

# The Surgical Spotlight

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

SPRING 2009



## TRAUMA SURGERY IN KHANDAHAR AND TORONTO



Homer Tien with Vivian, Evalyn, Julia and Abigail

Homer Tien is a trauma and emergency general surgeon at Sunnybrook Health Sciences Centre who spends half of his clinical time in elective general surgery practice. He serves as an acute care surgeon (1) for one full week six to eight times per year. He is usually able to link this to his trauma call.

Homer spends 40% of his time on clinical epidemiology in two areas: combat casualty research, and civilian trauma research. He is working with Andrew Smith and Fred Brenneman to assure that acute care surgeons are consulted expeditiously – that a patient is seen within 30 minutes of arrival and a decision is made within two hours. Their current goals are to speed up the recognition of surgical problems by the emergency room staff, and to facilitate better access to the operating room despite the competing services that are prevalent in academic settings. Whether decreasing the “door to operating room time” brings about objective improvements is one of the research questions addressed in their prospective clinical database.

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The acute care surgeon system has proven to be good for patients and staff. There is more continuous care, more resident interaction, and better life balance for the surgeon. When a general surgeon with a significant practice performs emergency surgery at night, she may be distracted by major elective cases from follow-up care of emergency patients in the ensuing days. Family life is more manageable when the acute care surgeon can predict times of intense and heavy responsibility and match family activities and vacation to predictably lighter periods.

Trauma care is becoming more and more non-operative because of better imaging. 64-slice CT imaging has brought a better understanding of the natural course of solid organ injury. Liver and spleen injuries can be watched without exploration when it is clear that there is no bowel injury. Ultrasound helps determine the need for immediate surgery. It is far better for a patient to go home without a laparotomy after a small splenic injury; late rupture is rare if the patient is observant and well-informed. Splenorrhaphy is now rarer in adults, but may be more commonly used in children. If the CT shows extravasation or aneurysm and the patient is stable without other visceral injuries, embolization may be the procedure of first resort.

Trauma surgeons prioritize care in the ER, orchestrating the interaction with subspecialties such as orthopaedics, neurosurgery, vascular and thoracic surgery. Most of the thoracic trauma is managed by the trauma surgeons at Sunnybrook, while the thoracic surgeons from Toronto East General provide prompt and excellent backup.

Homer's military practice includes two-month deployment to Khandahar, Afghanistan every 18-24 months. He has served there three times and will go again in October. The spectrum of military injuries is quite different from civilian practice with more penetrating, blast, and burn trauma. The surgery is challenging and there is less subspecialty backup, so emergency neurologic, vascular and plastic operations expand the scope of practice for military surgeons. Care is excellent and the equipment is very good at the Canadian forces hospital. Expectant treatment of splenic injury is replaced by splenectomy if the patient requires air evacuation to the Landstuhl/Ramstein US Army medical center/ hospital in Germany.

Homer's acute care and trauma surgery group is supportive of his military practice. He is now the Canadian forces national practice leader for trauma. Sunnybrook and the University of Toronto receive good publicity for their contribution to the Canadian forces' academic and research activities. Homer now brings military personnel to Sunnybrook to train, and the surgeons from Sunnybrook teach at CFB Borden, the Canadian Forces Base near Barrie. Homer serves as "block leader" for trauma research for the Canadian forces. He has been able to help Sandro Rizoli and his colleagues improve the protocols for hemostasis in trauma, working with a \$350 thousand grant for a randomized trial. A larger study in collaboration with US forces is in the planning stage.

Homer grew up in Hamilton and Toronto. He was a biochemistry major at Queen's and then attended McMaster medical school. He is the first in his family to study medicine. He completed a rotating internship at Scarborough General Hospital, then served as a general practitioner in the military for five years – "one of the best times of my life". He learned from participating in a counter-terrorism team, travelling to Yugoslavia, Burma, the Middle East and Tanzania. He learned counter-measures for biological weapons, hostage rescue, how to parachute and dive.

All this adventure preceded his marriage to Vivian during his surgical residency. Vivian has a dental practice in Stouffville, and together they have three daughters, Abigail, 8, Julia, 6, and Evalyn, 2. They live across the street from Sunnybrook. Most of Homer's spare time is spent participating and watching his children in soccer, T-ball and other school related activities. He is currently reading Conn Iggulden's *Emperor* series, a four-volume historical fiction about the life of Julius Caesar. He particularly enjoyed the Henry V module on Leadership Day. His military experience makes him very appreciative of the surgical training he received in the Gallie program, and in particular, the senior surgical training he received from Tom Gilas at Toronto East General, Bryce Taylor at Toronto General Hospital, and the entire Division of General Surgery at Sunnybrook.

*M.M.*

- (1) [http://www.surgicalspotlight.ca/Article.aspx?ver=Fall\\_2008&cf=AcuteCareSurgeon](http://www.surgicalspotlight.ca/Article.aspx?ver=Fall_2008&cf=AcuteCareSurgeon)

## New Bariatric Surgical Program Established at University of Toronto



Richard Reznick

### FOUR SURGEONS BRAIN-STORMING IN AN OFFICE

About two years ago, I had an informal meeting in my office with Laz Kline and John Hagen from Humber River Regional Hospital (HRRH) and Lloyd Smith from St. Joseph's. We spent our time discussing the current state of affairs with respect to surgery for morbid obesity in the Province of Ontario. And it was not a pretty picture. Laz, John and other colleagues from HRRH were performing about 250 cases per year, having been designated by the government as a provincial centre of excellence. But despite this accomplishment, other centres, like St. Joe's had not received any funding to treat these patients and over 1500 patients per year were exiting Ontario for their surgery at great cost to our health system. John and Laz's wait times were staggering and approached two years. Further, there has been mounting, and now overwhelming evidence that gastric bypass surgery can be a life-saver, with a dramatic positive impact on diabetes, hypertension, lipid disorders, coronary artery disease and mental health. This impromptu conversation lead to the formation of a working group as we theorized that if we could use the collective power of our teaching hospitals across the University of Toronto, we could possibly achieve the number of cases needed to have a real impact on the Ontario problem, not overwhelm any one hospital and provide a platform for training and research into this important area.

### A UNIVERSITY DEPARTMENT CAN PLAY A COORDINATING ROLE IN CLINICAL CARE

Despite the fact that it is not usual for the University to take a political lead in clinical matters, in this case it made sense; and what resulted was a tremendous spirit of cooperation between our teaching hospitals and our

Department of Surgery at U of T, ultimately resulting in the tabling of a proposal to the Ministry. And they agreed! MOHLTC has recently approved funding to establish a large bariatric surgery program at the University of Toronto, which is great news for our university, the affiliated hospitals involved in this initiative, and most of all, the growing ranks of Ontario patients who will significantly benefit from weight loss surgery. The Ministry has earmarked a total of \$75 million to expand bariatric surgery capacity in the province, as part of its wide-ranging diabetes strategy. Recognizing the magnitude of the need for this surgery that exists in the Greater Toronto Area, the tremendous surgical expertise concentrated in Toronto, and the University of Toronto's reputation for excellence in health research and education, the Ministry agreed to further expand capacity in Toronto. Other provincial Centres of Excellence in bariatric surgery include Guelph General Hospital, The Ottawa Hospital, and St. Joseph's HealthCare Hamilton.

The new University of Toronto Collaborative Bariatric Surgery Program will be a partnership with Humber River Regional Hospital, University Health Network's Toronto Western Hospital, St. Michael's Hospital, St. Joseph's Health Centre, Toronto East General Hospital, and The Hospital for Sick Children. The rapid creation of a dispersed surgical program such as this one would not have been possible without the trust and belief in teamwork that already exists in the University of Toronto's surgical community.

To date, the province has provided the University of Toronto Collaborative Bariatric Program with over \$3 million in capital funding for specialized equipment, instrumentation, inpatient area renovations, and the creation of an ambulatory obesity clinic. Once this program is fully functional, operational funding will total almost \$12 million per annum. This money will cover supplies, clinical support service, and inpatient and clinic staffing costs.

### A GOOD MODEL OF CARE

A cornerstone of the collaborative bariatric surgery program will be two ambulatory clinics which will provide centralized triage, intake, assessment, and post-operative follow-up care. A centralized clinic component such as



this, will allow this bariatric program to realize numerous organizational efficiencies and cost savings, and optimize coordination and continuity of care for patients. To this end, Humber River Regional Hospital will expand its current clinic to accommodate a larger volume of patients, and will serve as the model for a new clinic to be established at Toronto Western Hospital. The planning process is already well underway at Toronto Western, and it is anticipated that they will be able to open their doors to bariatric patients by the fall of 2009. A key facet of these two clinics is that they will be able to provide large volumes of patients with highly-coordinated, multi-disciplinary care. Hospital administrators, surgeons, medical specialists, psychiatrists, nurses, dietitians, social workers, occupational therapists and Community Care Access Centres will work collaboratively in an interprofessional practice environment to ensure that patients' co-morbidities are managed properly, their obesity-related conditions and mental health issues are fully addressed, and they are adequately prepared for the lifelong weight management and behavioural modification required for a successful outcome.

Once the program is fully functional, it will serve over 900 patients a year, in the University of Toronto-affiliated hospitals. A total of 17 surgeons will perform bariatric surgery. Distributing the caseload in this manner will prevent any one hospital from being burdened by such a large volume of bariatric patients, and will allow participating surgeons to maintain their current scope of practice.

With the program encompassing six surgical sites, and two clinic locations dispersed across Toronto, efforts to ensure communication throughout the network will be paramount. A nucleus executive committee will be formed with representation from the various sites, not only to facilitate communication, but to provide the multi-site program with effective coordination and management. The Ministry has also created a province-wide bariatric network, which includes an Advisory Board and various working groups, with representation from all provincial Centres of Excellence. This will allow for the sharing of best practice, the development of comprehensive assessment criteria, and the creation of a centralized patient database to generate high-quality evidence-based research.

## RESEARCH AND EDUCATION WILL BE A FOCUS

With respect to research and education, this new surgical program will undoubtedly be able to capitalize on its association with the University of Toronto. Numerous opportunities exist to conduct outcomes and evaluation research, as well as to investigate the efficacy of emerging bariatric technologies. This new program also has very promising academic implications, not only for general surgeons, but for plastic surgeons, anaesthetists, psychiatrists, medical internists, postgraduate medical trainees, nurses, and allied health professionals. Additionally, the new bariatric program should prove to be a natural fit with the University of Toronto's already established Minimally-Invasive Surgery Fellowship Program.

Most importantly, this initiative will help the province address the ever-increasing waiting list for weight loss surgery, and stem the tide of Ontario patients who undergo gastric bypass surgery outside of Canada. Each patient who has surgery in Ontario, as opposed to the United States, will result in savings of approximately \$10,000. With a total of 1660 patients leaving the country for bariatric surgery in 2008/2009, (1) the time for expansion of services in Ontario has arrived. The establishment of the University of Toronto Collaborative Bariatric Surgery Program will do much to curb health care spending, and provide a large patient population with an integrated range of services close to home.

*Richard K. Reznick*

*R.S. McLaughlin Professor and Chair*

- (1) Ontario improves access to bariatric surgery: McGuinty government moving forward on diabetes strategy. News Release. February 23, 2009 [http://www.health.gov.on.ca/english/media/news\\_releases/archives/nr\\_09/feb/nr\\_20090223.html](http://www.health.gov.on.ca/english/media/news_releases/archives/nr_09/feb/nr_20090223.html)

## Minister David Caplan answers questions at the Kergin Lecture



David Caplan

Ontario Minister of Health David Caplan opened his Kergin Lecture at University Rounds with a story about the minister who asked his speechwriter for a 20-minute talk. When he spoke, it was a disaster. It took over an hour. Half the audience fell asleep while the other half walked out. When he got back to the office and chastised his

staff for the failure, the speechwriter said, "I did the best I could. I gave you a good 20-minute speech and two back-up copies." Minister Caplan then gave an excellent 20-minute talk and took 40 minutes of questions.

He told us that though the economy has forced constraints on healthcare investment, we are still hiring 9,000 more nurses, deploying more family healthcare teams, continuing to invest in hospital infrastructure, reduce wait times in emergency rooms and develop creative solutions to connect unlinked Ontarians to primary care. He recounted that investment in hospitals has been increased from \$11 billion to \$14 billion and that health spending is up 35% during the present administration. The ministry plans to focus the Wait Times Strategy on general surgery, orthopaedics and ophthalmology and look for solutions across the entire health care system to provide greater safety. Alan Hudson will take the lead in electronic health and Michael Baker will lead the safety program. Minister Caplan finds the Ministry of Health an exciting change from his previous portfolio of provincial infrastructure where he made substantial contributions. He feels that healthcare is "part of the identity of Canada"; he follows in the footsteps of his mother Elinor Caplan who also served as Minister of Health. Following her advice to focus on a few key areas, he will emphasize prevention and management of chronic disease, improvements in mental health and addiction

and conversion to electronic health records. He closed by promising not to "soar to mediocrity", but to improve healthcare by listening to people like this audience, in the spirit of Dr. Kergin.

A well-orchestrated question session followed, reflecting thoughtful preplanning to cover all the subjects important to our department. Dean Cathy Whiteside acknowledged the importance of family doctors and pointed with pride to the statistic that almost half the family doctors in Ontario trained at the University of Toronto. She asked what will be done about specialists, including generalists within the specialties, like general surgeons. Minister Caplan pointed to the important role of Joshua Tepper, Assistant Deputy Minister, Health Human Resources Strategy, whose responsibility includes training institutions to help attract people into healthcare through "Workforce Ontario". The ratio of retired to workers has shifted from 1:8 to the current level of 1:5. It will soon become 1:3 and there will be an increased need for personnel trained in healthcare. Michael Jewett asked about support of research. "There is a Ministry of Research and Innovation to help build made-in-Ontario solutions through basic research as well as systems research. Our mandate before the switch to LHINs was operational; today it is more strategic." Hans Kreder, Chair of Orthopaedic Surgery, asked about the ministry's vision for long-term financial stability of healthcare in contrast to cyclic targeted funding programs such as the wait time initiative. He emphasized that some LHINs may end up absorbing the worst problems from the rest of the province. Minister Caplan responded that quality measures and outcomes, such as patient satisfaction, provider satisfaction and clinical results will be used to distribute resources. He predicts that healthcare will increase the shift from a department store model to focussed centres, for example for cardiac, orthopaedic or cancer care. Hugh Scully underlined the problem of matching the funding to the costs of patient care. He emphasized that 30-60% of the patients in the Toronto Central LHIN come from outside our LHIN. Caplan acknowledged the problem of managing funding more precisely. He felt that we will someday have a formula that lands some place between the global budget for hospitals and the fee-for-service budget for physicians. He and Brian Goldman, Sandra Rotman

Chair in Health Sector Strategy at the Rotman School of Management recently visited Harvard Business School's famed Professor Michael Porter for advice about funding. Acknowledging that we do not have this problem well worked out, he is planning to bring Michael Porter up to assist in the analysis of this problem. Robin Richards raised the Alternate Level Care (ALC) problem, recounting his experience with two patients who needed repair of ankle fractures the preceding night, "I did the one who was an in-patient because he would become an ALC patient blocking the availability of beds to other patients needing admission. The out-patient had to be deferred." In answer, the minister told us that 20,000 beds had been added in the previous administration, and 7,000 during the current administration. With each addition of beds and each increase in expenditure, the number of ALC patients increased. "We have better drugs and better treatment and they all increase demand on the healthcare system. We need to drive care back out into the community, and to work on prevention and the development of transitional beds that will allow management of patients until they can be moved into long term care." He told us that Timmins is working on a "wrap-around" patient care program to put care around the home rather than around a hospital bed. Resident Danny Penello asked about funding for MBA training of residents, a costly but much-needed investment. The minister plans to emphasize funding for leadership courses for physicians, emphasizing that healthcare must be run by physicians. "We'll continue to support the leadership course," he said, referring to the Ministry of Health and Long Term Care's Health Leadership program. ([http://webcontent.rotman.utoronto.ca/open/health\\_leadership/program.asp](http://webcontent.rotman.utoronto.ca/open/health_leadership/program.asp))

In answer to Dimitri Anastakis' concerns about the unstandardized financial reporting across jurisdictions throughout the province, the minister told us that they have asked KPMG to do an effectiveness analysis across the LHINs. In general, the LHINs system is doing better with managing the financial aspects of healthcare than the ministry had in the past, and there is more to come from this analysis. Tirone David pointed out that the expectation for healthcare services has increased in Canada far above the more realistic attitudes among the public in France and the United Kingdom. He asked whether we shouldn't "teach doctors to bring the bar

down – life is finite". Minister Caplan said that at every meeting he attends with healthcare leaders, we are envied for our system. "People certainly need to take care of themselves and to improve their overall wellness, nevertheless, as an Ontarian I expect excellence in diagnosis and treatment and I see it throughout the system."

*M.M.*

## SAVE THE DATE!

**MAY 7 & 8, 2010**

THE 25TH ANNIVERSARY OF THE  
SURGEON SCIENTIST PROGRAM



CELEBRATION OF THE DEPARTMENT  
OF SURGERY THROUGH THE DECADES.

Current and past faculty, current students and alumni from around the world are invited back to the Department of Surgery to help honour this special 25th Anniversary of the Surgeon Scientist Program.

Event activity will pay homage to the Surgeon Scientist Program's mission, history, and successes – as embodied by our alumni – and will also highlight the milestone achievements of the entire Department of Surgery.

Dr. Reznick, Department Chair, and Dr. Barkin, Surgical Alumni Association President, welcome you to join them in reconnecting and celebrating with friends and colleagues old and new.

To remain current with upcoming activity, please update your contact information by emailing [address.update@utoronto.ca](mailto:address.update@utoronto.ca)

# Leadership Lessons from Shakespeare

An enthusiastic group of 26 surgeons and surgical nurses gathered to hear stimulating lessons on Leadership Day for surgeons, held at the Vaughan Estate on April 24, 2009. Jim Fisher, Vice Dean, Programs at the Rotman School of Management developed the theme that “leadership is thoughtful; it is not about charisma”. Using the example of King Henry V as portrayed by Shakespeare, Jim developed his nine-block conceptual framework for successful leadership in action, illustrated in a nearby figure. Henry’s **management** included careful *planning*. He chose the site of battle to be a tapered field where the overwhelming numerical superiority of the French could be confounded. They stumbled over each other in the mud as they approached the small end of the funnel where the English troops stood their ground. He *organized the structure* – sharpened wooden spears were positioned diagonally in the ground to impale the French horses as they charged. He *assembled the required team* of long-bow archers, a novel weapon, far superior in accuracy and range to the cross-bows used in the past. These were positioned safely between the spears. The arrows that he brought from England, made of Spanish yew, would not shatter when they struck their targets.

The **leading** component of his action plan included *a vision* of the future in which generations would look back at the heroism of his troops and see them as noble-men. He *aligned* a heroic group of committed fighters by telling those who did not share the motivation of the heroic “happy few” that they should take their pay and leave. This eliminated those who might be seditious or troublesome. He appealed to the soldiers’ *self-esteem* and *sense of belonging* by placing himself in the front line – neutralizing any doubts about his commitment. In engaging his troops, Henry *articulated and lived the values* consistent with his vision of a band of heroes.

Jim recommended the book *Leadership and the Quest for Integrity* by Badaracco and Ellsworth as the best book



Jim Fisher

available on leadership. (1) It emphasizes involvement. Followers need to control their space. The Political theory of leadership requires that we give followers their choice within the boundaries of the leader’s plan. Good followers are volunteers who have chosen to do their work. “If you pay them and walk around to check on them, you’ll get the minimum – while you are watching. They have to choose to volunteer for the rest.”

The Directive theory of motivation states that we want decisions from the boss, even if we don’t agree. Leaders should make decisions on issues people want decided – “We’ll do X by Y.” Values are important; we feel better about ourselves if we are doing X. Good leaders manage, lead and engage. Too idealized a vision is discouraging. “World class care for everyone immediately” sends everyone home feeling like losers. Make the vision achievable, not unrealistically ideal. He commented that we in healthcare treat each other badly compared to the business community. We are doing heroic work, and it should be far easier to inspire each other. When he was working for Neilson, he felt that the company dealt with its customers and co-workers better, even though the motivating values and vision were far less heroic. “Stuffing Mr. Big bars down the throats of boys, and Caramilk down the throats of girls – stuffing fat and sugar into people isn’t highly motivating, so we pushed the idea that it’s Canadian and that we deal with our customers and co-workers better than other companies.”

“In the political world Obama did all three leadership tasks well (managing, leading, engaging). He was always clear, always on plan. Stephane Dion couldn’t do the manage part, though he was fine on the others. John McCain and Hillary Clinton couldn’t manage the plan.” The vision sometimes changes so the thoughtful leader adjusts to the situation, the resources and the purpose. Leaders use objective left-brain corporate considerations as they measure output, and subjective personal right-brain approaches when they look to the authenticity of their leadership.(2) They use the left and the right brain to determine who they have to get on-side. Objective information is easy to obtain. Emotional intelligence is more critical to success. In Henry V, the king walks around disguised in a cloak the night before the battle, listening to learn what the soldiers won’t tell him. They believed that the king will be ransomed if captured, a common practice at that time; that the plan was bad, and that God did not favour their enterprise. His speech counters all these misconceptions. (The text of this



speech and a link to the video clip of Kenneth Branagh's delivery is available in the online version of the spotlight at [www.surgicalspotlight.ca](http://www.surgicalspotlight.ca).)

Analyzing the resources of the leader, there were objective resources like long bows, shatter-proof arrows and physical geography. There were also emotional, right-

brain resources. In the long line of the many French kings who had ruled England since 1066 Henry V was the first who could speak the Anglo-Saxon language. He was credible to his men, based on his emotional intelligence (3) and knowledge of their culture from his days of carousing in bars.

## THE THOUGHTFUL LEADER'S WORKBOOK

MANAGING	LEADING	ENGAGING
<b>PLAN</b> <ul style="list-style-type: none"> <li>- Setting targets or goals (typically for the next month or year)</li> <li>- Establishing detailed steps for achieving targets</li> <li>- Allocating resources to accomplish plans</li> </ul>	<b>VISION</b> <ul style="list-style-type: none"> <li>- Setting a direction – developing a vision for the future</li> <li>- Clarifying the purpose</li> <li>- Communicating the vision to all potential stakeholders</li> </ul>	<b>VALUES</b> <ul style="list-style-type: none"> <li>- Articulating and living the values that are consistent with the values and give meaning to work</li> </ul>
<b>ORGANIZE</b> <ul style="list-style-type: none"> <li>- Creating an organizational structure and set of jobs for accomplishing plan requirements</li> <li>- Assemble required team</li> <li>- Communicating plan, delegating responsibility and devising systems to monitor implementation to those involved</li> </ul>	<b>ALIGNMENT</b> <ul style="list-style-type: none"> <li>- Ensuring a significant group of people believe in the vision and understand its roots</li> <li>- Creates and empowers coalitions committed to vision</li> </ul>	<b>DIRECTION</b> <ul style="list-style-type: none"> <li>- Providing clear, specific, and compelling goals that bring clarity to the vision</li> <li>- Establishing the boundaries for action</li> </ul>
<b>CONTROL</b> <ul style="list-style-type: none"> <li>- Monitoring results and reports to ensure consistency with the goals</li> <li>- Identifying deviations from the plan and organizing to solve problems in a timely way</li> </ul>	<b>MOTIVATION</b> <ul style="list-style-type: none"> <li>- Appealing to the basic but often untapped human needs, values, and emotions</li> <li>- Stirring a sense of belonging and self-esteem in the fulfillment of the vision</li> <li>- Keeping people moving in the right direction, despite obstacles to change</li> </ul>	<b>INVOLVEMENT</b> <ul style="list-style-type: none"> <li>- Ensuring people have an opportunity to put their own energy and initiative into bringing the vision to life</li> </ul>

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# The Matrix Revisited



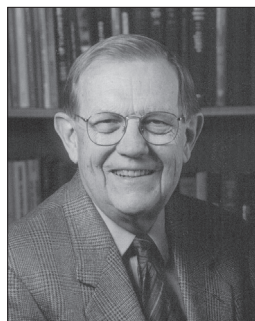
Brendan Calder

Brendan Calder led us through a spirited exercise utilizing his famous Responsibility Matrix. (4) This management tool identifies for each management decision: 1. who is **Responsible** for getting it done; 2. whose **Consensus** is required; 3. whose **Input** is required; 4. who does the **Work**; 5. who must be **Advised Before**; and 6. who must

be **Advised Later**. Bryce Taylor replaced the surgical exercise planned for Brendan's analysis with the group by introducing the news – fresh that day – of the H1N1 influenza epidemic. Participants had fun struggling with this exercise; it clearly demonstrated how failure to assign and articulate individual responsibility when a decision is made can delay and/or prevent its implementation. Here are some key recommendations that are not typical of our decisional policymaking processes: “assign only one R”; “minimize the number of Cs”; “define consensus clearly – consensus means parties may still like their own differing opinions but are **willing to commit to and support the proposed decision**”.

Miles Shore, Professor of Psychiatry at Harvard Medical School and an affiliate of the Centre for Public Leadership, Kennedy School of Government at Harvard, developed the theme of **senior leadership teams** to augment, intensify, or supplement the impact of the thoughtful individual leader. He cited the work of the Hay

group, with Richard Hackman of Harvard (5), which reports a study of senior teams in a variety of industries. Senior leadership teams can be **informational**, like the Alcoa team that met every Monday morning on a world-wide conference call to inform the CEO, **consultative** – advising the CEO on strategy and management, **coordinating** – integrating and aligning different divisions within the organization, or **decision-making**. Decision-



Miles Shore

making teams can do all four of the functions and may be extremely effective if they are properly organized and supported by top leadership. The Senior Advisory Committee of the Department of Surgery, comprised of all of the University Division Chairs and Surgeons-in-Chief is an excellent example of a decision-making team. Miles emphasized that senior leadership teams are needed during periods of rapid growth, when new areas of activity are taken on by the organization, when major capital expenditures are contemplated or when entering a new stage of the organization's life cycle.

It is critical that the senior leadership group be a real team and not a pseudo team, that is, members must have the skills and knowledge required, and the participants must know that they are members of a team – it should not include ex officio members. A well-functioning team requires stability, and consistent support by the leader of the organization. All members should come to all meetings and the team should have significant tasks. Each member of the team should add value regarding the purpose of the organization, and the team should have a compelling direction to pursue, rather than simply a schedule of pro forma meetings.

Team enablers include a structure of the right size, eight to nine people, and a focus on the whole organization rather than its contending parts. Lincoln accomplished this at a national level by changing the language describing the United States. After the Gettysburg Address, the standard usage became “the United States is,” rather than “the United States are.” Additional enablers include a supportive context with sufficient resources and logistic support, and team coaching. This should come from the team and from the CEO, including debriefing summaries of each meeting which then serve as the agenda for the next meeting. This is classic Brendan Calder “get it done” technique. (4)

To illustrate the formation of a senior team, Miles tied together the Jim Collins theme from Jim Fisher's talk on Henry V. “You need to get the right people on the bus and the wrong people off the bus.” (6) He told us that Henry V chose the right group of senior leaders to join him at Agincourt, bypassing his troublesome brother Thomas, Duke of Clarence. Thomas was their father's favourite, and had made a military alliance with elements of the French aristocracy, generating suspicion that he was trying to set up a political regime in France

in opposition to Henry. When early in Henry's reign various perquisites were bestowed, Thomas was deprived of what he had expected, and was only bought off by large amounts of money, and some lesser titles. Henry went further outside the immediate royal family to build his senior leadership team, basing appointments on merit rather than nepotism or the conventions of the noble hierarchy. He chose a relative outsider, Henry Chichele, as Archbishop of Canterbury on the basis of his legal expertise and loyalty rather than the more flamboyant but headstrong and ambitious Henry Beaufort, the expected candidate. His "senior team" of leaders in the French campaign was made up of experienced warriors, men who had succeeded in suppressing the Welsh uprising. These seasoned leaders brought with them not only expert archers and armoured men-at-arms but, more important, their own experience in war to ensure the success of Henry's campaign.

## Larry King interviews Bryce Taylor

Leadership Day closed with a spirited imitation of Larry King, including the red suspenders, by Rotman Professor of Strategy Joe D'Cruz interviewing Bryce Taylor about his ten-year term as Surgeon-in-Chief at the University Health Network. One of the first lessons that Bryce learned is that you must express your strong opinions in a committee meeting, but if the consensus opinion about a subject differs from your own, you must enthusiastically support that opinion and decision when the meeting is over.

Painfully, he had to make the cuts that go with a deficit budget during the last recession, though many felt the hospitals might have succeeded despite the submission of deficit budgets. Bryce finds cuts in budget deeply disturbing; a 2% budget cut may mean an 8 or 9% reduction in care, because in 2009, reductions in service also



Bryce Taylor

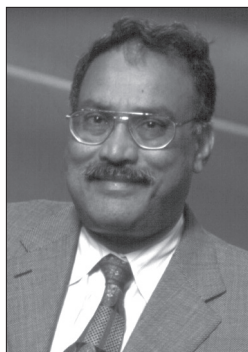
lead to reductions in revenue in a volume-funded system.

He described a good example of Jim Collins' removal of "the wrong people on the bus." (An innovative and disruptive surgeon once created a new device to use in the operating room. He proceeded to use it over the nurses' objections, and this ultimately led to a suspension of

privileges. The disrupter eventually "found a new bus").

"Being surgeon-in-chief is a tough job, but there are now eight or nine excellent candidates" – a testament to the respect, efficiency and followership Bryce has brought to the position of Surgeon-in-Chief. Bryce says, "I have the best surgical job in the country. The various clinical and academic outputs of our surgeons are phenomenal. I view my success as the success of others. I get a tremendous kick out of the success of other surgeons, like seeing Steve Gallinger's cadre of four young stars take hepatobiliary and pancreatic surgery up a level, or recruiting as our new head of plastic surgery Stephan Hofer, who actually was the star of a daily reality TV show in Holland, in addition to being an outstanding reconstructive surgeon and leader."

Larry King asked Bryce to explain how the transformation from "just a surgeon to leader" developed. "After my clinical general surgery training in Toronto, I went to England where I engaged in basic research, and then started my career at Toronto Western Hospital where I performed a wide variety of operations in general surgery. During my time at Toronto Western, I was the year 2-3 coordinator for the medical students, then became director of post-grad education for all U of T surgical residents. There were no specialty program directors at the time, so I interviewed each and every resident entering all specialties and also throughout his/her training, trying to provide the best experience possible for about 150 residents! From 1989-99 I was Chair of General Surgery for the 10 university hospitals – a position characterized by lots of responsibility but with little authority and no budget. For the past ten years I have been the Surgeon-in-Chief and Director of Surgical Services at UHN. The latter job involves a commitment to finances, quality of care, and workload



Joe D'Cruz

of everyone who works in surgery. I never really sought any job I eventually took on – I did them to learn, for a challenge, because they were interesting, and because I could see certain areas where there was a job to be done. It sure was a challenge when I was Chair of General Surgery and Division Head at UHN, we introduced the liver transplant program, we were flying all over Canada and the US to harvest organs, we always had challenges of doing more with less, and at the same time I remembered that I had a large family whose members saw too little of their Dad!

Work with independent, individualistic physicians and surgeons is always a tightrope walk. As independent practitioners, none of us likes change. As an example, the surgical checklist project, which may reduce the incidence of complications by 4%, and has numerous well-documented advantages as reported in the NEJM, (7, 8) has not been universally adopted. Despite being easy and cheap, the checklist has not yet been embraced in North America with the enthusiasm that was predicted; the challenge was laid that 4000 hospitals in the US would adopt the surgical checklist within three months of the publication of NEJM article, but to date only a small proportion of that number have implemented it. We have an opportunity at the University of Toronto to lead the continent!”

The evaluations of Leadership Day were enthusiastic. Jim Waddell wrote:

“In my previous leadership positions I was fortunate to know most of the individuals with whom I worked and was able to bring about change through personal connection. In my new position as the Lead for the Expert Panel for Orthopaedic Surgery in the Province of Ontario I am largely working with individuals throughout the province with whom I do not have a personal connection and often have little understanding of the local circumstances that influence or direct their behaviour.

I attended this leadership session because I wanted to know more about large, complex organizations, how they are run and the decision-making processes they use to set priorities. This is particularly relevant with many of the large hospital corporations responsible for delivering orthopaedic care throughout the province as well as the 14 LHINs that are expected to coordinate the actions of the respective hospitals within their borders.

This course offered valuable insights into corporate decision making and those points along the process of concept, planning and implementation where one might influence the ultimate result and augment the leadership of others.”

M.M.

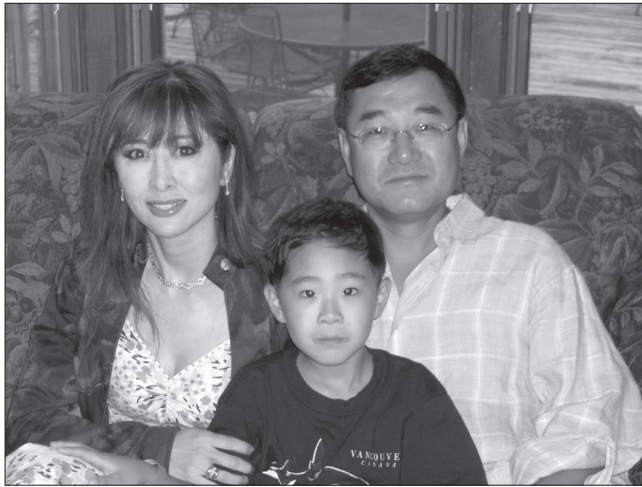
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# Airway Reconstruction and Image-Guided Innovation



Peter Kim with his wife Jennifer and son William

Peter Kim is a paediatric general and thoracic surgeon whose clinical practice includes tracheal reconstruction, airway surgery, vascular reconstruction, and minimal access operations on the lung, biliary tract and intestines. His cases in the week of this interview included surgical treatment of bronchomalacia, creation of a pelvic pouch and laparoscopic bowel and lung resections. He takes great pride in the airway reconstruction team (ART) comprised of ENT (Vito Forte, Paolo Campisi), anaesthesia (Helen Holtby), critical care (Peter Cox, Desmond Bohn), general surgery (Priscilla Chiu), pulmonary medicine (Felix Ratjen) and cardiac surgical colleagues (Glen Van Arsdell, Chris Caldarone).

Peter's research program includes a basic science program investigating molecular mechanisms in congenital malformations of the hindgut and foregut supported by CIHR. Peter's applied research emphasizes the development of new technology in collaboration with industry. He is developing catheter-based and robotic smart tools based on automated autonomy, in collaboration with MDA Corporation. He is working on imaging with Philips Research USA to develop magnetic resonance and ultrasound-based technologies for paediatric and fetal surgical application. The third component of his

applied research is in simulation, working in collaboration with L-3 Mapp of Montreal (manufacturer of simulators for NASA).

Peter is setting up an incubator for the development of advanced surgical instruments applicable to all surgical specialties with initial focus on paediatric needs. The plan is to develop sustained funding rather than the usual single cycle paradigm of grant support by creating a company in collaboration with industry partners. This program (the Center for Image-Guided Innovation and Therapeutic Intervention; [www.CIGITI.com](http://www.CIGITI.com)) has been guided by Chair Richard Reznick, Jim Wright, Surgeon-in-Chief at the Hospital for Sick Children, and Janet Rossant, head of the HSC research institute. He has active ongoing engagement of clinical team members Walid Farhat, Sharifa Himidan and Jim Drake. Peter is building process and structure by hiring Thomas Looi, an MBA engineer, and three PhD theme leaders, Edward Huang, Nikoo Saber and Harmanpreet Bassan who will catalyze interaction between surgeons and engineers. Collaboration has also been developed with Brigitte Brisson, head of veterinary surgery at the Ontario Veterinary College in Guelph; Paul Milgram, Professor of Engineering at University of Toronto; Peter Fitzgerald, who is a paediatric surgeon and President of McMaster Children's hospital; Juan Bass, head of paediatric surgery at Children's Hospital of Eastern Ontario; Geoff Blair, Surgeon-in-Chief at BC Children's hospital; Douglas Heddon, Chair of Surgery at University of Alberta; and Michael Giancoantonio, Chief of Paediatric Surgery at IWK children's hospital. The fund-raising strategy for these projects has been developed over the past two years. He currently holds over \$3.5 million in grants from the Ministry of Research and Innovation and \$5.4 million from the Canadian Foundation for Innovation for this initiative. Peter's management skills were enhanced by attendance at the Ministry of Health and Long Term Care Advanced Health Leadership Program at the Rotman School of Management, led by Professors Brian Golden and Joseph D'Cruz.

Recent accomplishments (featured in *The Toronto Star* April 30, 2009 edition) include a significant population-based health systems initiative leading the development of the fetal alert network (FAN) ([www.fetalalertnetwork.com](http://www.fetalalertnetwork.com)), to improve access to care, surveillance and education about birth defects in Ontario. This provincial



program (\$5.4 million over 5 years) in co-leadership with Greg Ryan and Rory Windrim, David Chitayat of the Mount Sinai Hospital has helped well over five thousand pregnant mothers and babies with anomalies to date, providing timely care and appropriate place while reducing wait time and cost. The FAN has become a critical building block of the overarching materno-fetal provincial strategy led by ADM Adelsteinn Brown of the MOHLTC of Ontario in transforming our health care and health care system.

Peter completed his medical training at McGill University, a PhD in immunology at the University of Toronto, and surgical training, including paediatric surgery fellowship at U of T. He completed post-doctoral studies at the University of Cambridge in molecular biology. He has mentored a number of graduate students, clinical and research fellows over the years, and takes a great pride in their success. PhD student Wei Cheng has since been appointed as department head and Chair of Paediatric Surgery at Monash University in Melbourne, Australia. Research fellow Masayuki Obatake has been appointed as Surgeon-in-Chief in Nagasaki, Japan and clinical fellow Patricio Herrera has become department head of thoracic/airway surgery in Santiago, Chile.

Peter is married to Jennifer, an attorney specializing in corporate and commercial law. Together they have a nine-year-old son William. They ski and travel together. Peter's younger brother Harry Kim is a paediatric orthopaedic surgeon, currently the head of research at the Scottish Rite Hospital in Dallas, Texas. Peter is currently reading *Chasing Daylight* by Eugene O'Kelly and Margaret Atwood's *Payback*.

M.M.

## Minimally Invasive Brain Surgery

Neurosurgery has not traditionally been considered an area of surgery which could lend itself to minimally invasive techniques. But minimally invasive brain surgery (MIBS) has evolved to include small skin incisions, bet-

ter illumination, and minimal disturbance of the normal brain tissue. The philosophy is to create as little disruption to the patient as possible – the clinical value of minimally disrupting the patient's tissues is to allow the patient to recover quickly and resume his/her normal life as soon as possible.



Kathleen Khu

Neurosurgical technique has progressed, and advances in anaesthetic techniques and medical technology, such as neuronavigation and improved optical devices, have also played a crucial role in enabling MIBS. There are also exciting advances in minimally invasive spine surgery which will revolutionize this area of surgery. Some exciting examples of MIBS being performed at the Toronto Western Hospital (TWH) are described below.

### OUTPATIENT CRANIOTOMY

In late 1996, the first awake outpatient craniotomy in the world was performed at TWH. Since then, almost 400 brain tumour patients have been operated on, on an outpatient (i.e. Day Surgery) basis, with low morbidity and high patient satisfaction.

Awake outpatient craniotomy with brain mapping has been found to be a safe and effective procedure for the surgical treatment of patients with gliomas and metastatic tumours. The patient is discharged after 6 hours post-op, assuming a CT done at 4 hours shows no problems and the patient remains well.

An important adjunct that greatly facilitates outpatient surgery is the use of image guidance for the localiza-



Mark Bernstein

tion of brain tumours. With the neuronavigation system, the location of the tumour is more easily pinpointed, minimizing disturbance to the normal surrounding brain and saving operative time. In addition, the skin incision and the bone flap are smaller and tailored to expose the lesion, lessening the patient's post-op pain and discomfort. Many patients report that going home on the same day makes them feel better overall. They recover faster at home, within a familiar environment, giving them more confidence to resume their day-to-day activities. Outpatient brain surgery is slowly catching on outside Toronto and represents a major advance in patient care and patient flow, minimising the use of shrinking inpatient resources.

### KEYHOLE APPROACHES TO ANTERIOR CIRCULATION ANEURYSMS

Aneurysms have traditionally been approached through large bone flaps. However, the actual working space for the exposure, dissection, and clipping of anterior circulation aneurysms is small, so as long as the principles of minimal brain retraction and proximal vascular control are followed, patient outcomes after aneurysmal clipping using small versus large openings are comparable.

Examples of keyhole approaches to anterior circulation aneurysms include the supraorbital and the microposterior approach. The former involves a skin incision above the eyebrow and the latter involves a small curvilinear skin incision at the temple; in both cases a dollar coin-sized craniotomy is fashioned. In both approaches, the aneurysm is dissected and clipped using the usual microsurgical techniques. Narrower instruments are needed to fit through the opening without obscuring the view.

Focused approaches such as these would have less morbidity since only the relevant structures are exposed. Smaller incisions heal faster, are aesthetically more pleasing, and promote faster recovery. Unruptured aneurysms can be operated on an outpatient basis.

### ENDOSCOPIC APPROACHES TO SKULL BASE TUMOURS

The majority of sellar tumours have been approached through the transsphenoidal route for decades, and tumour resection has traditionally been accomplished with the use of the operating microscope. Over the past few years, the endoscope has been introduced initially as an adjunct to the microscope, until pure endoscopic techniques have been developed to supplant the microscope. Expansion of the bony resection results in the endoscopic endonasal transbasal approach.

The transbasal approach still utilizes the natural corridors leading from the nasal cavity to the sellar region of the skull. These tumours are outside the brain so this approach is ideal in that it allows safe and effective tumour resection with minimal anatomic disruption of the brain.

The advantage of the endoscopic technique over the microscopic one is that the former requires no mucosal incisions, allows a wider and more magnified view of the operative field, and is able to visualize areas that are outside a microscope's line of sight. It also rarely requires nasal packing post-operatively. Overall this technique gives better visualization of the tumour and causes less patient discomfort compared to the traditional microscopic approach. The true advances involve expanding the clinical applications to remove much larger lesions such as skull base meningiomas with minimal touching of the brain.

### GAMMA KNIFE STEREOTACTIC RADIOSURGERY

Gamma Knife stereotactic radiosurgery (GKSRS) is an outpatient procedure in which a highly focused dose of radiation is delivered in a single fraction. It is in reality a radiation procedure but it was initially developed and championed almost entirely by neurosurgeons and many leaders in the field now call it "Gamma surgery". It allows the treatment of discrete lesions with high conformity using three-dimensional stereotactic imaging and the delivery of multiple radiation beams focusing on the target lesion. The beams are so precise that the surrounding normal tissue receives minimal radiation. GKSRS is used to treat a variety of conditions, such as benign tumours (mainly vestibular schwannoma), malignant tumours (mainly metastases), vascular lesions (AVM's), and functional disorders (mainly trigeminal neuralgia).



Gamma Knife

On the day of the procedure, a stereotactic frame is applied on the patient's head and screwed into place. The patient then undergoes imaging with the frame in situ. Treatment planning is done, after which the patient receives the actual treatment. Afterwards, the frame comes off and the patient can go home after one hour of observation.

Compared to the surgical alternative, GKSRS is much less invasive and provides similar success rates. It has been proven to be a safe and effective mode of treatment, especially for patients with deep-seated lesions and for elderly patients with medical co-morbidities who would have high surgical risks.

*Kathleen Khu, Clinical Fellow in Neurosurgical Oncology, Toronto Western Hospital*

*Mark Bernstein, Professor of Surgery and Neurosurgeon at Toronto Western Hospital*

## General Surgery Review Program

In April 2009 the 4th General Surgery Review Course took place with participation of 113 graduating residents from every program in the country. The objective of the Course is to prepare residents for a successful Royal College Exam on General Surgery. It is a two day program with lectures and a question and answer period oriented to the exams. Lectures are given by faculty from every program who make the effort to prepare



Residents use touch pads to participate in the 2009 General Surgery Review.

the topics and relevant questions in the most important topics. The number of participants has been increasing every year and this year I think we have over 90% of the graduating residents coming to the course. The course is sponsored by the University of Toronto and McMaster University in a joint effort. A web site has been created and residents can find all the information in this site [www.generalsurgeryreview.ca](http://www.generalsurgeryreview.ca). We are already planning next year's course based on the feedback from participating residents and the needs assessment we do every year. We will include new activities in this next course to make it even better.

*Jaime Escallon, General Surgery, Mount Sinai Hospital*

SOME COMMENTS FROM THE RESIDENTS  
ABOUT OUR 2009 GENERAL SURGERY  
REVIEW PROGRAM:

*“Well organized, concise, right to the point, excellent lecturers.”*

*“Touch pad input, case based questions, great for audience participation.”*

*“Thorough coverage of selected topics with very knowledgeable and dynamic speakers.”*

YEAR	NUMBER OF RESIDENTS WHO ATTENDED
2006	69
2007	84
2008	96
2009	113

PROVINCIAL BREAKDOWN FOR 2009  
ATTENDEES

BC	11
ALBERTA	13
MANITOBA	5
ONTARIO	38
QUEBEC	30
NS	7
NF	1
NB	1
SK	7
TOTAL	113

# LETTERS FROM OUR READERS

## GENERAL SURGERY IN PERIL? OR THE FAILURE OF OUR PROFESSIONALISM?

Dear Richard,

Your *Chair's Column: General Surgery in Peril?* (*Surgical Spotlight*, Winter 2008 – 2009) catalogues a litany of ills increasingly affecting the provision of general surgical services.

You correctly call for action to address systemic problems in the areas of training, lifestyle, workload and compensation.

Seventy percent (70%) of current trainees go on to fellowship. Many plan to subspecialize or to develop a *special interest* which will allow them to limit their scope of practice. Why so? I am convinced this is because subspecialty practice is the only mode of practice to which they are exposed in our major teaching centres. The *generalist* surgeon may be encountered during brief rural electives but certainly is not held up as a role model. Yet the generalist surgeon is admirably suited to interface with students and residents, the future of our specialty, especially in their formative years. The generalist surgeon is also well positioned to relate to community surgeons on issues of clinical care, teaching and research, thereby promoting distributed learning in a university truly without walls.

Pursuing fellowship training defers entry into independent practice which suggests to me that many trainees lack self confidence. That this should be the case after 6 years of residency might reasonably lead the taxpayer to ask *Why so?*

Climate change, geopolitical uncertainties and our current financial woes combine to make today's world a troubling, uncertain place. Every thinking Canadian must be concerned about our country's security and self sufficiency. I suspect we may see an increase in the rural population of this country as citizens increasingly seek safe surroundings, locally produced foods, combat climate change and develop environmentally sound and secure sources of energy. These citizens will require generalist surgical care.



Canadians will continue to be called upon in their roles as peacekeepers / peacemakers and in the provision of humanitarian relief. All such initiatives require the support of well and broadly trained generalist surgeons.

We Canadians can not expect to enjoy a high standard of living and the fruits of “peace, order and good government” in a pluralist, liberal democracy if much of the rest of the world has no hope of the same. Accordingly it is a matter of enlightened self interest that we extend the helping hand of friendship as part of coordinated foreign policy initiatives designed to dispel distrust and ignorance. Generalist surgeons are essential to such initiatives.



William Fitzgerald

Lifestyle, workload and compensation are intimately interrelated. The Canadian Association of General Surgeons' Practice Guidelines suggest a 1 in 5 call schedule is supportable. Such demands would be seen as excessive to many academics yet an unattainable dream to many community surgeons. Feminization (I prefer to think *humanization*) of the profession and retirement of the Boomer generation combine to force us to develop imaginative ways to collaborate in the provision of care without compromising quality of care.

Positive, proactive colleagues working together and enthusiastically celebrating their collective successes in improving the health of Canadians are far more likely to attract students to the discipline than impotent whinging complainers in staff lounges railing against politicians and bureaucrats while bemoaning the passage of *the good old days*.

General Surgeons are the engines that drive community and rural hospitals. Though often overshadowed by more glamorous subspecialty services in larger teaching institutions no subspecialty can function without general surgical backup.

Through the *social contract* society invests heavily in health care, including the training and remuneration of general surgeons. This contract accords surgeons self governing professional status and the exclusive right to practice the art and science of surgery. If as a profession we are unable to provide in a timely manner the services society has a right to reasonably expect then we have failed in our professional obligations under this contract.

As a proud graduate of the University of Toronto's Gallie Surgical Training Program I believe I can in this forum assert, without fear of contradiction, that I consider myself an alumnus of the finest training programme in the country!

That being the case I call upon you as Professor and Chairman of the country's premiere Surgical Department to lead the way in tackling the important issues you raise and to consider the following suggestions:

- Establish a division of *generalist* general surgery intended to legitimize those who are broadly trained in all aspects of general surgery as currently understood. This service should be mandated to adopt a proactive *CAN DO* philosophy. *General* surgical care certainly requires subspecialty back up but can never be replaced by the same. Practitioners on the unit would be prepared to deal with abdominal emergencies of every variety, trauma, surgical infection and participate in the Surgical ICU. In multiple trauma and other complex cases trainees should have the opportunity to collaborate with consultants in other disciplines (neuro, ortho, plastics, thoracic, vascular etc.) in case management. Opportunities equally should exist for formal rotations on services such as the above. Elective cases representing the spectrum of general surgery should form the foundation of such a service. Continuity of care should be central to its organization.
- As appropriate *encourage* colleagues to participate in general call such that skills, judgement and confidence do not diminish with time.
- Foster mentoring relationships intended to accompany the trainee into practice.
- Develop imaginative, equitable, alternate funding plans that recognize case volume, clinical teaching and research, length of service, continuity of care and include provision for sabbatical leave.
- Seek to increase exposure of residents in senior years to the challenges and rewards of community, rural and remote practice.

- Explore with The Canadian Association of General Surgeons, The Royal College of Physicians and Surgeons of Canada and the College of Family Practice of Canada a surgical training programme designed specifically for Family Physicians. Support the practice of graduates of such a programme.
- Explore with other stakeholders (Gov't., CPSO, CAGS, RCPSC) a competency based training & assessment programme for IMGs.
- Actively promote collaborative outreach projects with rotations of staff and residents in developing countries.

*General surgeons, broadly educated and capable...*  
are exactly what the public deserve and have every right to expect. Anything less is the result of the failure of our professionalism.

Respectfully submitted,  
G. William N. Fitzgerald, CM, MD, FRCSC  
General Surgeon

*The writer is President of the Royal College of Physicians and Surgeons of Canada.*



## GENERAL SURGERY IS A SPECIALTY

Dr. Reznick,

I read with interest your thoughts in the most recent issue of the surgical spotlight. I think you made some very salient points.

I always felt that general surgery really was a subspecialty. During residency I often used the line "Don't be fooled by the word general, general surgeons are specialists too". An individual who doesn't do multiple fellowships should be considered a master of surgery of the alimentary tract at minimum.

Another massive advantage of being a general surgeon is Volume. There is a staggering amount of general surgery that a community requires. No hospital larger than a cottage could survive without at least one general surgeon.

There are likely to be quite a few general surgeons in a hospital... That means call, although busy, should be less frequent. In addition, if things are insanely busy, arrangements can be made so an individual is ON CALL ONLY (no clinic no OR). Over the last year that is exactly what the general surgeons at Sunnybrook have done. It's called the access team and so far it's been working pretty well. Staff surgeons get a chance to clear the schedules and concentrate their call, which helps to manage their practice and their lives.

I liked your scenario with the bleeding ulcer patient with 5 general surgeons either away or uncomfortable with the procedure. That will never go away completely (and to perhaps to a lesser degree has been with us for a long time) but there are creative solutions to enhance lifestyle while maintaining income. Hopefully we can demonstrate some of these strategies to our residents and medical students.

Andrew Dueck  
Assistant Professor, University of Toronto  
Division of Cardiac and Vascular Surgery  
Sunnybrook Health Sciences Centre

## NEW STAFF

### MUSIC, FENCING AND SURGICAL SKILLS

**Ranil Sonnadara** joined the University of Toronto Surgical Skills Centre as a Research Scientist in September 2008. Originally from England, Ranil brings a diverse and atypical skill set to the Department of Surgery. In his 'first career', he was a sound designer and composer for theatre and film. Ranil won several awards for his work which spanned 10 years, 4 continents, and included residencies at the Royal National Theatre and West Yorkshire Playhouse, two of England's "flagship" theatres, and several forays to Toronto, Sydney and New York. Ranil is also a highly successful fencing coach; several of his students have been selected for University, National, World Championship and Olympic Teams both in the UK and in Canada. A recognised expert in coaching development, Ranil has been an integral member of the team responsible for moving coaching and referee development models for fencing in Canada from time-based curriculae to a proficiency-based model of evaluation and training. Ranil is also an occasional consultant for Sport Canada, and is a member of the Board of Directors for the Coaching Association of Canada and the Ontario Fencing Association.



Ranil Sonnadara

Ranil has masters degrees in Music and Physiology from the University of Leeds, where he researched factors which have an impact on skill performance, and a doctoral degree in Experimental Psychology from McMaster University. His thesis work sought to untangle the effects of listening to sounds and music on brain development, specifically looking at changes which occur in the brain as a function of experience. Following his doctoral work, Ranil completed a postdoctoral fellowship in "Motor learning and expert performance" with Drs. Tim Lee and Digby Elliott, extending his masters and doctoral research to look at motor learning and performance in athletes and musicians. Ranil's research has won awards from the Canadian Institutes of Health Research, the International Conference on Music Perception and Cognition, and the Society for Psychophysiological Research, and has been published in a wide variety of high impact factor journals including *Brain Research*, *Perception and Psychophysics*, *Neuroreport* and *Signal Processing*.

Ranil's most recent research extends his previous work on skill acquisition, performance and evaluation in athletes to health professionals. Current projects include studying how underlying information processing pathways between the different systems which underpin surgical performance can be optimized as a function of training and deliberate practice, cognitive factors which impact performance, and studying how performance can more reliably be evaluated and predicted.

## The Way We Work

**Surgeon** c. 1300, from Anglo-Fr. *surgien*, from L. *chirurgia*, from Gk. *kheirourgios* “working or done by hand.” from Online Etymology Dictionary.



Martin McKneally

In an entertaining new book published this month (*Shop Class as Soulcraft: An Inquiry Into the Value of Work*, Penguin Press, 2009) motorcycle mechanic and political philosopher Matthew Crawford explains the elemental satisfaction derived from working with our hands. He contrasts the experience of individual agency he derives from repair-

ing motorcycles with the diffuse and unfocused rewards of his life as a doctoral level “knowledge worker”. The dominant educational paradigm of recent decades trains students to sit for 17 years in class and before their computers to graduate into their cubicles. Crawford writes, “As I was shown to my cubicle, I felt a real sense of being honoured. It seemed more than spacious enough. It was my desk where I would think my thoughts, my unique contribution to a common enterprise in a real company with hundreds of employees. The regularity of the cubicles made me feel I had found a place in the order of things. I was to be a knowledge worker.”

Though high school shop class programs had been widely dismantled over the past several decades, Crawford found part time work in an apprentice role as an auto mechanic and an electrician. He came to an epiphany when he realized that his doctoral level of knowledge work was being used to reverse engineer foregone conclusions and claims to contrived premises in commercial companies and government agencies. He began to teach himself the deeply thoughtful and remarkably satisfying art of motorcycle repair. He came to prize the elemental difference as each repair job had consequences that were close, unmediated, and associated with direct and honest confrontation with customer-owners whose satisfaction and gratitude gave him a deep sense of personal significance. He enriched his knowledge and skill by entering a network of motorcycle antiquarians who understood the

nuanced metallurgy and manufacturing idiosyncracies of particular models and years. He came to understand the difference between the structured role-based systematic knowledge imparted in factory service manuals and the perversity and risks of working on old machines. “So you put the manual away and consider the facts before you. You do this because ultimately you are responsible to the motorcycle and its owner, not to some procedure. The gap between theory and practice stretches out in front of you .... What you need now is the kind of judgement that arises only from experience; hunches rather than rules. For me, at least, there is more real thinking going on in the bike shop than there was in the think tank.”

Surgeons and other practitioners of the manual arts will enjoy this thoughtful book available at amazon.ca at \$20.48. It offers pleasant summer reading and may inspire educators to revise their curricula toward more emphasis on the value of working with material reality as grounding for knowledge workers. The abstract and relatively unaccountable work of many fund managers and corporate officers in the financial world is only one of many high-risk placements of knowledge workers. Politicians, generals and CEOs who are insulated from the consequences and personal accounting of their work should be grounded in their early education with the experience of failure. Basic lessons are learned when we work in the concrete material reality of making and planting things. “The visceral experience of failure seems to have been edited out of the career trajectories of gifted students. It stands to reason then, that those who end up making big decisions that affect all of us don’t seem to have much sense of their own fallibility and of how badly things can go wrong, even with the best intentions ... Those who sit on the swivel chairs tend to live remote from the consequences of the decisions they make. Why not encourage gifted students to learn a trade, if only in the summers, so that their fingers will be crushed once or twice before they go on to run the country.” Like our surgeon-scholars, Crawford personifies a refutation of the misconception that handworkers are self-selected because of their inability to do knowledge work. He is a fellow at the Institute for Advanced Studies in Culture at the University of Virginia.

As our medical curriculum undergoes its latest revision, we should encourage medical students and practitioners to enjoy and learn from the visceral experience of



delivering a baby, suturing a wound, casting a fracture. "There is good reason to suppose that responsibility has to be installed in the foundation of your mental equipment at the level of perception and habit. There is an ethic of paying attention that develops ... through hard experience. It inflects your perception of the world and your habitual responses to it. This is due to the immediate feedback you get from material objects and to the fact that work is typically situated in face-to-face interactions." I wish you all a happy summer, tending your garden or repairing your dock.

*Martin McKneally*

## HONOURS/ AWARDS/ ACCOMPLISHMENTS

Please join me in congratulating the following individuals who have been promoted this academic year. The University of Toronto holds a high standard with regards to academic promotion and so these promotions are a product of a lot of hard work and extreme dedication.

I would also like to take this opportunity to thank the Promotions Committee consisting of: Chris Feindel, Christopher Forrest, Gail Darling, Mark Cattral, Michael Schwartz, Mike Wiley, Neil Fleshner, Paul Greig, and Sid Radomski. I would also like to thank Sylvia Perry without whom we could not have achieved the successes we realized and Harriet Capalla who was instrumental in preparing the documentation for the Promotions Committee's deliberations.

And with enormous respect and appreciation I would like to express our entire Department's indebtedness to Robin Richards, the Chair of the Promotions Committee and the central figure in the process for our department. Robin's work has been indefatigable on this issue and his personal attention to detail has aided in each and every promotion package. We all owe him a sincere debt of gratitude.

All my best,  
Richard Reznick

### FULL PROFESSOR

**Christopher Caldarone** (Division of Cardiac Surgery, Hospital for Sick Children)

**Gail Darling** (Division of Thoracic Surgery, University Health Network)

**Peter Dirks** (Division of Neurosurgery, Hospital for Sick Children)

**Andras Kapus** (Research, St. Michael's Hospital)

**Peter Kim** (Division of General Surgery, Hospital for Sick Children)

**Ronald Levine** (Division of Plastic Surgery, St. Joseph's Health Centre)

**James Mahoney** (Division of Plastic Surgery, St. Michael's Hospital)

**Sydney Radomski** (Division of Urology, University Health Network)

**Carol Swallow** (Division of General Surgery, Mount Sinai Hospital)

**Douglas Wooster** (Division of Vascular Surgery, University Health Network)

### ASSOCIATE PROFESSOR

**Gideon Cohen** (Division of Cardiac Surgery, Sunnybrook Health Sciences Centre)

**Marc De Perrot** (Division of Thoracic Surgery, University Health Network)

**Annie Fecteau** (Division of General Surgery, Hospital for Sick Children)

**Ted Gerstle** (Division of General Surgery, Hospital for Sick Children)

**Raja Rampersaud** (Division of Orthopaedic Surgery, University Health Network)

**Paul Wales** (Division of General Surgery, Hospital for Sick Children)

**Frances Wright** (Division of General Surgery, Sunnybrook Health Sciences Centre)

**Robert C. Cartotto** (PlasSurg) won the 2009 Arnis Freiberg Faculty Teaching Excellence Award, Division of Plastic Surgery, University of Toronto.

**Howard M. Clarke** (PlasSurg) has been elected President of the American Society for Peripheral Nerve (ASPN) for a one-year term which will end with the annual meeting of the society in 2010. Howard is internationally recognized for his expertise on obstetrical brachial plexus palsy and paediatric nerve surgery.

**Karen Cross** (PlasSurg) won the 2009 John Edward De Toro Award, Division of Plastic Surgery, University of Toronto.

**Kristen Davidge** (PlasSurg) won the 2009 Best Basic Science Award, Division of Plastic Surgery, University of Toronto.

**Karen Davis** (Research) has been elected to the Johns Hopkins Society of Scholars. This distinguished honour is awarded to individuals who trained at Johns Hopkins and “thereafter gained marked distinction elsewhere in their fields of physical, biological, medical, social or engineering sciences or in the humanities” at their home Institutions.

**Lee Errett** (CardSurg) is the recipient of a 2009 Award for Excellence in Postgraduate Medical Education in the category of Development/Innovation.

**Michael Fehlings** (NeurSurg) has been re-appointed as chairman of the editorial board of the *Journal of Neurosurgery Spine*. Michael has also been appointed the Canadian Medical Association Representative of the Canadian Spine Society.

**Michael** and his colleagues received the Outstanding Outcomes Research Award at the recent 2009 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves meeting in Phoenix, AZ for their paper entitled “Key predictors of outcomes in patients undergoing surgical treatment for cervical spondylotic myelopathy: Analysis of a prospective multicenter study in 285 patients with 1-year follow-up”.

**Michael** has also received the 2009 Olivecrona Award for his important contributions in spinal cord injury research. Given by the Karolinska Institute in Stockholm, this award acknowledges an outstanding neurosurgeon/neuroscientist who has contributed with excellence to the neurosurgical field, based on development of micro-neurosurgical techniques, pedagogical skills or scientific contributions.

**Greg Hawryluk** (NeurSurg) was appointed to the Brain Trauma Foundation’s “Algorithm for the Management of Post-Traumatic Intracranial Hypertension” committee.

**Sevan Hopyan** (OrthSurg) is the recipient of the 2009 Angela S.M. Kuo Young Investigator Memorial Award, given by the Pediatric Orthopaedic Society of North America (POSNA). This award is presented to an outstanding young researcher to help promote a long-term research career.

**Michael Jewett** (UrolSurg) has been granted honorary membership by the Board of the American Urological Association for “diligence and commitment surpassing their greatest expectations” and for “participation in initial anatomy and surgery for nerve sparing RPLND and for leadership in the management of small renal masses”.

**Betty Kim** (NeurSurg) received the Brain Star Award from the CIHR/Institute of Neuroscience, Mental Health and Addiction, February, 2009.

**Betty** has also been awarded the 2009 Canadian Research Award for Specialty Residents from the Royal College of Physicians and Surgeons of Canada/CSCI and PAIRO, for her manuscript entitled “Biodegradable quantum dot nanocomposites enable live cell labeling and imaging of cytoplasmic targets.”

**Loch Macdonald** (NeurSurg) has been appointed to the editorial board of the *Journal of Neurosurgery*.

**James L. Mahoney** (PlasSurg) has received the 2009 William K. Lindsay Faculty Research Mentor Award, Division of Plastic Surgery, University of Toronto.

**Mary-Helen Mahoney** (PlasSurg) received the 2009 Best Clinical Paper Award, Division of Plastic Surgery, University of Toronto.

**Jim Rutka** (NeurSurg) was appointed Director at Large for the Canadian Cancer Society effective August 2009.

**Micheal Taylor** (NeurSurg) has been named to Canada’s Top 40 under 40 list for 2009, the prestigious national program founded and managed by the Caldwell Partners to celebrate leaders of today and tomorrow and to honour Canadians below the age of 40 who have achieved a significant level of success.

**Michael** has also been appointed as an associate investigator at The Centre for Applied Genomics at The Hospital for Sick Children.

**Chris Wallace** (NeurSurg) is the recipient of a 2009 Award for Excellence in Postgraduate Medical Education in the category of Teaching Performance Mentorship/Advocacy.

**Karen Wong** (PlasSurg) was cited for excellence in research presentation by the Division of Plastic Surgery, University of Toronto.

**Vanessa Wong** (PlasSurg) was cited for excellence in research presentation by the Division of Plastic Surgery, University of Toronto

## GRANTS/ FELLOWSHIPS

**David Cadotte** (NeurSurg) has been selected by the Congress of Neurological Surgeons Fellowships Committee to receive the 2009-2010 CNS/Synthes Spine Fellowship.

**David** has also received a two-year Ontario Neurotrauma Foundation (ONF) for Graduate Studentship and Post-doctoral Fellowship Award in Spinal Cord Injury Research. This award is for his research project entitled “Functional magnetic resonance imaging evaluation of the injured human spinal cord: an assessment of recovery and functional plasticity”.

**Peter Dirks, James Rutka** and **Michael Taylor** (NeurSurg) are the recipients of a \$1 million research grant from the Pediatric Brain Tumor Foundation Grant. Their proposal is entitled “The role of isochromosome 17q in pediatric medulloblastoma”.

**Peter Dirks** (NeurSurg) has been awarded a Canadian Cancer Research Society grant for his work on “Defining cancer stem cell and clonal heterogeneity in mouse brain tumours”.

**Michael Fehlings** (NeurSurg) and **Albert Yee** (OrthSurg) have had the SpineLINK project selected and approved by the Sunnybrook and UHN AFP grants panel.

**Michael Fehlings** (NeurSurg) has been awarded a 3-year operating grant from CIHR for his project “Psychometric testing of a new scale measuring medical outcomes of dysphagia (MOD) in adult patients with swallowing disorders secondary to stroke, cervical spine abnormalities and head and neck cancer”.

**Ab Guha** (NeurSurg) received one year of bridge funding from CIHR for his work on “Glioblastoma Multiforme Biomarkers”.

**Clement Hamani** (NeurSurg) received a Young Investigator Award/grant from NARSAD - National Alliance for Research on Schizophrenia and Depression for his project on “Deep Brain Stimulation in an Animal Model of Depression”.

**Andres Lozano** (NeurSurg) received a grant from the Dystonia Medical Research Foundation for his work entitled “Effects of internal globus pallidus deep brain stimulation for dystonia on cortical circuits and plasticity”.

**Demitre Serletis** (NeurSurg) received a research fellowship from the American Academy of Neurological Surgery/Neurosurgery Research and Education Foundation.

**Subodh Verma** (CardSurg) was recently awarded the following grants at the Fall 2008 national competitions:

- a) Role of the tumor suppressor gene BRCA1 in adverse cardiac remodelling (Heart and Stroke Foundation of Canada and Canadian Institutes of Health Research)
- b) Elucidating the in vivo role of adiponectin in inflammation: a biochemical and pharmacological approach (Heart and Stroke Foundation of Canada)
- c) Neuregulin-1 as a novel treatment for endothelial dysfunction and atherosclerosis (Heart and Stroke Foundation of Canada)

**Subodh** and Milan Gupta have recently established The Canadian Cardiovascular Research Network (CCRN), a not-for-profit academic research organization that aims to foster basic, translational, clinical and population level research efforts and generate new knowledge to improve cardiovascular care in Canada. CCRN has been awarded 3.8 million from AstraZeneca to run an Investigator-initiated study entitled PARADIGM aimed at evaluating atherosclerosis risk stratification in primary care.

The deadline for the Summer 2009 Surgery Newsletter is July 15, 2009.  
All members of the Department are invited to submit news items, articles,  
pictures, ideas or announcements. You may reach us by:

***voice mail: 416-946-8084, fax: 416-978-1911 or  
e-mail: [julie.roorda@utoronto.ca](mailto:julie.roorda@utoronto.ca).***

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

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