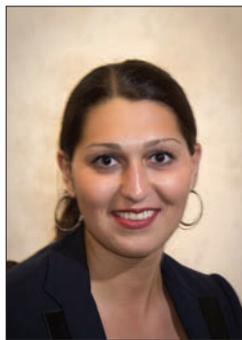
Joseph Catapano – PS



William Cherniak – GS



Ashton Connor – GS



Maryam Elmi – GS



Suzan Ergun – GS



Christopher Farlinger – OS



Alaina Garbens – US



Brandon Girardi – OS



Jason Shrouder-Henry – OS



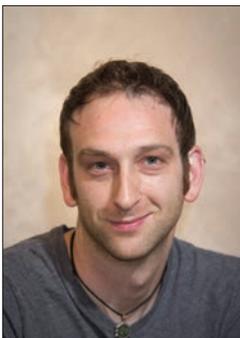
Kathryn Isaac – PS



David Jaramillo – GS



Jordan Van Orman – CS



Joshua Greenberg – GS



Christopher Kim – OS



Yonah Krakowsky – US



Michael Mackechnie – OS



Melinda Maggisano – GS



Alireza-Syed Mansouri – NS



Mark Miller – OS



Dorotea Mutabzic – GS



Alireza Naderipour – OS



Ryan Nazar – NS



Dylan Pannell – GS



Sam Park – OS



Amandeep Pooni – GS



Jessica Quan – NS



Adnan Qureshi – GS



Karim Ramji – GS



Caroline Scott – OS



Natasha Seeman – GS



Peter Szasz – GS



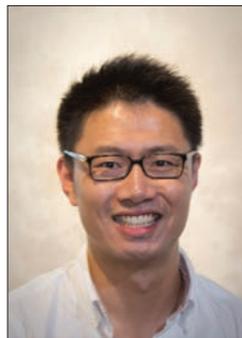
Christopher Wallis – US



Jesse Wolfstadt – GS



Nathalie Wong Chong – GS



Hanmu Yan Yan – US



Teng-Chih Tony Yang – GS

Transforming Surgery

BEYOND THE CUTTING EDGE
DEPARTMENT OF SURGERY STRATEGIC
PLAN 2012-2017



James Rutka

Many of you will recall that our last major Strategic Plan was performed in 2004, and was entitled “Breaking through the Boundaries”. In this plan led by Richard Reznick, efforts were made to strengthen and renew the faculty, enhance teaching and enrich the student experience, increase academic productivity and impact of research,

promote inter-disciplinarity in all academic activities, and explore alternate sources of revenues. I am pleased to say that the majority of goals set at that time have been accomplished. Accordingly, it is now timely and opportune for us to embark on a new strategic planning effort this academic year.

In August 2011, the Executive Committee of the Department of Surgery (James Rutka, Ori Rotstein, Robin Richards, Robin McLeod, Avery Nathens, Ben Alman and David Latter) met to discuss the key issues and challenges facing the Department of Surgery over the next 5 years. This led to a departmental survey of faculty, residents and fellows in September 2011 to determine all critical elements that should be part of the strategic planning process. I am pleased to report that there were over 150 respondents to the survey from across all of our institutions. Respondents selected our areas of greatest need to be post-graduate medical education, undergraduate medical education, best surgical practices/quality, surgical innovation and simulation, and faculty development. Faculty mentoring and the potential of a competitive pension plan were also considered to be important issues to address. When asked what the single most important issue is facing the Department of Surgery, the following responses received multiple hits: Jobs for graduating residents; integration of academic activities across all institutions; support of surgical research; surgical innovation; international surgery; recruitments, retentions, and retirements; and fundraising or advancement.

These survey responses have helped us focus our attention on 5 major themes going forward: 1) Education; 2) Faculty Development; 3) Best Practices/Quality; 4) Research; and 5) Integration. Cutting across all themes will be advancement, innovation, and our social responsibility as surgeons.

The timing of our Strategic Planning initiative is perfect, as we can harmonize our efforts with the recently developed and publicized Faculty of Medicine strategic plan (<http://www.facmed.utoronto.ca/Assets/FacMed+Digital+Assets/Leadership/Strategic+Academic+Plan+2011-2016.pdf>). In this plan, integration, innovation, impact, and social responsibility are the key goals to be achieved over the next 5 years. It is clear that these goals resonate precisely with what ours will be and should be as we move forward.

In October 2011, a Strategic Planning Steering Committee was formed to execute the workplans behind each of the 5 major themes (See Table I). Leads were identified for each of the five working groups, and membership was identified for each working group from across all institutions in the fully affiliated and community affiliated hospitals. In discussion at the October 13th, 2011 meeting of the Steering Committee, there were several areas that were identified that require attention and focus. Among these are: Undergraduate medical education, job preparation for graduating residents, surgical simulation, international surgery, the surgeon-scientist, harmonization of research ethics boards across the campus, faculty mentoring, career transitioning, best practices/quality delivery of surgical services, and university versus hospital institutional dynamics.

I am pleased to inform you that we have retained Helena Axler as our Strategic Plan facilitator. Helena helped us with our 2004 Strategic Plan, and knows the Department well. The working groups for this strategic plan have met frequently in preparation for the Strategic Planning retreat to be held on Friday January 27th, 2012, at the University Club. At the retreat, invited guest speakers include Robert Bell, President and CEO, University Health Network; Robert Di Raddo, Scientific Lead, NeuroTouch simulation project, National Research Council of Canada; Dean Catharine

Whiteside; Vice-Dean Jay Rosenfield; and Kevin Imrie, Lead, Pan Canadian Duty Hours initiative, the Royal College of Physicians and Surgeons.

Following the Strategic Planning Retreat January 27th, the Steering Committee will be meeting on several more occasions to amalgamate the information from the retreat, and to synthesize the final plan to be made public in the spring of 2012.

I look forward to working with all of you on our new Strategic Plan. This plan will provide the blueprint of our future directions in the Department as we transform surgery beyond the cutting edge over the next 5 years.

Table I: Strategic Planning Steering Committee Members:

James Rutka, R S McLaughlin Professor and Chair, Surgery
Robin Richards, Vice-Chair Clinical, Surgeon-in-Chief (SHSC)

Ori Rotstein, Associate Chair, Surgeon-in-Chief (SMH)

Robin McLeod, Vice-Chair Quality

Ben Alman, Vice-Chair Research, Division Chair Orthopedics

Avery Nathens, Chair Departmental Appointments Committee

David Latter, Vice-Chair Education, Division Head Cardiac Surgery (SMH)

Bryce Taylor, Professor, General Surgery

Dimitri Anastakis, Professor and Chair, Plastic and Reconstructive Surgery

Carol Swallow, Division Head, General Surgery (Mt Sinai)

Cindi Morshead, Division Head (Anatomy)

Ron Levine, Director PostGraduate Medical Education

George Christakis, Director UnderGraduate medical Education

Andras Kapus, Associate Chair Research

Lakho Sandhu, Resident, General Surgery

Norman Hill, Vice President, Medical and Academic Affairs, Trillium

Darina Landa, Senior Development Officer Surgery

Andy Williams, Vice President, Sales and Marketing, J&J

Nancy Condo, Business Officer (Surgery)

James Rutka

2011 Annual Department of Surgery Address



Annual Address at St. Michael's new auditorium in the Li Ka Shing Knowledge Institute

On September 7th, 2011, Jim Rutka delivered the Annual Address for the Department of Surgery at the Li Ka Shing Knowledge Institute, St Michael's Hospital. At the outset, Jim thanked Ori Rotstein, Surgeon-in-Chief St Michael's Hospital, and Associate Chair, and Bob Howard, CEO St Michael's Hospital, for hosting the Address in the marvelous new space of the Li Ka Shing Knowledge Institute. Jim then provided details regarding the current structure of the Department with a review of the Executive Committee, Division Chairs, Surgeons-in-Chiefs, Program Directors, and the Research and Education Team. He reviewed some administrative changes with Sender Herschorn taking over the position as Chair, Promotions Committee, from Robin Richards; and George Christakis taking over the position of Director of Undergraduate Medical Education from David Backstein.

In the Department of Surgery this past year, there were 13 members of the Department who were promoted to Associate Professor; and 6 who were promoted to full Professor. Jim reviewed the proceedings of this year's Gallie Day and Awards Presentation ceremony at the Fairmont Royal York Hotel May 6th, 2011 (details highlighted in the last issue of



Jim Rutka



David Latter



Nir Lipsman

the Spotlight: http://www.surgicalspotlight.ca/Article.aspx?ver=Summer_2011&f=Main). He also reviewed some of the many Departmental Awards given to faculty members. Some of the top awards include Dee Ballyk receiving the WT Aikins Faculty Teaching Award, Tom Lindsay the Ross Fleming Surgical Educator Award, Albert Yee the Excellence in Postgraduate medical education award, Marc Jeschke verification of the Ross Tilley Burn Centre by the American Burn Association, Andres Lozano renewal of a Tier 1 Canada Research Chair, John Murnaghan the Royal College DR Wilson Award, and Michael Tymianski receipt of a Tier 1 Canada Research Chair in translational stroke research.

There were 24 new full time faculty appointments as of July 1, 2010, and 37 adjunct appointments. The Department of Surgery received over \$2 Million in funds from its efforts in advancement thanks to the assistance of Darina Landa, Senior Advancement Officer.

Ben Alman produced the research report which highlighted 6 new residents in the Surgeon-Scientist Program (SSP). In a study performed by Ben, more than 65% of residents who train in the SSP go on to lead academic surgical practices in Canada and the United States.

David Latter spoke about the highlights of the Department's education portfolio. The accreditation process of the Faculty of Medicine will take place in May 2012. Accordingly, Undergraduate Medical Education has become a priority for the Department of Surgery. In Postgraduate Medical Education, the next Royal College Review will take place in 2013. One of the main issues faced by graduating residents is finding employment in subspecialty surgical disciplines in the province of Ontario. The Department of Surgery continues to train the majority of Fellows in the country.

The address was concluded by a superb presentation by SSP resident, Nir Lipsman, who spoke about his outstanding research work probing and modulating neural circuitry underlying reward and emotional processing.

Responsible Innovation in Cardiac Surgery

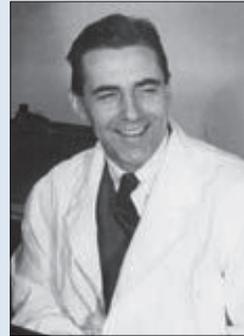


Sidney Levitsky

Sid Levitsky, the David W. and David Cheever Professor of Surgery at Harvard Medical School, began his Bigelow lecture by describing the recent transition in the common understanding of the role of physicians. In the distant past, doctors were recognized as altruistic and scholarly stewards of the canon of medicine. In recent years the role of the physician has been reinterpreted as similar to that of a production worker. The language of a market civilization comprised of providers and consumers associated with this reinterpretation is clearly problematical.

17% of the gross domestic product of the United States is consumed by healthcare, yet 49.9 million Americans go without health insurance. Automobile manufacturers in the United States spend more on health insurance for their workers than they do on the steel that is put into US cars. 30% of healthcare expenditures are consumed by administration and 30% by defensive and non evidence-based treatments. Though the wound infection rate is reduced by 50% when antibiotics are properly administered in the peri-operative period, there is only 23% compliance with this best practice.

43% of Medicare costs in the United States go to treatment of cardiovascular disease. Levitsky showed a picture of a balloon angioplasty from a publication in the New England Journal of Medicine, showing a shower of fragments from the disrupted coronary lesion - spreading down stream and causing "infarctlets". "It is not CPK-washout, as cardiologists would have us believe, but myocardial necrosis." Hannan, in 2005, showed evidence that the need for redo interventions when stenting is used to treat coronary lesions far exceeds the need for retreatment after coronary bypass¹. In the United States there are currently 26% (formerly 11%) of cardiac surgical units that perform fewer than 100 operations



Bill Bigelow

Wilfred (Bill) Bigelow was a pioneer of cardiac surgery who introduced the use of hypothermia and electrical stimulation of the heart. He also introduced the pacemaker to Canadian surgery. His trainees populated the surgical programs throughout Canada, and his lasting contributions in clinical cardiac surgery, teaching, and research made him a legend. The Bigelow Lectureship was created to honour his memory and has brought distinguished surgeons and scientists to the University of Toronto for the past 5 years.

per year. Clearly these were started in order to cover the cardiologists who are inserting stents. Douglas reported on 565,504 cardiac catheterizations². Disease was found in 23-100% depending on the catheterization lab.

"Clinical behaviour is unaffected by guidelines". For example, evidence based guidelines counsel against attempting to dilate occluded vessels. Nevertheless, this is routinely practiced. The STS database now includes 4.5 million patients. It is audited, covers 95% of hospitals performing open heart surgery and has gained transparency by reporting results in Consumer's Reports. Whereas formerly 20% of surgeons participated in public reporting, now 50% participate. One group, the Virginia Cardiac Surgery Quality Initiative group, has saved hundreds of millions of dollars through the application of evidence.

The one year stroke rate in Transarterial Aortic Valve Insertion (TAVI) patients is 8.3 % versus 4.3% in patients treated with open aortic valve surgery. A study in Austria using MRI, showed that 90% of TAVI patients had brain lesions (resulting from fracture of calcified aortic valves in order to make a place for the new prosthesis). Who should do TAVI? It seems prudent to look at the STS database for hospitals doing 2 or more aortic valve replacements per



From left to right James Rutka, Stephen Fremes, Sid Levitsky and Christopher Caldarone

week. The STS will recommend 150, not all 1100 cardiac surgical centers, to do TAVI. The recommendation includes training to improve the catheter and “wireskills” of surgeons, and to require that two surgeons evaluate each case.

His overall theme was that evidence and transparency is the new paradigm for effective medical care. He noted that the problems with applying evidence based medicine will be more difficult in the United States, a society which evolved from a revolutionary culture, whereas Canada evolved from an imperial culture.

Marv Tile asked “Who drives the industrial dominance, for example, who advised Johnson & Johnson on their recent decisions to stop manufacturing stents and to buy an orthopedic device company?” Levitsky answered that there are lots of roles and influences in play including market and corporate values and “no sheriff funded to enforce guidelines”. There is a need for professionalism. We, the physicians, should advocate for patients and traditional values. John Bohnen asked: “Have advocacy groups a role?” The answer: “anecdotally - they appear before congressional committees and provide emotional testimony.” Tom Waddell asked: “When brilliant innovators like Michael Mack come up with new techniques, there is no evidence base of randomized trials or meta-analyses to support them.” Levitsky answered that we must make room for innovation and participate in its oversight. Levitsky served on the Lung Volume Reduction Surgery oversight committee for the National Institutes of health Trial of Emphysema Surgery. He has also served on Research Ethics Boards and emphasized the need for US to serve

on such boards. He told us that Europe requires only safety to be demonstrated for innovations, whereas the United States requires safety and effectiveness. He ended the discussion by telling us “We need to innovate responsibly. Many IRBs inhibit innovation. I try to counter this on the IRB at Harvard.” He closed with Bigelow’s favourite quote, an aboriginal blessing: “May the Great Spirit hold you in the palm of his hand!”

M.M.

1. Hannan, E., Racz, M., Walford, G., Jones, R., Thomas J. Ryan, T., Bennett. E., Culliford, A., Isom, W., Gold, J., Rose, E. *Long-Term Outcomes of Coronary-Artery Bypass Grafting versus Stent Implantation.* N Engl J Med 2005, 352:2174-2183
2. Douglas, P., Patel, M., Bailey, S., Dai D., Kaltenbach, L., Brindis, R., Messenger, J., Peterson, E. *Hospital Variability in the Rate of Finding Obstructive Coronary Artery Disease at Elective, Diagnostic Coronary Angiography.* J Am Coll Cardiol, 2011; 58:801-809.



Teaching and Evaluating Surgical Skills



Helen MacRae

When Helen MacRae completed her ten year term as Director of the Surgical Skills Lab recently, she was given a whimsical fur-lined lab coat created by her appreciative staff. She always feels cold in the air conditioned environment of the lab. “The most fun has been working with the people - the staff, residents and faculty

who I get to know across all the divisions and would not ordinarily meet in my general surgery and colorectal practice at Mount Sinai Hospital.” The combination of learning, teaching and informal conversation has been an enriching experience. The medical students have also been active in the lab thanks to a program set up by David Backstein and continuing now under George Christakis.

Helen has been primarily involved in the PGY1 group. She enjoys getting to know the surgery residents and then following them later when they come on her service. In the future, she anticipates that the Skills Lab will become more integrated into the residency in the way that the orthopaedic Curriculum Based Competency program integrates laboratory skill building into the residents’ clinical work (see also: http://www.surgicalspotlight.ca/Article.aspx?ver=Summer_2010&f=ResidentsCorner).

Teamwork training in the lab has been a focus of study of the Obstetrics Department. This program will be moved into other Surgical Divisions. Ara Darzi’s program at Imperial College, London is studying team communication during simulated crises¹. “We will need expansion of our facilities, especially of the virtual operating room, to strengthen this program. Our former colleague, Lorelei Lingard videotaped interactions in the operating

room to show how easily surgeons’ “clear” communication has been misinterpreted. Video feedback has been explored to teach surgical technique. “It did not enhance performance significantly the way it does in sports. This may be related to the scale of the movements in surgery. Deconstruction of skills into building blocks such as instrument handling and knot tying are extremely effective, however, and residents learn how to automate these skills.”

Helen has been interested in the *attention resources* of learners. “Residents need to use more of their attention resources than faculty, for whom many things have become automatic. Faculty are better able to operate while having conversations. It is not as easy for a less experienced resident. The team showed that residents who are trained in technical skills are able to attend to other learning in the operating room, whereas novice residents were less able to retain information from a script read to them while closing an abdomen.² There is an important lesson here regarding operating room teaching of novice surgeons. Carol-anne Molton has written³ about the importance of slowing down when required by the situation. For example, music in the operating room can be a distraction, occupying the attention resources of the personnel. “That’s why you turn the radio off when a crisis arises”.

“Teaching fundamental skills should be done without pressure. For example, my son is a basketball player - you don’t teach him to shoot during a game, but during practice in a less stressful situation. In surgery, we usually do the opposite.” Helen is leaving a busy lab that many members of the department have accepted enthusiastically. “Richard Reznick and Zane Cohen got it started, and Carol Hutchinson was the first director for 18 months. Luckily, Lisa Satterthwaite was here when I took over.” Helen relates her success to her husband Brent, to Lisa and the staff in the laboratory, and to her clinical secretary, Firdeza, who was a family doctor in Yugoslavia. Their help has made it possible for her to raise her two children ages 13 and 15, keep up a busy practice and have a successful academic career.

Helen is working with Master’s in Education students - developing technical skill certification as a potential

component of Board Exams, which currently test only knowledge and judgment. “There is only one point on the ITER for technique. We need to develop skill assessment for certification.” She is working on this with the American Board of Colorectal Surgeons and has run a pilot study, unique in Surgery, in which she compared the technical skill of general surgeons and colorectal surgeons in an eight station examination. She will continue to work on this project and will stay in touch with the laboratory as well as work with the American College of Surgeons.

M.M.

1. Aggarwal, R.; Ward, J.; Balasundaram, I.; Sains, P.; Athanasiou, T.; Darzi, A. *Proving the Effectiveness of Virtual Reality Simulation for Training in Laparoscopic Surgery*. *Annals of Surgery*. 246 (5):771-779, 2007
2. Palter, V., Grantcharov, T.,Harvey, A., MacRae, H. *Ex Vivo Technical Skills Training Transfers to the Operating Room and Enhances Cognitive Learning: A Randomized Controlled Trial*. *Annals of Surgery*, 253 (5): 886-889,2011
3. Moulton, C., Regehr, G, Lingard, L., Merritt C., Macrae, H. *Slowing down When You Should’: Initiators and Influences of the Transition from the Routine to the Effortful*. *Journal of Gastrointestinal Surgery*, 14.6: 1019-1026, 2010.



RESIDENTS' CORNER

SYNTHESIZING INTERNATIONAL DEVELOPMENT AND SURGERY



Joshua Greenberg

Long before his undergraduate medical training at the University of Toronto, first year resident in General Surgery Joshua Greenberg did a foundation year in philosophy and literature, during which he read Plato's *Republic* and Rousseau's *Discourse on the Origins of Inequality*. These works sensi-

tized him to social injustice and structural violence as later described by the American physician - anthropologist Paul Farmer. Of his decision to specialize in surgery, Joshua remarks, “This is an exciting time to be able to get the wide breadth of training surgery offers and apply it to the complex issues of equity, access, and infrastructure development that threaten healthcare today.” Joshua's Bachelor's degree in Biomedical Science is from the University of British Columbia and his Master's work in molecular oncology and international development was done at U of T. The research was published in *Cancer Research*.

Joshua has done International Development work for 10 years with UNAIDS, UNDP and other NGO's. He has worked in Zambia, Uganda, Kenya and several other sub-Saharan countries. He performed needs assessments, researched and addressed issues of knowledge translation with multinationals, and worked at a teaching hospital with UNICEF along the Zambia-Zimbabwe border during the height of Zimbabwean political upheaval. The Zimbabwean refugees, displaced from their homes and deprived of their antiretroviral agents as they fled the country, made a lasting impression on him. “It fascinated me to see the quality of healthcare some countries were able to provide their people through intelligent organization of their infrastructure while other countries, often wealthier, were unable to accomplish the same feat by monetary investment, alone.”

Joshua's plan is to contribute on an international scale, using surgery as the springboard. He chose to specialize in surgery because of the versatility surgical training provides, as well as the research highlighting the cost effectiveness of basic surgical intervention in resource poor-settings. He would like to learn more about the structure and delivery of healthcare internationally through elective studies abroad. There are many Toronto links to the developing world which he finds inspirational. The Toronto-Addis Ababa Academic Collaboration (TAAAC) led by Clare Pain of Mount Sinai Hospital is of particular importance (see also: http://www.surgicalspotlight.ca/Article.aspx?ver=Winter_2010&cf=InternationalSurg). Clare Pain has shown us how to train future physicians, even in a resource-poor and clinically under-served setting. There are now 16 disciplines that have picked up on her pioneering work in psychiatry. With the TAAAC, Joshua worked on the pre-trip cultural sensitivity training program and the ethical framework for large-scale cross-cultural collaboration. He has also worked with "Peace through Health" from McMaster, a program that promoted similar principles as the International Physicians for the Prevention of Nuclear War. This concept of reframing war as a health care issue has been applied with great success to vaccination campaigns credited with ceasefires in war-torn countries like Sudan, Sierra Leone, and the DRC "as the one time when warring factions came peacefully to the table, recognizing their common humanity and their need to protect their children from disease." Joshua has taken several courses in this area of study, and his mentors include Clare Pain and Joanna Santa-Barbara at McMaster.

Joshua was a high level competitor in volleyball and beach volleyball. As a 'weekend mountaineer', he has climbed Kilimanjaro and to the base camp of Mount Everest. He is currently reading *Abysinian Chronicles* by Moses Isegawa, a book which spans five decades in the political history of Uganda.

M.M.

Jordan Van Orman Enters Cardiac Residency



Jordan with Cydney Van Orman and their son Augustus

First year cardiac resident Jordan Van Orman is from Alberta. He completed his undergraduate training in Utah at Brigham Young University, followed by two years of missionary work in the Philippines. He then completed an MD - PhD at the Medical College of Wisconsin. His thesis was on factors that influence differentiation of cardiac cells from embryonic stem cells. He plans to practice cardiac surgery in an academic centre.

He is enjoying the 6 year program here where there are 11 highly enthusiastic and excellent residents enrolled. He completed his first rotation at Toronto East General Hospital with Rob Zeldin, "an excellent place to start a surgical rotation with plenty of operating, plenty of supervision and plenty of responsibility."

His father and brothers are in finance, an uncle is a pediatric neurologist. His wife Cydney is finishing her art history degree at the University of Toronto. They live in the Bathurst and St. Clair area with their 18 months old son, Augustus.

His academic path "might include a post-doctoral fellowship in the laboratory or clinical research, following the models of Tyrone David, Steve Frenes and Vivek Rao." He was inspired by the outstanding teaching at Children's Hospital of Wisconsin by Mike Mitchell, a pediatric cardiac surgeon who trained at Massachusetts General Hospital, Boston Children's and Philadelphia Children's Hospital.

M.M.

Mark Bernstein Appointed to the Greg Wilkins Barrick Chair in International Surgery



Mark Bernstein with Vera Wilkins and Peter Munk (from left to right)

A \$5.5 million gift from the Barrick Gold Corporation and Vera Wilkins will insure a legacy of education and care based on the pioneering work that Mark Bernstein has done to encourage improvement in neurosurgical treatment in developing countries (see also http://www.surgicalspotlight.ca/Article.aspx?ver=Summer_2010&f=BernsteinGhana).

The Barrick Gold Corporation, the largest gold mining corporation in the world, has 26 operating mines in many countries. The company has decided to honor the memory of Greg Wilkins, their charismatic and highly effective Chief Executive Officer. He is described by his friends as highly intelligent, adventuresome (he was a Grand-AM auto racer), humble and fiercely loyal. He had taken the company to great heights during his tenure as CEO. Greg died from a glioblastoma multiforme at age 53. The Greg Wilkins-Barrick Chair was planned as his legacy. It will perpetuate his memory and celebrate his accomplishments.

Mark's vision of the Chair is to improve neurosurgical health care delivery in developing nations, to decrease inequities, to enhance engagement and understanding between healthcare providers in developed and developing countries, and to advance the general well-being of developing nations, specifically in the domain of healthcare. This mission will be accomplished by enhancing the access and quality of neurosurgical care - by empowering their surgeons, nurses, anesthetists and other healthcare providers through hands-on education inside and outside the operating room in their local environment and in Toronto. Mark's specific aims include:

Support of scholarships for surgeons, nurses, anesthetists and other healthcare providers from developing nations to visit and observe neurosurgical care at Toronto Western Hospital, and to provide salary support for neurosurgeons from developing nations to obtain additional specialty training in neuro-oncology as Fellows at TWH.

Support of travel costs for the Chair holder and other members of the team for missions to teach neurosurgery, nursing and surgical ethics in distant lands, and to recruit students and residents to participate in international surgery by visiting developing nations.

Support for research to assess the impact and sustainability of the teaching program, support the Chair holder and his/her designate to present lectures at international meetings, support video conferencing, tele-teaching, internet-based teaching in developing centers, and support visiting professorships and academic symposia based on international surgical education.

The Chair will add countries where the Barrick Corporation has mines to Mark Bernstein's already productive international teaching program. For example, a recent Barrick outreach scholar, Mariam Al-Rashid is an international neurosurgery observer from Saudi Arabia. Mark will travel to Zambia, a country he has not yet visited, but an important part of the Barrick program, to assess and advance neurosurgery capacity there. He will continue to fulfill his mandate in other countries, in addition to those of interest to the corporation, such as his Nigeria mission where he will bring two nurses, an anesthetist, a resident and a qualitative researcher for his next visit.

Supported by the Chair, students will be enabled to participate in these missions, and a Global Health Professional Masters degree in International Surgery will be funded. George Ibrahim, a current neurosurgery resident will be the first to enter this graduate program. George teaches the ethics module on informed consent to the 3rd year medical students, accompanied by Mark Bernstein. Mark is developing a model of teaching ethics through and with residents, a well established model of education in clinical surgery. The international chair will bring students and neurosurgery residents with Mark to assure that a legacy of international Neurosurgery is established. An important theme of the program is enculturating residents and students to inspire them to sustain the program. There is an axiom often quoted in our bioethics centre to describe the importance of teaching moral reasoning in addition to providing answers to ethical dilemmas: “If you give a man a fish, you feed him for a day, if you teach him to fish, you feed him for life”. Embodying the transgenerational theme of the Barrick-Wilkins Chair, Mark adds: “If you teach a man to teach his son to fish, you can help feed a community for life.”

M.M.

Canadian Plastic And Reconstructive Surgery Rocks Vancouver!

It was a special time for Canadian Plastic Surgery. The Canadian Society of Plastic Surgeons “hosted the world” in Vancouver at the 16th Congress of the International Plastic, Reconstructive and Aesthetic Surgeons – IPRAS 2011 Vancouver. Canada played host for this quad annual - now biannual event only once before, almost 30 years ago in Montreal.

Getting the bid was a story in itself, beginning over seven years ago at a remote meeting in El Salvador, where the ground work of collaboration between Canada, Latin America and India was laid. It all came to fruition with ratification by the main body of IPRAS in 2007



IPRAS Presenters (From left to right) Ron Zuker, Isaac Harvey, Howard Clarke, M. Bezuhly, Greg Borschel, Adel Fattah

in Berlin. Congresses would be held in Delhi 2009, Vancouver 2011, and Santiago 2013.

Now that we had the bid, the work of planning the Congress began with the Canadian Society financial backing. It would be four and a half days of instructional courses, invited keynote lectures, directed panels and free papers in six locations from 7:00 a.m. to 6:00 p.m. Only the plenary session each day, 8:00 – 10:00, was a standalone. For this Congress, unlike others in the past, there would be no additional charges for any of the dozens of instructional courses. Everything was included in the reasonable registration fee. This could even be reduced for those attendees from less fortunate areas that were not able to pay the full amount. All aspects of the specialty, including burn surgery, reconstructive surgery, hand surgery, microsurgery, aesthetic surgery, and transplantation were addressed by clinical and research experts from around the world. It was a tour de force never seen before in our specialty. Peter Neligan orchestrated an amazing scientific program. A special highlight was The Bethune Humanitarian Plenary Session. Ron Zuker led off outlining the life of Norman Bethune, how his Canadian roots fashioned his remarkable national and international career, and outlining how he came to be the most famous and most revered Canadian worldwide. Ron outlined what he means to Canada and how he is remembered. This was followed by The Story of Bethune from the Chinese perspective. R.H. Zhang discussed what Bethune’s humanitarian work meant to the Chinese during the formative years of the revolution. Humanitarian work is a common thread of Plastic

Surgery throughout the world. This session then outlined the work of thousands of surgeons worldwide, who volunteer their time and expertise to help those unable to receive basic reconstructive procedures otherwise. Bill Magee spoke of cleft lip and palate work; Constance Newhann-Lorenz spoke of “Women for Women Burn Reconstruction” for unfortunate women burn victims, and Stephen Sullivan spoke of humanitarian reconstructive efforts in Haiti. It was a moving and compelling session that dramatized what significant work can be done by dedicated reconstructive surgeons.

Social events, coordinated by local host chair Richard Warren, were as well orchestrated as the scientific component. The opening ceremonies showcased our remarkable country, complete with real Mounties in their well recognized red uniforms.

“Oh, Canada!” was sung by opera star Mark Donnelly, just like at the Canucks games. The reception that followed featured Canadian foods from across this land. The closing gala was just as spectacular with Vancouver Harbor and the northern mountains as backdrop. The weather cooperated (albeit briefly) for the attendees to experience the beauty of Vancouver. They were also introduced to Canadian hospitality at its best.

The Organizing Committee worked hard to bring the meeting to Canada, to set it up and finally to carry it off. For the 1800 registrants, it was an opportunity to experience the world (literally) of plastic surgery.

Mingling with the experts was commonplace and activities directed at resident/fellow participation were encouraged. There was the amazing race, in which trainees were put on teams and raced through checkpoints in Vancouver, the resident paper session - complete with awards, and the resident pub night out, which many of us attended, as well. What a great way to meet fellow trainees from around the world. Rumor has it that there may be a serious wedding relationship as fallout from the pub night. Special credit is due to Don Lalonde of Saint John, New Brunswick, and Karyn Wagner of Montreal, our Executive Director. Financial issues are always a concern, but thanks to Gordon Wilkes these all worked out to our advan-



A Social Success as Well (From Left to right) Back Row: Stuart Bade, Michael Klebuc, Chris Forrest, Greg Borschel Front Row: Natasha Bade, Jonathan Wheeler, Brooke French, Adel Fattah, Jonathan Burge

tage. He also put together a superb exhibit hall with exhibitors displaying their products for all to see. Of course, it could not have happened without the support of the Canadian Society of Plastic Surgeons and Plastic Surgeons across the country. The University of Toronto’s Division of Plastic and Reconstructive Surgery led the charge of academic institutions. Our Chairman, Dimitri Anastakis, Gordon reported the following remarkable statistics:

“At last week’s IPRAS 2011 meeting in Vancouver, over 400 members of the CSPS participated and contributed to the meeting’s success.

The University of Toronto was well represented at IPRAS and I would like to thank all 22 faculty, 12 residents and 14 past and present fellows who contributed to the meeting’s success. Our faculty, residents and fellows gave 41 podium presentations, chaired 15 podium and 2 plenary sessions, acted as 4 invited panelists, gave 6 masters classes, prepared 3 posters and delivered 1 keynote lecture. The quality of the presentations was top-notch.

Congratulations again to all. A special thanks to Ron Zuker and Peter Neligan for organizing such an excellent and successful meeting. Our division continues to make significant contributions to the advancement of plastic and reconstructive surgery at an international level.” We can be proud of what this Division accomplished at IPRAS 2011 Vancouver. We have achieved a new level of capability with worldwide recognition as a centre of

clinical expertise, scientific ingenuity and research. It will provide a firm foundation for the exciting years of reconstructive surgery that lie ahead.

Ronald M. Zuker
Chair, IPRAS 2011 Vancouver
Chair International Relations Committee
University of Toronto

On behalf of the entire organizing committee:

Jean Paul Bosse
Honorary Chair
IPRAS 2011
Vancouver
University of Montreal

Donald Lalonde
Chair, Organizing Committee
IPRAS 2011
Vancouver
Dalhousie University

Gordon Wilkes
Chair, Finance
Committee
IPRAS 2011 Vancouver
University of Alberta

Peter Neligan
Chair, Scientific
Program Committee
IPRAS 2011 Vancouver
University of Washington

Richard Warren
Chair,
Local Arrangements
University of
British Columbia

Karyn Wagner
Executive Director
Canadian Society of
Plastic Surgeons



An Effective Business Plan from Neurosurgery



Mike Tymianski

The Neurosurgery Division at UHN performed 2300 operating room cases in 2010 in Oncology, Functional, Vascular, and Spinal Neurosurgery and published 150 peer-reviewed papers in 2010. There are four active labs in the division and they are currently running 3 multi-centered trials with \$8.4 million per year in funding for research.

Acting Division Chief Mike Tymianski inherited a unique challenge: “In a certain sense this level of success presented a problem: ‘lots of chiefs and no indians’. Shaf Keshavjee had charged me to keep the division the best in the world, but we had no room for new junior faculty”. The paradox was crystallized last year when the division was unable to recruit an excellent candidate for lack of resources. The OR budget for neurosurgery regularly ran a deficit of \$750,000 per year. Option one would be to cut operating room time, reduce beds and ruin practice and retention - a poor business solution. A second option would be to increase practice and turn a profit. “We decided to make up 50% of the shortfall this year without reducing activity.”

There are certain cases that bring increased income to the hospital, based on volume targets negotiated with the government. Deep Brain Stimulation, Spine Stimulation, Aneurysm coils, Workmen’s Compensation, Neurooncology and cases referred through CriteCall (see also: http://www.surgicalspotlight.ca/Article.aspx?ver=Summer_2010&cf=AcuteCareService). In contrast the 80 -year old with a subdural on Coumadin who is admitted from the hospital’s surrounding community is not a volume-funded case, and has been a traditional source of accumulating deficit. The solution is to route the patients through CriteCall. The CriteCall cases are approximately 60% intracranial bleeding, 30% spine

and 10% oncology. Since intracranial hemorrhage and subdural hematomas stall out the operating room, Mike and his colleagues developed a procedure room for draining subdural hematomas, hydrocephalus and similar problems. This unit is run by the neurosurgery residents. A second initiative is the development of a neurovascular unit - a multidisciplinary stroke unit with much better outcomes and lower cost than the intensive care unit. Lastly, everyone in the Division of neurosurgery was asked to manage their own budget, which was assigned and spent according to the decisions of the individual surgeons. Everyone became engaged in the fiscal management of the division. This empowered the surgeons to solve the financial problems through awareness. They were highly motivated by enthusiasm to recruit to the division. The key to the success of the program was that every expendable item used in the operating room was labeled with its cost. An expensive \$500 item that might have been opened routinely was left untouched unless the surgeon specifically asked for it. There are now prices on everything in the operating room from a \$14,000 laser catheter to a €65 pair of gloves. The bill is printed for the surgeon at the end of each case, just like it is at the Home Depot cash register. Surgeons quickly learned not to open the gelfoam or floseal (a costly hemostatic agent), unless they were clearly needed. The bills were sent every week and summarized every month. Currently, they are now available monthly, but really are no longer necessary. The savings from this program have been dramatic and the division is now in the position to recruit five more neurosurgeons. The money saved is also used to buy equipment needed for the operating room.

Volume funding from the Ministry of Health started with heart surgery. The government negotiated for a certain number of cases to be done, based on pressure from the public. They now volume fund joint surgery, bariatric surgery, CritiCall, neuromodulation and endovascular surgery for brain aneurysms. "The increased awareness and selectivity of costly items is the result of knowledge that empowered the surgeons." By routing appropriate referrals through CritiCall, the budget makes room for cases that are otherwise unfunded. The take home message from this experience is that a mandate from administration to save in the old days simply meant "do fewer cases". The current surgical response

is "become more aware and cost effective in order to do more cases".

Michael's business experience did not come from a course in management, but from running a biotech company with excellent corporate mentors on its board of directors, including the legendary physician executive John Evans. They are savvy investors with extensive business experience.

"The Stroke Unit, which includes stroke neurologists, interventionists, neurosurgeons, nurses and an allied health team - all focused on one theme, opened in September of 2011. Beds were shifted into the unit from medicine, neurosurgery and elsewhere. It has acute monitoring like a step-down unit and integrated care. This has increased the number of patients who walk home after a stroke."

Michael trained at the University of Toronto and extended his training in skull base and vascular neurosurgery at the Barrow Neurological Institute in Phoenix. He completed a PhD in stroke research under Charles Tator's mentorship and holds a Canada Research Chair in Translational Stroke Research.

His company NoNO Inc. has developed a drug that has the potential to dramatically reduce the damaging effects of stroke, preventing the death of brain cells in stroke patients and thereby reducing the life altering consequences of strokes. This program has been supported by UHN's Technology Development and Commercialization Office. "I am very pragmatic about research; basic science has very little accountability. Five years of research with no productivity is ok under a grant system, but it is not ok in biotechnology where we are accountable to the board, the investors and to the law. We should deliver research on the same scale. I do it as Division Head of neurosurgery, in the lab, and in the company." Just as "excellence" is Jim Rutka's guiding value, "accountability" seems to be Michael's. At Michael's Grand Rounds presentation, Tom Waddell asked about the motivation to achieve a profit in a surgical unit, when any savings disappear back into the total budget of UHN. The answer is that "a critical motivating factor for success is keeping the savings within the unit."

He is married to Dawn who heads the advanced practice program in the School of Nursing. Together they have four children. Mike and Dawn Tymianski are avid cyclists and hikers. With the exception of extensive travel related to Michael's jobs as a neurosurgeon, scientist, and company CEO, Mike and Dawn hide away whenever they can in a small house on the south shore of Nova Scotia. They are avid collectors of Canadian Inuit art, contemporary and fine Canadian art, and fine wine. With the latter, Mike Tymianski states: "We don't have enough time to drink it. But I really like anything that's done really well. It's remarkable what some people can create out of grape juice."

M.M.

Excerpts from Bryce Taylor's book "Effective Medical Leadership"

This is the last in a series of excerpts from Bryce Taylor's outstanding book "Effective Medical Leadership", reprinted with the kind permission of the University of Toronto Press. Ed.

WHAT MAKES A GOOD LEADER?

Leadership Styles

Plenty has been written about why certain people are effective leaders – mostly based on the characteristics of present-day leaders. Psychological analysis may also help in defining the character traits that precede effective leadership. One such psychological evaluation tool is the abbreviated Myers-Briggs test.¹⁰ By answering seventy-two questions you will obtain your type formula according to Carl Jung and Isabel Myers-Briggs, along with your strengths and preferences.

Many leaders are ENTJ (extroverted, intuitive, thinking, judging), which may represent a combination of characteristics aligned to the classic larger-than-life so-called field marshal boss, seen more frequently in the mov-



Bryce Taylor

ies than in real life. However, Jim Collins, a business authority and writer, has observed that frequently the effective leader in business is a quiet, self-effacing person whose main set of characteristics is not the outward persona of the typical field marshal but simply one that gets results and that others follow.

As reported in his book *Good to Great*,¹¹ Collins found that often the most effective leaders were quiet, modest, data-driven individuals who were always thinking about the success of others in the organization. The notion of the unassuming organization man behind the scenes is much more common and compelling than the typical in-your-face, Lee Iacocca version.

Effective leaders come in all shapes, sizes, colours, and stripes, and their common trait is that they get results. The problem in medicine is, what results are we talking about. Which of the following outcomes are you concerned about as a medical leader: patient outcomes, patient mortality, medical error, financial solvency, innovation, successful research and educational programs, doctors toeing the line, and/or recruitment and retention of the best minds and hands?

The answers are yes, yes, and yes – perhaps all of the above – but the response is clouded by our inability (to date, anyway) to reliably and accurately measure many of these variables on an ongoing, consistent basis.

Leaders have personalities that may play well in the positions they hold, but in many cases there may be traits that actually hamper effectiveness. Personality traits are ingrained and might be analogous to the genotype. However, the public behaviour, or phenotype, of a person can be learned and modified, and this phenotype can create styles of leadership that are useful in getting results.

Many aspects of effective medical leadership can be learned.

Daniel Goleman, Richard Boyatzis, and Annie McKee, in *Primal Leadership* (2004),¹² describe six styles of leading, and these have varying effects on the target followers. The six leadership styles that they examined in a large number of business leaders are coercive (also known as commanding or directive), authoritative (visionary), affiliative, democratic, pace-setting, and coaching.

It's fun to categorize known leaders into an appropriate slot, but when you go through the exercise, you quickly realize that styles are assigned to individuals according to how their images seem to fit; how they actually operate on a daily basis may be quite different and certainly more complex than a single style would allow.

It's important to realize that what you see may well not be what you get when you assess behaviour from afar. One of the most effective leaders I have ever worked with had the outward appearance of employing a typical coercive style.

SITUATION 2.1

DOCTOR D'S APPARENTLY COERCIVE LEADERSHIP STYLE:

Don't Judge a Book by Its Cover

Doctor D was (and is) decisive, powerful, futuristic, action-oriented, fasttalking (and, with his Australian accent, almost unintelligible when excited). As chief executive of a major teaching hospital he demands much of his team members and deals quickly and decisively with important prospective issues as well as unexpected ones.

In a public town hall meeting, when faced with some difficult confrontational questions, he once declared, 'Well, if you don't like what we're doing, you don't have to work here; you have other choices!' What could be a more coercive approach than that?

However, Doctor D is the most democratic person with whom I've ever had the privilege of working. He has always sought out the opinions of others, achieved buy-in from his managers, and been very respectful of all sides of a problem presented to him – and not

infrequently he has changed his mind without concern for how conciliation would appear to others. Clearly, his outward appearance to many spoke to one image (coercive), but his real *modus operandi* indicated quite another (democratic).

One of my favourite illustrations of a leadership style was that of Cito Gaston, who was manager of the Toronto Blue Jays baseball team in the early and mid 1990s. This was memorable for me, a baseball enthusiast who has followed the Blue Jays since their inception in the American League in 1977 (the interest had been spawned many years prior to that, when I was a member of the 'knothole gang' watching the Toronto Maple Leafs of the International League in the 1950s).

SITUATION 2.2

CITO GASTON, AN AFFILIATIVE LEADER:

Let Your Players Play

Cito Gaston was regarded as the quintessential 'players' manager' because he was a patient, hands-off macro-manager, seldom intervening in his coaches' teaching, although he had previously been a hitting coach. He was supportive of his players, especially the more experienced leaders in the clubhouse. Gaston let players play and concentrated on positive relationships among members of the team. He was never negative in public with the media.

Cito Gaston and the Toronto Blue Jays were rewarded with world championships for three years (1992, 1993, and 1994, the latter being a default position during the famous strike year), and, of course, like most managers, Gaston was fired several years later.

Ironically in 2008, Cito was surprisingly rehired to inject a struggling underperforming team with at least change or at most a significant improvement in results.

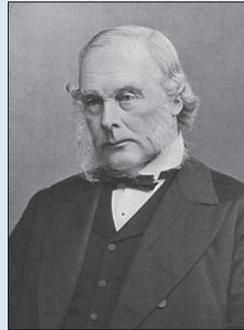
The above description is typical of the affiliative leader who creates harmony, builds emotional bonds, and puts people, their values, and their emotions first.

Without going into details of the other leadership styles, I subscribe fully to the notion that each style has its value, and all situations may require varying styles. One writer likens this to club selection during a golf game – choosing the right attitude and methodology for the right moment, that is, a kind of situational flexibility. This might be seen by some as inconsistent or indicative of multiple personalities. I summarize this flexibility in the leadership talks I give by suggesting that all styles may be required in the same day: you're coercive or commanding in the operating room when the going gets tough; you're visionary when you're in the planning mode; you should be coaching much of the time with residents and students; you're affiliative with your divisional staff and your support staff; you're definitely democratic at home if you're smart; and you may be pace-setting when you're feeling your oats, but you should watch that!

As a medical leader you can be somewhat unpredictable in your handling of various situations, but you must be entirely predictable as far as principles and values are concerned

*University of Toronto Press, 2010
ISBN 978-1-4426-4200-3*

The Lister Lecture: Regenerating the Lung



Joseph Lister

Surgeon scientist Joseph Lister discovered the effectiveness of antiseptics in the 19th century. He based his work on the use of carbolic acid, a derivative of creosote, which was used to prevent the wood in railway ties from rotting. He used carbolic acid (phenol)

to prevent infection in compound fractures and in abscesses. After confirming Semmelweis's neglected discovery that surgeons can transmit infections from septic patients, Lister introduced the revolutionary concept of asepsis to the practice of surgery.

Tom Waddell began his Lister Prize lecture at Surgical Grand Rounds by showing us a lung transplant patient who was totally transformed from near lifelessness to athletic vigor by her treatment. The effectiveness was breathtaking. "The limit to this therapy is the severe shortage of donor organs and the fact that the treatment involves allogeneic tissues. Mechanical support using ECMO (extracorporeal membrane oxygenation) as an alternative has all of the limits that go with pumps." Tom described the wide breadth of regenerative medicine approaches explored as alternative solutions in his lab.

Cell therapy can improve injured organs and enhances endogenous repair, but cannot replace function. Cell replacement with precursors requires removing endogenous stem cells and then putting in gene-corrected progenitors. That is regularly done for bone-marrow transplantation, as all the cells can be wiped out and the marrow repopulated. It is much more difficult in the lung. "Amy Wong in our lab discovered a unique population of bone marrow cells with a special propensity to populate the lung in mice. Sarah Gilpin studied sternal

marrow in lung transplant recipients and found the same type of cells in humans. Administration of Clara Cell Secretory Protein (CCSP) positive stem cells via the airway causes proliferation of the recipient's cells, restoring the respiratory epithelium, and this may be useful in a variety of lung conditions. Using the combination of ablation of airway epithelium followed by transtracheal delivery of bone marrow cells, Pascal Duchesneau has achieved remarkable success in cystic fibrosis mice."

An alternative approach to the shortage of donor organs is to grow them in the laboratory. For example, ongoing work in Tom's lab is evaluating the role of decellularization and recellularization in the creation of new airways and lungs themselves. Tracheal replacement using decellularized tracheal allografts is a promising approach. "The decellularization techniques in current use tend to make the trachea floppy but Siba Haykal is evaluating various approaches to combat this challenge. The cells used to repopulate must be arrayed in order to move foreign material from the airway via the mucociliary carpet. John Soleas is using sophisticated bioengineering approaches such as nanotopography of the underlying substrate which may allow creation of this orderly orientation. Geff Frost has developed a device for decellularizing the entire lung by rotating it during perfusion to thoroughly distribute the decellularizing solution. The next step will be to recellularize the entire lung which will require massive numbers of epithelial and endothelial cells.

One such approach is to use partial reprogramming of lung cells towards induced Pluripotent Stem (iPS) cells. Stem cells retain their epigenetic memory of their tissue of origin. Lily Guo is working to determine if partial re-programming, for a short period of time will allow expansion of lung epithelial cells, which could then revert to lung epithelium upon withdrawal of the reprogramming stimuli."

Tom concluded his lecture by acknowledging the incredible hard work of the many members of his lab, past and present. He also expressed his thanks to the other members of the Thoracic Division and the Department of Surgery for the support of this work.

M.M.

Reducing Toxicity of Tumor Treatment



Tom Waddell and Michael Taylor with a November moustache for Cancer Research

Michael Taylor won the George Armstrong Peters Prize for 2011. His studies advance our understanding of cancer through genetic analysis of cancer transcriptomes. These are genetic markers derived from the genome of particular cancers that will allow prognostication at a level that has not been achieved using operative findings of the extent of disease, clinical or pathological staging or microscopic analysis.

In his Peters Prize Lecture at Surgical Grand Rounds, Michael described the microarray analysis of over 400 ependymomas of gene products, collected in Heidelberg and Toronto. Immunohistochemical analysis of gene products identified two classes of ependymomas that are otherwise indistinguishable. Tumours in group A had a far worse prognosis (Figure 1). Those in group B have a far better prognosis and tend to be easier to resect. They less frequently wrap around cranial nerves in the posterior fossae or invade vessels to the brain stem. It may be that eventually we will be able to spare the young developing residual brain from the debilitating effects of post-operative radiation in patients with group B tumors.

Medulloblastoma, the second major category of pediatric brain tumors, sort into four completely different groups, despite their histologic similarity. The sorting can be

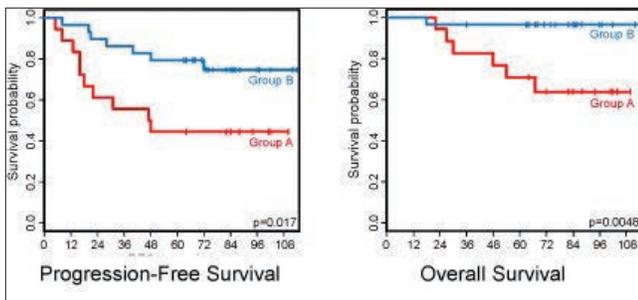


Fig. 1. Ependyoma Survival Curves

accomplished similarly with immunohistochemistry based on their genetic makeup (Figure 2). These genetic characteristics also show distinct differences between primary and metastatic tumours from the same patient or between primary and recurrent tumours. We are not yet at a point where the immunohistochemistry of the transcriptome can be used to guide surgery in the operating room, but the information can be used to determine whether adjuvant therapy is appropriate. Those with the WNT mutation have sufficiently favorable prognosis that a randomized trial will soon be undertaken in which the innovative arm will be the omission of postoperative radiation. This multi-centre program of de-escalation of toxic treatment will be financed by a grant from CIHR and support from the Garon Family Pediatric Cancer Centre at the Hospital for Sick Children. The Children's Oncology Group in the United States is exploring retrospective validation of the prognostic groups based on their immunohistochemistry. This will allow future therapeutic trials using these genetic markers to stratify treatment.

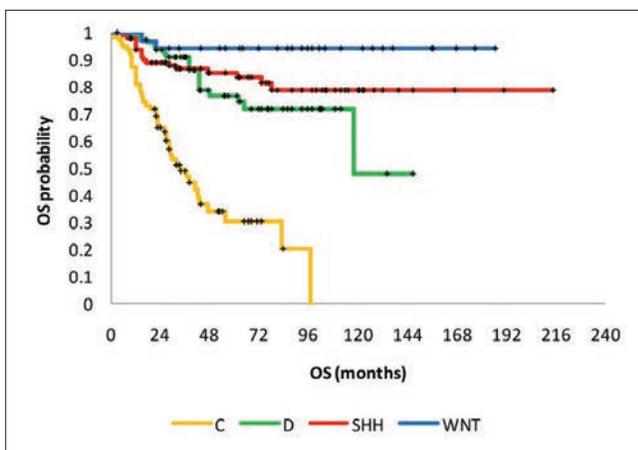


Fig. 2. Medulloblastoma

Michael's wife of 16 years, Susan, is a technical writer who edits his grants with a detectable level of impact on his excellent record of funding. His children are Alexandra, 12, Robert 9 and Andrew, 5. On the night before his Peters Prize presentation he was up working with Robert on a challenging math homework assignment. He is currently reading Michael Shermer's "The Believing Brain". His principal mentors have been Jim Rutka and Richard Gilbertson at the St. Jude Hospital in Memphis, Tennessee.

M.M.

UofT Neurosurgery Hits It Out of Central Park!

For the second year in a row, the Division of Neurosurgery at UofT organized a team to take part in the 8th Annual Neurosurgery Charity Softball Tournament in New York City's Central Park, June 4th, 2011. This Tournament, supported by the New York Yankees, brought together 22 neurosurgical teams from across the continent. Some of the notable programs included: Johns Hopkins, Emory University, Columbia, Harvard, University of Pennsylvania, Penn State, and the University of Pittsburgh. The Division of Neurosurgery at UofT was the only Canadian entry in the tournament.

In sharp contrast to the previous year when the UofT team won only one game out of many starts, this year the Toronto squad was successful at defeating Northwestern University in Chicago, the University of Utah, and the University of Colorado before losing to the Barrow Neurological Institute, a phoenix team which went on to win the entire tournament.

This year, the proceeds from the Tournament were used to support the Neurosurgery Research and Education Foundation (NREF) of the American Association of Neurological Surgeons. The NREF has been pivotal at supplying research fellowship funds to neurosurgery residents. In fact, over the years, many neurosurgery residents have applied for and received research awards



UofT Neurosurgery Team

Figure Legend: Right to left kneeling: Dennis Izukawa (Trillium Neurosurgery), Ossama Khan, Shobhan Vacchrajani, Carlo Santaguida, James Rutka, Sumit Jhas, Mehdi Shahedi

Right to left standing: Chris Wallace, Greg Hawryluk, Ryan Alkins, DJ Cook, Julius Ebinu, Scellig Stone, Brian Drake, Taufik Valiante, Emily Neilson (base coach).

from the NREF including Betty Kim, Greg Hawryluk, and Demitre Serletis.

This year's neurosurgery team from Toronto was elated with its relative success and progress since last year. All the more so since baseball is not the national sport or pastime of Canada or Canadians. "Now if it were only hockey, we would show our American colleagues a thing or two!", said DJ Cook, one of the players on the UofT Team. The entire UofT Team would like to thank Andres Lozano, Professor of Neurosurgery, and Dan Family Chair for his support of the Tournament.

James Rutka

Christopher Forrest Appointed as Interim Chair Division of Plastic and Reconstructive Surgery



Christopher Forrest

As many of you know, Dimitri Anastakis has been appointed Interim Vice Dean of Continuing Education and Professional Development (CEPD) in the Faculty of Medicine at the University of Toronto. Dimitri will hold this position until June 30, 2012 or until such time as a new Vice Dean is appointed. With the

time commitment and responsibilities of this new position, Dimitri has determined that while he is Interim Vice Dean CEPD, he will not be able to serve as Division Chair of Plastic and Reconstructive Surgery (PRS).

Accordingly, I am delighted to inform you that Chris Forrest has been appointed to the position of interim Chair of the Division of PRS. Chris is currently the Head of the Division of Plastic Surgery at the Hospital for Sick Children, and is an internationally acclaimed craniofacial surgeon. Chris received his MD from the University of Toronto in 1983, and his Royal College subspecialty certification in plastic surgery at the University of Toronto in 1990. He also earned a Masters degree from the Institute of Medical Science under the supervision of Cho Pang in 1990. Following fellowship training, including a pediatric craniomaxillofacial surgery fellowship at Wayne State University in Michigan in 1992, Chris began his faculty appointment as an Assistant Professor in the Department of Surgery at the University of Toronto in 1993. He became full Professor in 2006. Chris has served as the Medical Director of the Craniofacial Centre at the Hospital for Sick Children since 1999.

Chris has published over 100 peer reviewed articles and over 30 book chapters. Over the years he has received numerous peer reviewed grants for his research on the impact of radiation on the developing craniofacial skeleton. He is the recipient of numerous honours and awards including the WK Lindsay Research Supervisor award and the Operation Herbie Doctor of the Year Award. He has been invited to numerous visiting Professorships across Canada, the United States and worldwide.

Please help me welcome Chris Forrest into his new role as Interim Chair in the Division of PRS.

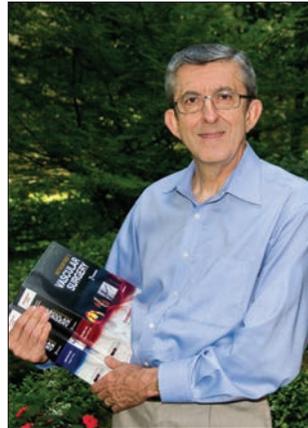
James T. Rutka, MD, PhD, FRCSC
*RS McLaughlin Professor and Chair,
Department of Surgery*

The K. Wayne Johnston Visiting Lecture

On behalf of the Division of Vascular Surgery, I am pleased to announce the establishment of an annual visiting lecture in honour of Dr. K. Wayne Johnston— the Division's inaugural Chair.

The K. Wayne Johnston Visiting Lecture will honour the outstanding leadership, clinical, research and education contributions made by Dr. Johnston.

Dr. Johnston was a founding member of the Canadian Society for Vascular Surgery and along with other members of the Canadian Society of Vascular Surgery established a separate certification in vascular surgery at the Royal College level in Canada. He is a dedicated clinician as well as an inspired educator. He has made major contributions to research in Doppler Ultrasound, as well as having been the principal investigator on several landmark clinical studies of early angioplasty outcomes and aneurysm repairs in Canada. Dr. Johnston has also made significant contributions to the Journal of Vascular



Wayne Johnston

Surgery; he was Editor of this leading journal in the field of vascular surgery during its transition to the electronic era. Within the Society for Vascular Surgery, Dr. Johnston has held many roles, including the prestigious position of President for the term 2009 to 2010. Dr. Johnston has had a major long-term involvement in editing the Rutherford Textbook of Vascular Surgery; during the last two editions, he served as Co-editor. It is important to underscore Dr. Johnston's pivotal role in inspiring many surgical trainees to pursue an academic career in vascular surgery. He has been steadfast in his support and mentorship of members of both the Division and the Department over more than thirty years.

This Visiting Lecture is a key initiative as the Division of Vascular Surgery begins the new direct entry five year residency. This lecture will give the Division's outstanding young residents the opportunity to interact and learn from the best as they train in both clinical vascular surgery and in research.

At the same time, the K. Wayne Johnson Visiting Lecture will become a living legacy honoring the importance, stature and contributions of Dr. Johnston to the specialty – locally, nationally and internationally.

To make a contribution to the K. Wayne Johnston Visiting Lecture, or for more information, please contact Darina Landa at darina.landa@utoronto.ca or 416-978-4296.

Tom Lindsay
*Chair, Division of Vascular Surgery
University of Toronto*

NEW STAFF



Anand Govindarajan with his wife, Andrea and their 2-year old son Ethan

Anand Govindarajan is a surgical oncologist at Mount Sinai Hospital and Princess Margaret Hospital, and Assistant Professor at the University of Toronto. He completed medical school and a residency in General Surgery at the University of Toronto. During residency, Anand enrolled in the surgeon-scientist program and completed a Masters of Science through the Department of Health Policy, Management and Evaluation. Following this, Dr. Govindarajan completed a clinical fellowship in Surgical Oncology at Memorial Sloan-Kettering Cancer Center in New York City.

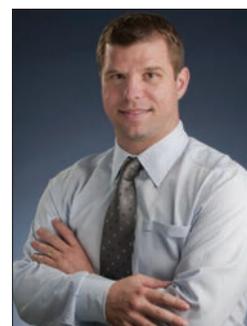
Dr. Govindarajan's clinical practice will involve the care of patients with gastrointestinal and peritoneal-based malignancies. He is part of the multidisciplinary peritoneal malignancy program at Mount Sinai Hospital. His primary research focus is to study and narrow the gaps between current practice and best evidence in the treatment of these diseases, through the use of health services research methods and knowledge translation techniques. He is also interested in studying quality of life in patients with peritoneal-based malignancies.

*Andy Smith,
Bernard & Ryna Langer Chair, Division of General
Surgery,
University of Toronto*

I am pleased to announce that **Marcelo Cypel** has officially accepted a position as Surgeon-Scientist in the Division of Thoracic Surgery at UHN and Assistant Professor, Thoracic Surgery, University of Toronto.

After completing his General Surgery and Thoracic Surgery training in Brazil, Marcelo came to Toronto as a full-time Research Fellow at the Latner Thoracic Surgery Laboratory. During his research period, he earned a Master's degree doing basic and translational research in lung transplantation. Subsequently he completed his clinical fellowship in thoracic oncology, cardiac surgery, and lung transplantation at the University of Toronto.

Dr. Cypel has made a significant contribution, while working with Dr. Keshavjee, in the research development of Ex Vivo Lung Perfusion (EVLP) and clinical implementation of both EVLP and extra-corporeal life support programs at University Health Network. The work on EVLP has achieved global attention and is being rapidly adopt-



Marcelo Cypel

ed at leading transplant centres around the world. Drs Cypel and Keshavjee have published this work in high impact journals such as Science Translational Medicine and the New England Journal of Medicine. Dr. Cypel's interest in thoracic oncology focuses on minimally invasive thoracic surgery and the use of loco-regional therapies for the treatment of pulmonary metastases. Dr. Cypel recently won the Young Investigator Scholarship Award (Michael DeBakey Scholarship 2011-2013) from the American Association of Thoracic Surgery to develop an in vivo lung perfusion approach to be used as a platform for various anti-cancer therapies.

Please join me in congratulating Marcelo and wishing him much success in his academic career in the Division of Thoracic Surgery.

*Tom Waddell,
Chair and Head, Division of Thoracic Surgery,
University of Toronto, UHN*



Manuel Dibildox

Manuel Dibildox was born and raised in Monterrey, Mexico, where he attended medical school. He obtained an academic scholarship and graduated with honors in 2002. Before obtaining his MD degree, he performed clerkships at Baylor School of Medicine and Harvard Medical School. These clinical

rotations prompted him to pursue General Surgery training in the United States. After acquiring full ECFMG certification, he completed his surgical training at the Metropolitan Group Hospitals/University of Illinois at Chicago Program. This training was followed by fellowships in Surgical Critical Care as well as Burn and Reconstructive Surgery at the University Of Texas Medical Branch and Shriners Hospitals for Children in Galveston, Texas. Current credentials include Certificates in General Surgery and Surgical Critical Care from American Board of Surgery as well as Advanced Cardiac Life Support, Advanced Trauma Life Support and Fundamentals of Laparoscopic Surgery.

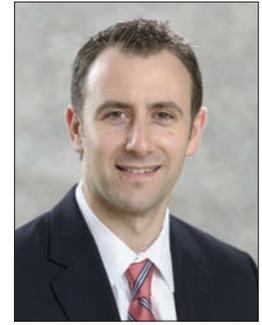
After finishing his training, Manuel accepted a position as Attending Surgeon at the Ross Tilley Burn Unit at Sunnybrook Health Sciences Centre and Lecturer at the University of Toronto. Besides clinical practice, his appointment also includes completing a Master of Sciences Program at the Institute of Medical Sciences with emphasis on clinical epidemiology. His clinical and academic focus is on the acute and reconstructive phases of burn patients and their long term outcomes.

Academic achievements include being co-author in 2 publications in peer reviewed journals and 2 other publications currently in review, contributions to 3 chapters in surgical textbooks and 7 presentations at national and international meetings. Other interests include skiing, snowboarding, music and information technologies.

*Dimitri Anastakis
Professor and Chair,
Division of Plastic and
Reconstructive Surgery*

*Marc Jeschke
Director of the Ross Tilley
Burn Centre*

Paul Karanicolas is a surgical oncologist at the Odette Cancer Centre and Assistant Professor of Surgery at the University of Toronto. He completed medical school and residency in general surgery at the University of Western Ontario. During his residency, Paul entered the clinician-investigator program and completed a PhD thesis at McMaster University, focused on outcomes assessment in surgical trials. After finishing his general surgery training, he completed a clinical fellowship in Surgical Oncology at Memorial Sloan-Kettering Cancer Center in New York.



Paul Karanicolas

Dr. Karanicolas' surgical practice is devoted to patients with hepatobiliary, pancreatic and gastrointestinal cancers. As part of a multidisciplinary care team, he strives to maximize quality-of-life and minimize the morbidity of interventions for his patients without compromising long-term prognosis.

Dr. Karanicolas is actively engaged in clinical research to further these goals. A central part of his research involves writing and conducting clinical trials for patients undergoing surgery, particularly in the area of gastrointestinal oncology. Dr. Karanicolas is also focused on improving the methods to collect and interpret data on quality-of-life in patients with cancer. In addition, he is actively involved in improving the incorporation of evidence-based care into surgical practice through the development of clinical guidelines and teaching.

*Andy Smith
Bernard & Ryna Langer Chair,
Division of General Surgery
University of Toronto*

ANNOUNCEMENTS

UHN MOURNS PASSING OF ROBERT BUCKMAN

Dear Colleagues,



Robert Buckman

Some of you will have heard of Rob Buckman's death on the radio. It is a very sad day for many people including his wife, Dr. Pat Shaw, the many patients who valued his support and encouragement, and for all of us in the UHN family who counted on Rob to lift our spirits and give us his unique perspective on illness, treatment and living.

There are many things I'll remember about Rob but the most vivid images I have of him are his enthusiastic support of many of the Princess Margaret Hospital Foundation's events. Whether it was Rob standing in front of PMH and cheering on the walkers in the Weekend to End Breast Cancer, or his dogged determination to finish each day of the cycling event, we knew that Rob Buckman would be there to lift people's spirits and tell them that, if he could finish, then so could they. Above all, he was a tireless advocate for patients and unrelenting in his skillful efforts to help clinicians communicate more effectively. He was indeed a great teacher, and so many of us have a 'Rob story' we will always remember with a smile.

I know that there will be lots written and said about Rob Buckman in the coming days. He was a valued member of PMH and the UHN family and, on behalf of the many people who enjoyed his humour and his zest for living, I would like to extend my condolences to Pat, his friends and his family.

Bob Bell

(reprinted with permission from UHN NEWS)

IN MEMORIAM

LEITH GARRETT DOUGLAS

Dear Colleagues,



Leith Douglas

It is with great sadness that I write to inform you of the passing of Leith Douglas on September 15, 2011. Dr. Douglas was a long-standing member of our Division and contributed to the training of a generation of plastic surgeons.

Leith earned his medical degree from Dalhousie University in 1962. He was a graduate of the University of Toronto Plastic Surgery Residency Program and completed additional fellowship training in Sweden, Austria and England. He became a fellow of the Royal College of Physicians and Surgeons of Canada in 1967. He practiced in Toronto at The Wellesley and St. Michael's Hospitals and finished his career at the Toronto Western Hospital in 2011. He will also be remembered for his work as plastic surgeon to the Toronto Maple Leafs for 36 years.

Leigh Douglas was passionate about plastic surgery. He was an exceptional role model to many young trainees. He was a committed alumnus and a strong supporter of our work in the Division and we will all miss his presence at Division events. On a personal note, I will miss his sense of humour, witty comments and his clear love for plastic surgery and life in general.

We extend our sincere condolences to his wife Lorna, his daughter Ellen, son-in-law Peter Woodward and his three beloved grandchildren Julian, Caroline and Liam of Cobourg, Ontario. Donations may be made in Leith's memory to The Salvation Army, 25 Centre Avenue, Toronto, Ontario, M2M 2L4 or to the Palliative Care Unit at the Northumberland Hills Hospital, 1000 DePalma Drive, Cobourg, Ontario, K9A-5W6.

D.J. Anastakis

Division of Plastic and Reconstructive Surgery

ABHIJIT (AB) GUHA

Dear Colleagues,



Ab Guha

It is with great sadness that I inform you that **Abhijit (Ab) Guha** passed away peacefully in the early morning hours on November 8th, 2011. For the past 3 years, Ab has been courageously fighting his diagnosis of acute lymphocytic leukemia (ALL). He was 54 years old.

Ab graduated with a degree in Medicine from the University of Toronto in 1982. He then entered the neurosurgery residency training program at the University of Toronto. In 1985, he received a Masters degree from the Institute of Medical Sciences under the tutelage of Charles Tator. He completed his neurosurgical residency training in 1989, and passed his Royal College specialty examination in neurosurgery that same year. Ab then traveled to Boston with his family to work as post-doctoral fellow with Charles Stiles at Harvard where he began his career long interest in neuro-oncology research. After his research fellowship at Harvard, Ab returned to the University of Toronto in 1993 to begin his faculty appointment as an Assistant Professor, and to conduct research in signal transduction mechanisms under the supervision of Tony Pawson at the Lunenfeld Research Institute.

Ab was promoted to Associate Professor in 1997, and to Full Professor in 2001. In 2000, he was appointed as the co-director of the Arthur and Sonia Labatt Brain Tumour Research Centre (BTRC). In 2002, he was installed as the inaugural Alan and Susan Hudson chairholder in Neuro-Oncology at the University Health Network. He has served on numerous editorial boards, grants panels, and boards of private philanthropic foundations. His research focused on the molecular biology of human brain tumours, in particular, human astrocytoma. His lab has been well funded over many years by numerous peer-reviewed granting agencies. He published his work in top tier neuro-oncology journals. He was the President of the Society of Neuro-Oncology from 2005 - 2007, the largest neuro-oncology organization in the world.

Born in Kolkata, India, Ab devoted himself in recent years to the establishment of a Neuroscience Institute in Kolkata where he frequently traveled to teach, operate on patients with neurosurgical diseases, and educate the faculty there about research.

Ab was married to Soma, and had two children, Daipayan (Deep) a medical student at the University of Toronto, and Tia, an undergraduate student at the University of Toronto. The Department of Surgery extends its most sincere condolences to the entire Guha family at this time.

Sincerely,
James T. Rutka

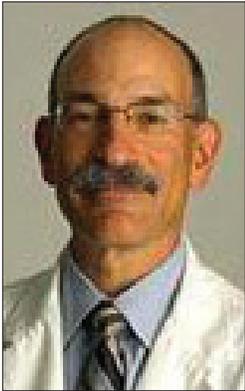
The Department of Surgery at UHN lost a dear friend and committed supporter when **Jim McCutcheon** passed away suddenly on Monday morning. Jim was a long-time trustee, donor, and creative thinker whose focus at our hospital in the last 20 years was our department members and their accomplishments.

In 1989, Jim established the James Wallace McCutcheon Chair in Surgery which accompanied the position of Surgeon-in-chief, and each year since that, hosted two unique and special "McCutcheon dinners" which became highlights of the spring and fall seasons, where UHN surgeons would have the chance to meet and network across specialties. His main intent at all times was to support the young surgeons recruited to UHN, and was intensely interested in their progress.

Jim will be missed, but his legacy of support and friendship will live on. He leaves behind his wife Brenda and sons Doug, Fred, Grant and Murray. Donations may be made to the James Wallace McCutcheon Foundation, 100 Richmond St. West, Toronto M5H 3K6.

Shaf Keshavjee
Surgeon-in-Chief,
James Wallace McCutcheon Chair in Surgery

The New Executive Committee of the Department of Surgery



Ori Rotstein

I am pleased to report to you that **Ori Rotstein** has been appointed to the position of Associate Chair of the Department. He has taken over from Bryce Taylor who served the Department as Associate Chair for 15 years. Bryce performed his last surgical procedure last month, and will now be assisting UHN with its international outreach program in Kuwait.

I am also pleased to inform you that **Robin McLeod** has been appointed to the position of Vice-Chair Quality and Best Practices in the Department. Robin has been leading the Best Practices in General Surgery (BPiGS) initiative at the University of Toronto these past 5 years, and will lead efforts to encourage best practices across all Divisions in the Department.



Robin McLeod



Avery Nathens

With the institution of the Integrated Medical Education (IME) initiative in the Faculty of Medicine, it became clear to me that a new chair for the Department's Appointments Committee was needed, and so I am pleased to report to you that **Avery Nathens** has agreed to take on this responsibility.

2011 Executive Committee of the Department of Surgery

RS McLaughlin Chair: **James Rutka**

Associate Chair: **Ori Rotstein**

Vice Chair Research: **Ben Alman**

Vice Chair Education: **David Latter**

Vice Chair Clinical: **Robin Richards**

Vice Chair Quality and Best Practices: **Robin McLeod**

Chair Departmental Appointments Committee:

Avery Nathens

Departmental Promotions Committee

One of the most important roles of the Department of Surgery is the Chair of the Promotions Committee. Robin Richards will be stepping down from this position, having served in the role of Chair of the Promotions Committee for 10 years.



Sender Herschorn

I would like to thank Robin for his Herculean efforts as Chair of this Committee all these years. I am pleased to report to you that **Sender Herschorn**, Chair Division of Urology, has agreed to be the new Chair of the Promotions Committee for a 5-year term beginning July 1, 2011. Sender has served on the Department's Promotions Committee and the Decanal Committee in the past, and is ideally suited to lead the charge here. I remind all faculty interested in pursuing promotions this year to ensure that they use the WebCV program for submission to the Department's Promotion Committee.

Jim Rutka

Robert Maggisano Named the Inaugural University of Toronto Department of Surgery Chair in Vascular Surgery at Sunnybrook



Robert Maggisano

Robert Maggisano has been named the inaugural Chair in Vascular Surgery at Sunnybrook Health Sciences Centre. The \$3 million endowment fund will allow Robert Maggisano, a vascular surgeon at Sunnybrook, to enhance the development and evaluation of less invasive image-guided vascular interventions, with a strong focus on education.

A priority of the Chair will be to disseminate new knowledge to both students and practicing surgeons,”

The Stereotactic and Functional Fellowship at the Toronto Western Hospital has been accredited for the next five years by the Committee on Accreditation of Subspecialty Training (CAST) of the Society of Neurological Surgeons. The fellowship, supervised by Division Chair Andres Lozano and Mojgan Hodaie and Taufik Valiante, is the first CAST-accredited stereotactic and functional fellowship in Canada, and the third in North America.

This fellowship complements the CAST-accredited spine and pediatric neurosurgery fellowships at the University of Toronto.

says Robert Maggisano, Associate Professor, Department of Surgery, University of Toronto. “My motto is make a difference and make a difference now. By ensuring that new knowledge is applied to patient care, we can make a difference now in saving patients’ lives.” The clinical and teaching strengths of the Sunnybrook Vascular Surgery team has been boosted by the additions of Giuseppe Papia and Andrew Dueck.

Another priority for Robert Maggisano is to build bridges with industry to modify and develop new endovascular products for the benefit of patients. The Chair in Vascular Surgery at Sunnybrook Health Sciences Centre will ensure the organization is actively involved in evaluating, critiquing and developing new endovascular devices.

Please join me in congratulating Robert Maggisano on becoming the inaugural Chair in Vascular Surgery at Sunnybrook!

Sincerely,

James T Rutka,
*RS McLaughlin Chair,
Department of Surgery, University of Toronto*



“Still workin’ on that, sir?”

© Michael Crawford/The New Yorker Collection/www.cartoonbank.com



Martin McKneally

In this issue of the Spotlight, we celebrate the arrival of a talented group of residents, who will carry on the tradition of surgical scholarship exemplified by Bill Bigelow.

Those following Bill's legacy into cardiac surgery have entered a six year direct entry residency. This innovative entry program in General Thoracic Surgery was also established in Canada in 1994¹. Only recently a few training programs the United States have experimented with direct entry into cardio-thoracic surgery. In the November issue of the *Annals of Thoracic Surgery*, an early report from Mount Sinai Hospital in New York City indicates that their new 6 year direct entry program is attracting academically excellent candidates - similar to Jordan Van Orman p11 - with advanced degrees and more life experience than recent medical school graduates applying to the traditional programs².

A direct entry program was established at the same time in Canada in General Thoracic Surgery. This proved impractical, as graduates who entered practice settings where they were the only thoracic surgeon in town were required to share on-call duties in general surgery. They were undertrained for this scope of responsibility and lacked adequate cross-coverage of their own specialty. Focused training may become more practical for Thoracic Surgery as regionalization of develops, concentrating the operations and practitioners in specialized centers the way cardiac surgery is organized.

Like our Department of Surgery, Canada has a communitarian ethic that enables cooperation toward agreed upon goals like these. This requires some sacrifice of individualism for the good of the community. Sid Levitsky drew attention to this attribute in his Bigelow Lecture p7. He reminded us that Canadians share a background derived from an imperial culture, whereas the entrepreneurial competitive character of US surgery and medicine derive from a revolutionary culture. The collaborative approach has fostered the development of a nearly universal system of healthcare insurance in Canada and a co-operative approach to healthcare delivery, illustrated in this issue

by Mike Tymianski's Neurosurgery colleagues at the Toronto Western Hospital p15.

As the country enters a two year period of discussion leading to the 2014 renewal of the Canadian Healthcare Act, we will need similar professional models of care delivery and management of the health enterprise to renew and sustain our practice. Our surgeons have developed exemplary programs of efficient care in the surgical treatment of trauma, obesity, cancer, cataracts, cardiac and joint disease. Stitching these and similar programs together, integrating them effectively with homecare and family practice, and coordinating the whole into a system are challenges for the next several years.

The resources needed to accomplish these goals will take more than the public currently invests in healthcare. It is encouraging to see the investment by philanthropists like the late Jim McCutcheon, Terry Donnelly, Peter Munk, Seymour Schulich and other donors. The Li Ka Shing auditorium where Jim Rutka gave his annual address and the five new operating rooms planned for St. Michael's Hospital indicate the growing support and insight into the needs of Canadian Healthcare.

Surgeons can provide much of the leadership required for this transformation, because of their accustomed role as responsible decision makers. Our contribution can be strengthened by the kind of management and business training Mike Tymianski receives from his company's board of directors.

As we enter the winter season of holiday gatherings with family and friends, let's be grateful for the satisfactions we derive from our work, for the richness of our professional lives, and the good fortune we enjoy – to be members of the remarkable department described in this issue.

M.M.

1. Mulder, D., McKneally, M. *The education of thoracic and cardiac Surgeons: A canadian initiative*, *Ann Thorac Surg*, 1995;60:236-238
2. Chikwe, J., Brewer, Z., Goldstone, A., Adams, D. *Integrated Thoracic Residency Program Applicants: The Best and the Brightest?*, *Ann Thorac Surg*, 2011;92:1586-1591

AWARDS/ ACHIEVEMENTS AND HONOURS

ONTARIO GENOMICS INSTITUTE SOCIETAL IMPACT OF GENOMICS PRIZE

Professor Abdallah S. Daar (GS) and Dr. Sarah Ali-Khan of the McLaughlin-Rotman Centre for Global Health (MRC), University Health Network and University of Toronto, are the 2011 recipients of the Ontario Genomics Institute Societal Impact of Genomics Prize. This acknowledgement is in recognition of their research in genomics and race.

Since the Human Genome Project was completed in 2000, there has been debate in biomedical literature about the use of race and ethnicity in genetic research potentially resulting in racial/ethnic stereotyping. Drs. Daar and Ali-Khan examined the 2005 Admixture Mapping study, which looked for risk factors for Multiple Sclerosis (MS) in African Americans and European Americans, a disease that is extremely rare in Sub-Sahara Africans, common in populations of European descent, and of intermediate frequency in African Americans. Drs. Daar and Ali-Khan examined the ethical and social issues raised by the Admixture Mapping project and used these to draw up a series of recommendations and points for policy makers and researchers to consider when undertaking population-based genomics studies. The paper, titled Admixture mapping: from paradigms of race and ethnicity to population history, published in August 2010 in the Journal of the Human Genome Organization, examined the social and ethical issues, the benefits and the risks of Admixture Mapping, and more generally, of population-based genomic methods.

CANADIAN ACADEMY OF HEALTH SCIENCES (CAHS) NEW FELLOWS

Seven members of the Faculty of Medicine were inducted as new Fellows of the Canadian Academy of Health Sciences (CAHS) on September 16, 2011. CAHS recognizes the full breadth of academic health science ranging from fundamental science to social science and population health. Fellows are elected to the Academy in recognition of their contributions to the promotion of health science through leadership, creativity, distinctive competencies and their commitment to the advancement of health science. The new inductees are **Vivek Goel** (Dalla Lana School of Public Health), **Patrick Gullane** (Chair, Department of Otolaryngology), **Amira Klip** (Department of Biochemistry), **Anthony Lang** (Department of Medicine), **Ren-Ke Li** (Department of Surgery), **James Rutka** (Chair, Department of Surgery), and **Stanley Zlotkin** (Department of Paediatrics).

James Rutka (Chair, Surg) was acknowledged for his work in the molecular biology of human brain tumors by the Royal Society of Canada. He has published over 300 peer reviewed articles, and received over \$10 million research funding.

Daniel Lodge (CS) received the Harrison Teaching Award, offered semiannually at the Sunnybrook Faculty of Surgery Annual Dinner. This award is given to the resident who scores best in undergraduate teaching as voted on by medical students.

Paul Karanicolas (GS) has received funding from Colon Cancer Canada (\$50,000) for his work entitled "*Quality of Life Following Resection of Colorectal Cancer*".

Lakho Sandhu (GS) was awarded the Best Clinical Abstract Award at the 2011 Canadian Association of General Surgeons' Surgery Forum for her study entitled "*Sources of bias in non-randomized comparative studies of surgical procedures*." (Supervisor: David Urbach).

Luke Szobota and **Usmaan Hameed** (GS) were the recipients of the 2011 Canadian Association of General Surgeons' Resident Excellence in Teaching Award.

Patrick Gullane (H&NSurg) will be awarded by The Royal College of Surgeons in Ireland with an Honorary Fellowship on February 4, 2012. This Fellowship is the highest honour bestowed by the College and is awarded in recognition of an individual's outstanding contributions to medicine, surgery and humanity. The award will be presented at the College's annual Charter Day Meeting at which Pat Gullane has been invited to deliver a keynote lecture.

Ryan Alkins (NeurSurg) was awarded the Edward Christie Stevens Fellowship in Medicine and Joseph M. West Family Memorial Fund for 2011-12.

Mark Bernstein (NeurSurg) was named as the Inaugural Holder of the Greg Wilkins-Barrick Chair in International Surgery. The \$5.5M gift to the Toronto General & Western Hospital Foundation represents one of the largest gifts ever to the Division.

David Cadotte (NeurSurg) is this year's recipient of the Starr Medal. He was also awarded the Chisholm Memorial Fellowship, Miriam Neveren Memorial Award, Edward Christie Stevens Fellowship in Medicine and Joseph M. West Family Memorial Fund for 2011-12.

Douglas Cook (NeurSurg) won 1st prize in the Basic Neuroscience Research category of the K.G. McKenzie Prize for his manuscript entitled "Extending the therapeutic window for reperfusion after stroke in non-human primates using a PSD-95 inhibitor" at the Canadian Neurological Sciences Federation meeting, Vancouver, BC, 2011."

Karen Davis (NeurSurg) was appointed to the CIHR Institute Advisory Board for the Institute of Neurosciences, Mental Health and Addiction for a three-year term (effective Sep. 1, 2011).

Peter Dirks (NeurSurg) won the Alan R. Hudson Neurosurgery Faculty Teaching Award presented at the 36th William S. Keith Professorship, Toronto, June, 2011.

Gregory Hawryluk (NeurSurg) was the recipient of the Warren Ho Memorial Scholarship in Neurosurgery presented at the 36th William S. Keith Professorship, Toronto, 2011.

Gregory was also awarded 2nd place in the Thomas P. Morley Neurosurgical Resident Prize competition at the 36th William S. Keith Professorship, Toronto, ON, June 9-10, 2011.

Gregory also won the National Neurotrauma Society's Murray Goldstein Award for his work entitled "*Neural Precursor Cells Express Trophins Following Transplantation but Remyelination is the Key Mechanism by which They Augment Functional Recovery Following Rodent Spinal Cord Injury*" at the National Neurotrauma Symposium in Fort Lauderdale, Florida on July 10-13, 2011.

He won also the Best Science Paper Award in the 2011 Region XII Committee on Trauma resident paper competition of the American College of Surgeons and was the unanimous choice of the Canadian Trauma Association to represent Canada at the 2012 American College of Surgeons Trauma Research competition.

Gregory was selected to represent Canada at the 2012 American College of Surgeons Trauma Research competition.

Gregory Hawryluk and **Michael Fehlings** (NeurSurg) won 2nd Prize in the Basic Neuroscience Research category of the K.G. McKenzie Prize for his manuscript entitled "Understanding how a cell transplantation paradigm leads to functional recovery from spinal cord injury: the importance of remyelination" at the Canadian Neurological Sciences Federation meeting, Vancouver, BC, June, 2011.

Michael Fehlings (NeurSurg) has accepted an invitation to serve as an Editorial Board Member for the journal Neural Regeneration Research (NRR).

Alexander Velumian, Marina Samoilova and Michael Fehlings (NeurSurg) paper entitled “Visualization of cytoplasmic diffusion within living myelin sheaths of CNS white matter axons using microinjection of the fluorescent dye Lucifer Yellow” (*Neuroimage* 2011, 56:27-34) was selected for inclusion in the Faculty of 1000, placing this article in the top two percent of published articles in biology and medicine.

George Ibrahim (NeurSurg) was awarded the William S. Fenwick Research Fellowship and Joseph M. West Family Memorial Fund for 2011-12.

Nir Lipsman (NeurSurg) was awarded a CIHR Fellowship Grant in the amount of \$50,000 for the 2011-12 academic year.

Nir Lipsman was also the recipient of the William S. Fenwick Research Fellowship, Chisholm Memorial Fellowship, Miriam Neveren Memorial Award, Edward Christie Stevens Fellowship in Medicine and Joseph M. West Family Memorial Fund for 2011-12.

Adrian Laxton (NeurSurg) won 1st Prize in the Clinical Neuroscience Research category of the K.G. McKenzie Prize for his manuscript entitled “A Phase I trial of deep brain stimulation of memory circuits in Alzheimer’s disease” at the Canadian Neurological Sciences Federation meeting, Vancouver, BC, 2011.

Andres M Lozano (NeurSurg) and his team received the 1st Prize, K.G. McKenzie Prize In Clinical Neuroscience Research for “A phase I trial of deep brain stimulation of memory circuits in Alzheimer disease”.

Andres was the lead investigator of a new PET Scan Suite, whose opening at Toronto Western Hospital was celebrated by UHN, the Toronto General & Western Foundation and the Edmond J. Safra Philanthropic Foundation on Sep. 19, 2011. Financial support for the PET Scan Suite came from a \$2.1M Ontario Innovation Trust award to Andres Lozano, a generous donation from the Safra Foundation, and a number of contributions from patients.

Andres Lozano was cross-appointed as a Professor of Neurology in the Department of Medicine at the University of Toronto, effective as of June 1, 2011.

Andres was also awarded a renewal of his Tier 1 Canada Research Chair in Neuroscience. The CRC Secretariat awards Tier 1 Chairs for seven-year terms to outstanding researchers acknowledged by their peers as world leaders in their fields.

Andres Lozano was the recipient of the 2010 Winn Prize Award from the Society of Neurological Surgeons.

Loch Macdonald and Jinglu Ai (NeurSurg) were awarded a \$25,000 grant from the Brain Aneurysm Foundation for their project “Molecular mechanisms of memory loss following subarachnoid hemorrhage”.

Loch also was the recipient of a Reviewer Excellence Award from the journal *Neurosurgery*.

Tejas Sankar (NeurSurg) was awarded a CIHR Fellowship Grant in the amount of \$50,000.00 for the 2011-12 academic year.

Tom Schweizer (NeurSurg) won a New Investigator Award from the Heart and Stroke Foundation of Canada in the amount of \$300,000 (2011-2016).

Tom was also the recipient of an Early Researcher Award from the Ontario Ministry of Research and Innovation valued at \$140,000 (2011-2016).

Mehdi Shahideh (NeurSurg) was the recipient of the Alan R. Hudson Neurosurgery Resident Teaching Award presented at the 36th William S. Keith Professorship, Toronto, ON, 2011.

Sunjay Sharma (NeurSurg) was awarded the Synthesis Award for Resident Research on Brain and Craniofacial Injury at the Congress for Neurological Surgeons 2011 Annual Meeting.

Scellig Stone (NeurSurg) was awarded the American Academy of Neurosurgery resident award for his PhD-related work on deep brain stimulation inducing neurogenesis. This international award is the most prestigious given to a resident by a neurosurgical body, and we should all be proud that it has been conferred once again to a resident from the University of Toronto.

Charles Tator (NeurSurg) was the recipient of the UHN 2011 Global Impact Award, given to a UHN staff member who has been a leader in medicine and science, and whose past work has led to improvements in health care well beyond our borders. Dr. Tator was selected as this year's recipient, in recognition of his pioneering research in spinal cord injury in Canada, and as an international leader in prevention of head injury.

Charles Tator was also presented with the Outstanding Achievement Award by the Medico-Legal Society of Toronto. This award is given in recognition of significant contributions to the society, the professions and the community at large.

Michael Taylor (NeurSurg) ranked #2 on the Toronto Star's list of the biggest scientific discoveries of 2010.

Travis Tierney (NeurSurg) was awarded a NREF Codman Fellowship Grant in the amount of \$53,083 for the 2011-12 academic year.

Michael Tymianski (NeurSurg) is UHN's sole lead recipient of an Ontario Research Fund Research Excellence (ORF-RE) Round 5 Award from the Ministry of Research and Innovation. The \$1.4M award for the project "TRPM7 Inhibitors for the Treatment of Stroke and Myocardial Ischemia" will be used for the development of drugs targeting TRPM7, a protein implicated in cell damage, in treatment of cellular damage arising from stroke, heart attack and retinal disorders. The \$65M ORF-RE Round 5 competition awarded 26 projects across the province.

Michael was also awarded a Tier 1 Canada Research Chair in Translational Stroke Research.

Taufik Valiante (NeurSurg) is Co-Director of the Krembil Neuroscience Center's Epilepsy Program, which has been designated a Luminary Site by Natus/XLTEK. The partnership with Natus, suppliers of EEG equipment to the Epilepsy Monitoring Unit, will allow the Epilepsy Program at Toronto Western Hospital to provide state-of-the-art epilepsy care at significantly reduced costs.

Adrienne Weeks (NeurSurg) was awarded 1st place in the Thomas P. Morley Neurosurgical Resident Prize competition at the 36th William S. Keith Professorship, Toronto, ON, June 9-10, 2011.

Jeff Wilson (NeurSurg) was the recipient of the Chisholm Memorial Fellowship, Edward Christie Stevens Fellowship in Medicine and Joseph M. West Family Memorial Fund for 2011-2012.

Mark Bernstein (NeurSurg) was honoured at a gala event at the Sony Centre for his pioneering work in surgical neuro-oncology and awake craniotomy. The event included a remarkable performance by the Guangzhou Ballet company of the 1940's Chinese ballet entitled "Return on a Snowy Night". Proceeds from the event will support neurosurgical oncology clinical and research efforts at the Toronto Western Hospital.

Andrew Howard (OrthoSurg) received a CIHR Grant for his project entitled "Pedestrian Countdown Timers: Effect on Pedestrian Injury Rates. A controlled cohort study using spatial analysis in the city of Toronto" (co-investigators – Ronald Norman Buliung, Linda Rothman, Andrew Roger Willan, Colin MacArthur).

Victor Lo (OrthoSurg), a Master's student working in Dr. Cari Whyne's laboratory received the 2011 CORS (Canadian Orthopaedic Research Society) Founders' medal. His work on photodynamic therapy and spinal metastases will be presented in Ottawa June 8-10, 2012 at the Canadian Orthopaedic Association annual meeting.

John Murnaghan (OrthoSurg) has been selected as the recipient of the 2011 RCPSC/AMS Donald Richards Wilson Award, which honours an individual who has demonstrated excellence in integrating the CanMEDS roles into a Royal College or other health related training programs.

Siba Haykal (PlasSurg) received the Postgraduate Research Award for her research entitled, *“Determining the Immunogenicity of Decellularized Tracheal Allografts.”* Siba is in her second year of the Surgeon Scientist Program, pursuing a PhD with Stefan Hofer and Tom Waddell as her supervisors.

Siba also received the William S. Fenwick Research Fellowship, as well as the Edward Christie Stevens Fellowship in Medicine. She also received the Joseph M. West Family Memorial Fund. All were received in August 2011

Jennica Platt (PlasSurg) has received acceptance to the Clinical Investigators Program along with one year of funding from the Ministry of Health.

Kyle Wanzel (PlasSurg) was presented with the St. Joseph's Department of Surgery Teacher and Mentor of the Year Award for 2011. This is an award given to the surgeon with the highest TES scores as given by residents and medical students who have rotated through the Department of Surgery.

Alison Snyder-Warrick (PlasSurg) was awarded the best paper for her presentation on *“Axonal Counts for Free Muscle Transfer for Facial Paralysis”* at Chang Gung Mayo Clinic Symposium in Microsurgery in Tapei, Taiwan in October 2011.

Ronald Zuker (PlasSurg) was the recipient of the Fu Chan Wei Award for Reconstructive Surgery presented at Chang Gung Mayo Clinic Symposium in Microsurgery in Tapei, Taiwan in October 2011. This is a prestigious award and recognizes international expertise in the area of reconstructive microsurgery. Although the award is

named after Fu Chan Wei, it should be noted that he spent his formative fellowship years at the University of Toronto under the supervision of Drs. Manktelow and Zuker and it is a fitting tribute that his former mentor has been honoured in this way.

Gail Darling (ThorSurg) was selected as the surgical representative for the RTOG Thoracic Subgroup.

Andrew Pierre (ThorSurg) received the Gail Darling Undergraduate Teaching Award 2011, as well as the RJ Ginsberg Postgraduate Teaching Award.

Andrew has also been appointed Thoracic Residency Program Director in July 2011. He was recently promoted to Associate Professor, Division of Thoracic Surgery, Department of Surgery, University of Toronto.

Kazuhiro Yasufuku and **Thomas Waddell** (ThorSurg) performed the first robotic lobectomy for lung cancer in Canada in October 2011. Using a completely portal, 4-arm technique on the Da Vinci platform, the procedure involved extensive training of OR staff and team preparation.

Robert Zeldin (ThorSurg) was Promoted to Associate Professor, Division of Thoracic Surgery, Department of Surgery, University of Toronto.

Thomas Lindsay (VascSurg) is the recipient of this year's Ross Fleming Surgical Educator Award. This award is presented by the Surgeon-in-Chief for Excellence in Surgical Education.

Ranil Sonnadara (Surgical Skills Centre) received the Top 3 paper Award, at the 2011 International Conference on Residency Education (Authors: Ranil Sonnadara, Oleg Safir, Shawn Garbedian, Markku Nousiainen, Peter Ferguson, William Kraemer; Benjamin Alman, & Richard Reznick) for *Orthopaedic boot camp II: Examining retention rates for skills taught through an intensive laboratory-based surgical skills course.*

The Deadline for the next Surgery Newsletter is February 14, 2012. All members and friends of the Department are invited to submit items, articles, pictures, ideas or announcements.

You may reach us by:

voice mail: 416-978-8909
e-mail: alina.gaspar@utoronto.ca

Please provide your name and telephone number so that we may contact you if we have any questions.

The Department of Surgery

Banting Institute
100 College Street
Room 211
Toronto, Ontario, Canada
M5G 1L5

Editor: Martin McKneally
Phone: 416-978-8909
E-Mail: martin.mckneally@utoronto.ca

Assistant Editor: Alina Gaspar
Phone: 416-978-8909
E-Mail: alina.gaspar@utoronto.ca

PRIVACY STATEMENT

The University of Toronto respects your privacy. We do not rent, trade or sell our mailing lists. If you do not wish to receive this publication, please contact us at 416-978-8909 or at alina.gaspar@utoronto.ca.

SUBSCRIBE ONLINE

The surgery newsletter is available electronically. To receive this convenient and colorful version of the Spotlight on your computer, register either online at <http://www.surgicalspotlight.ca/> or contact Alina at alina.gaspar@utoronto.ca.

