

The Surgical Spotlight

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

EVENTS AND STORIES FROM FALL 2012



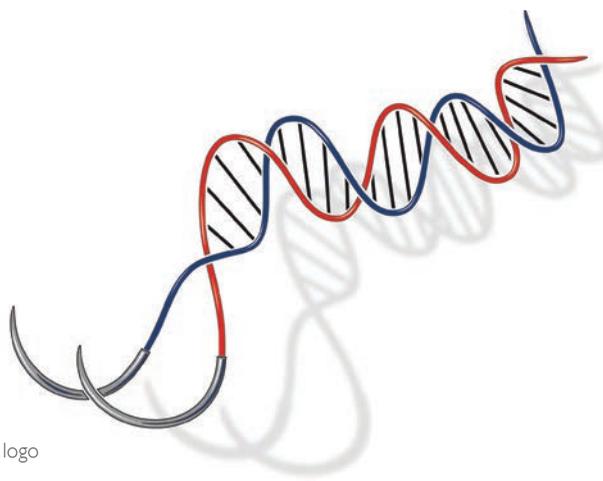
The Department of Surgery A new image



James Rutka

As part of our Strategic Plan for the Department of Surgery, I was strongly encouraged by Dean Catharine Whiteside to begin branding the Department in ways which would enhance our visibility on the global stage, increase our ranking on the continent, and promote our ability for advancement across all of our Divisions. In the process, I have learned that creating and promoting a brand does not simply occur overnight. It takes a concerted effort, and the passage of time, while attending to our core values before this is accomplished.

One of the elements of initiating a new academic brand is the creation of an image or logo which embodies the vision and mission of the Department. When I took office in April 2011, I began to work on a new image for the Department of Surgery. Most companies and organizations have logos, but few have been able to convert those logos into meaningful symbols. This is because most companies are not good at communicating what they believe⁽¹⁾. Fortunately, I could draw upon previous times when I fashioned logos to promote the organizations with which I was working. These included the Division of Neurosurgery in the Department of Surgery, the Arthur and Sonia Labatt Brain Tumour Research Centre, and the World Academy of Neurological Surgery, to name a few.



Surgery Department logo

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I have been aided in the process by famed medical illustrator Ian Suk, a graduate of the University of Toronto's Biomedical Communications in 1993, who is now the chief medical illustrator in the Department of Neurosurgery at Johns Hopkins University. In my opinion Ian is the most talented and acclaimed medical illustrator in the world, and his works have adorned the covers of numerous neurosurgical and medical journals over the past 2 decades.

In creating a new image for the Department of Surgery, I wanted to draw on our core values which are: 1) Surgery in all of its facets including technical innovation, and education; and 2) Science, given our rich history of accomplishments amongst our faculty, and the emphasis we have traditionally placed on our surgeon scientist training program, which dates back to Dr William Gallie's tenure as Chairman. Accordingly, it is my strong hope that we have achieved this with the new image that has been created with Ian Suk's help.

In the image depicted below, you will see two suture needles that are slightly offset, one to the other, in space. This idea came to me when I was glancing at suture packages, and in particular, vascular suture materials in which two suture needles are often connected by one suture thread. Even in this age of advanced surgical techniques and minimally invasive surgery, virtually all surgical specialties are still using suture needles and sutures. And so, the suture needles represent our emphasis and focus on the art and practice of surgery. In this new image, the suture threads are actually represented by a double helix of double stranded deoxyribonucleic acid (DNA) with appropriate nucleotide base pair cross - linking strands. The DNA represents our focus on surgical science and includes our research work from the molecule to man to community, in all of its forms.

As we created the logo in its final form, it did not escape my notice that the colours of the DNA strands we selected, red and blue, were connected by cross linking bands that were white, making the logo highly reminiscent of the colours of the archetypal "barber pole" from antiquity where blue represented the veins, red represented the arteries, and white was the background that accentuated the spiral of the red and blue stripes.

The story of our new image is one that I hope will resonate particularly well with all Divisions in the Department of Surgery. In the near future, you will see this image adorning our website, newsletters, letterhead,

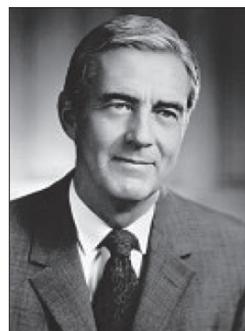
periodicals, PowerPoint slide templates, awards, and certificates. If any of you need a high resolution copy of this new image in the Department of Surgery, please do not hesitate to contact me.

James T Rutka, MD, PhD
RS McLaughlin Professor and Chair

¹ Sinek S, Start with Why. Penguin Group Publisher. Toronto, Canada, page 161, 2009

Metacognition, Error Management and Intellectual Humility

THE 2012 BILL BIGELOW LECTURE



Wilfred G Bigelow

Cardiac Surgery Chair Chris Caldarone described Thoralf Sundt as a summa cum laude graduate of Princeton, in the same class as Jim Rutka. Thor finished medical school at Johns Hopkins and surgical residency at the Massachusetts General Hospital. He completed cardiothoracic training at Washington University in St. Louis and Harefield Hospital in England.

Thor drew attention to the Bigelow family of surgeons who practiced in Boston and quoted generously from Bill Bigelow's book Cold Hearts. He emphasized Bill's interest in the relationship of the mind and body to the practice of medicine, as well of the importance of teaching "the limits of what we know", a touching reference to the intellectual humility of this brilliant surgeon.

Thor presented a difficult case- a 40 year old father of two children who had undergone prior radiation for Hodgkin's disease. Following coronary bypass and mitral valve reconstruction, he returned with endocarditis. His second operation required a Cabral aortic root replacement with reimplantation of the coronary arteries. The



Thoralf M. Sundt

patient developed right ventricular failure and eventually died, despite mechanical support with a right ventricular assist device. At post-mortem examination, the right coronary graft was kinked, so no amount of right ventricular assist would solve the problem.

The axiom “check the right coronary artery if the right ventricle is failing” is now the answer to a standard board examination question, but it was completely overlooked during this tragic case. The case inspired Thor’s interest in metacognition – the study of cognition as typified by Daniel Kahneman, Nobel laureate in economics. His book “Thinking Fast and Slow” is a current New York Times best seller. Surgeons are decision –makers and they rely heavily on fast thinking. It is important for management of complex problems to also include slow thinking . This has been well illustrated in previous rounds and publications by our colleague Carol- Anne Moulton¹.

“Surgeons rely on heuristics (rules of thumb and shortcuts to conclusions) and their decisions are influenced by biases. Important components of surgical thinking are pattern recognition, availability and recency bias, hedonic impact (acceptability), selective attention, fixation (for example on the right ventricle instead of the right coronary) and intuitive decision making (the fast track).” Thor drew our attention to “How We Know What Isn’t So?” by Thomas Gilovich. He told an interesting anecdote about his son’s refusal to accept Gilovich’s disproving the notion of “the hot hand” in basketball. His son was a college basketball player, and like most athletes and sports fans, he still believes in the mythology of the “hot hand”.

“In general, we find the unexpected to be unpleasant; the amygdala reacts because it does not like the unexpected. Francis Bacon and Bill Bigelow knew well the problem of confirmation bias. We reject disconfirmatory evidence, even after we have seen convincing evidence against our perceptually biased view.”

Thor emphasized the importance of team work in the management of errors. He quoted Denis Cortese, the former CEO of the Mayo Clinic. “When doctors work together before graduation, their collaboration is called cheating, when they work together after, it is called collaboration.” This is a problematical approach to teaching team work. Complexity leads to errors and errors can be managed in three general ways: 1. Avoid them, 2. Trap them and 3. Mitigate them. High reliability organizations manage error by stepping back, trapping the error and then mitigating it. Thor recommends “mindful engagement- not checklists”. He recognized that he was speaking in a “checklist monastery”, but stated nonetheless that he feels mindful engagement is even better, i.e. asking each team member to say what they think and what they worry about during the team huddle - to speak before the crisis, not simply listen to a recitation of the checklist. Thor conducted a briefing study on mindful engagement. He found that it cut the time that the circulating nurse is out of the operating room in half, and cut errors in half.

He quoted Tony Dungie, All-American football player at the University of Minnesota and Super Bowl winning coach of the Indiana Colts: “I don’t know anyone who performs better if you yell at them”. This approach worked well in Dungie’s practice, though it goes against the style of Vince Lombardi, John Madden and other more punitive coaches.

Thor presented a second case, a Christmas day cardiac transplant on a patient with a left ventricular assist

Surgical Leadership

- Use all the tools at your disposal to achieve a successful outcome
- That includes the functioning of the team
- Leader's job is to optimize performance of The Team
- Skills to optimize human performance become critical

“I don't know anyone who performs better if you yell at them”



device. The perfusionist knew in advance that there would be problems, but did not speak up. The transplant resulted in air embolization, causing fatal cerebral damage. Like the perfusionist, most people won't speak up, even when they know that there is a problem- even if they themselves may be harmed (see Marv Tile's comment below).

Non-Technical Skills for surgeons like communication and leadership are evaluated in 360 degree assessments at Massachusetts General Hospital. Thor showed his own 360 assessment, including less flattering comments made by his colleagues under the headings of "start to do the following" and "stop doing these things."

Thor closed on a gracious note, reminding us that "we all want to be like Bill Bigelow, imitating his humility, his open-mindedness, and his kindness and consideration".

In the discussion period, Bernie Goldman told the story about Bigelow's humility in the laboratory. "We were fixed on the outcome and didn't realize that we had not found hibernin - the imaginary hormone that allows the groundhog to hibernate. It was only when outside people- the organic chemists - looked at our work that we finally found our isolated magic molecule was a solvent eluted from for the plastic tubing used in our separation process. We had a fixed focus." The importance of asking others was a recurring theme in the lecture. Bigelow published this embarrassing lesson in a famous article in the journal *Surgery*.

Chris Caldarone commented on the data showing that interns sign out with a slow, extremely detailed process that would take pages to record. Intermediate staff use paragraphs, and senior staff use extremely short words or facts. "We only mention out of pattern patients: 'Watch this guy, the rest are OK'". Kahneman points out that fast thinking like that can be quite problematic. Novices think algorithmically and therefore slowly. Experts think fast, but they have more risk of confirmation bias. Outsiders pause and ask: "Are we ready?" at single points of vulnerability. At those points, the team should go to a low energy, cautious state, similar to Carol-Anne Moulton's work on slowing down in crises.

Avery Nathens asked about how teamwork should be taught. Thor feels that it is probably best done through role modeling. He has tried crew resource management, using a day spent with representatives of the airline industry. "These lessons don't last." He is trying to transform a whole department, but has not yet found the ideal technique.

Marv Tile recommended the book "Surgeons, Pilots and Astronauts" and told the story of the navigator who, though he knew the plane was running out of gas, did not speak up against the authority gradient, so that he would not offend the pilot and first officer. Andrew Dueck said work hour limitations, the assignment of an acute care service, nurse changeovers in the operating room and 12 hour cases are causes of handover errors that we can't control. Thor answered that "continuity was our remedy in the old days - no time off, endless hours on call." This has drawn attention to better sign-offs and importance of mindful engagement. To bring each new participant up to speed, the airlines use an action plan called "creating a team and maintaining a team". It requires a thorough briefing, not just "I am covering lunch".

David Latter asked about the larger team, the physiotherapists and others who are not usually considered part of the surgical cockpit crew.

"To address this, Bruce Keogh in the UK has dropped reporting outcome by surgeon and reports instead the outcome by surgical team. Anecdotally, Members of Parliament were shocked to learn from that study that half the surgeons were below average, unlike in Lake Wobegon, the apocryphal Minnesota community, 'where all the women are strong, all the men are good-looking, and all the children are above average'."

M.M.

¹. 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.

NEW RESIDENTS IN SURGERY



Ron Levine

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 will be the best taught ever.

Canadian Medical School graduates. Two 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. One is a visa trainee, who will return home following training. What a great gift this diverse group of bright young minds brings to our department. Welcome new residents!

Ronald H. Levine
Director, Postgraduate Surgical Education

Forty-three new residents have entered the department. Forty have come through the CaRMS match and are



Christopher Ahuja - NS



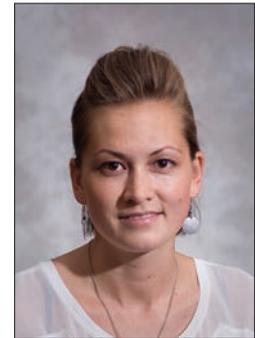
Naif Mitla Alotaibi - NS



Jason Booy - GS



David Burns - OS



Andrea Chan - OS



Eric Crawford - OS



Dhiraj Dhanjani - US



Andras Fecso - GS



Erin Gordey - OS



Daipayan (Deep) Guha - NS



Mohammad Hajjha - US



Victoria Hayward - PS



Nikki Hoffman - GS



Rayisa Hontscharuk - PS



Mohamad Hussain - VS



Ricky Jreaz - GS



James Jung - GS



Daniel Kagedan - GS



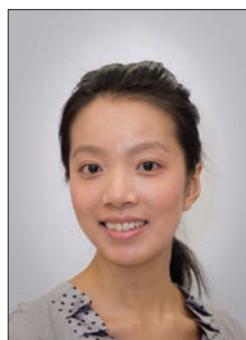
Hafiz Kassam - OS



Ryan Katchky - OS



Sabrina Kolker - OS



Shuyin Liang - GS



Stephanie Mason - GS



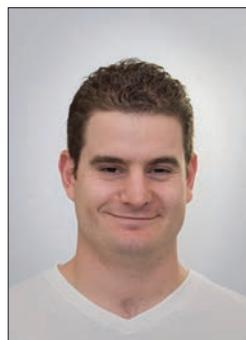
Matthew Murphy - PS



Madhur Nayan - US



Joshua Ng - GS



Dale Podolsky - PS



Rafael Gonzalez Pupo - VS



Adarsh Rao - OS



Stephanie Ramkumar - GS



David Berger-Richardson - GS



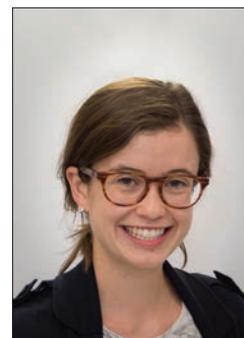
James Rofaiel - OS



Trisha Roy - VS



Ujash Sheth - OS



Courtney Spelliscy - US



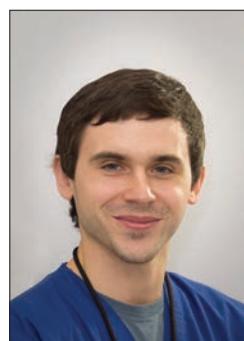
Maeve O'Neill Trudeau - GS



Rachel Vanderlaan - CS



Shelley Wang - NS



Christopher Witw - NS

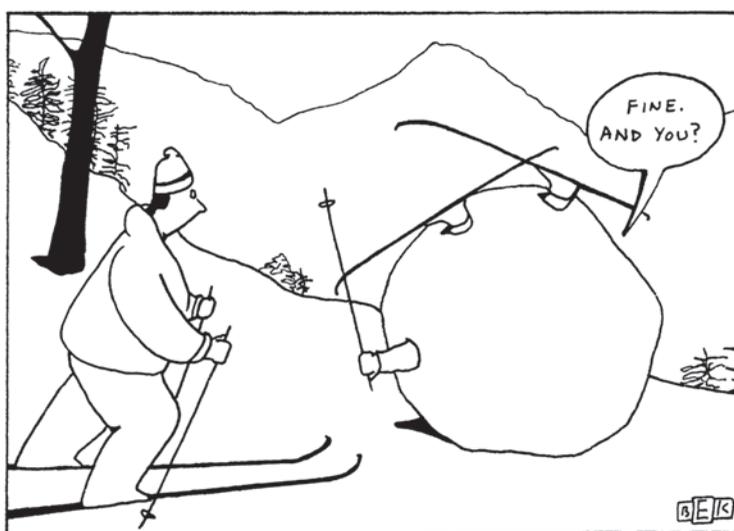


Petra Wildgoose - GS



Thomas Zochowski - OS

Pictures were unavailable for Heather Poushay - GS and Evan Watts - OS.



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Sunnybrook Surgeon-in-Chief Avery Nathens on the University Trauma Program



Avery Nathens

Avery Nathens spent the last years of his training in General Surgery at Sunnybrook, and has a sense of belonging that stems from that period. “Sunnybrook is a very special place to me and gave me my interest in trauma. The move to Sunnybrook presented an opportunity to take the University’s Trauma Program to the next level, to build on

Robin Richards’ work and to fulfill the academic mandate of the Hospital. I have a strong interest in safety and quality and the Centre for Patient Safety supported by the hospital, the University and the Hospital for Sick Children is well established at Sunnybrook. It is a great opportunity to develop this focus for the Department of Surgery.

“Sunnybrook has a very strong research institute, with remarkable expertise in imaging. Imaging is so essential to guide our interventions that this provides a natural area for strong clinician-scientist collaboration. In fact, many have developed strong relationships with the imaging scientists to develop innovative strategies ranging from better treatment of brain tumors to facial reconstruction.”

“Sunnybrook is remarkably pro-active in developing partnerships, which fits my interest in systems of care. Eighteen months ago, while I was trauma director at St. Michael’s, Homer Tien and I worked together in bringing our two institutions closer together, leveraging our great strengths - the transfusion work at Sunnybrook, and the scorecards and protocols at St. Michael’s Hospital for example. We decided to build an integrated University of Toronto program of Trauma care. We managed to get support from the surgeons-in-chief and the hospital programs to obtain administrative support to coordinate

our activities. Jim Wright then brought in The Hospital for Sick Children. Now the standards, quality assurance, and the safety protocols are uniform and well developed. They have been harmonized in a way that makes interaction with our external partners like EMS and Ornge much more productive. We have worked together to develop standardized inter-facility transfer protocols to better support referring emergency medicine physicians. We have developed a GTA Trauma Advisory Committee with members representing the LHINS, Toronto EMS, and the Emergency Medicine program to coordinate activities across the spectrum of care. We’ve also developed means to share data to improve the quality of care. Probably one of the greatest benefits is the move away from hospital-based fellowships to a “University of Toronto Trauma Program” fellowship, with trainees rotating between the trauma centres. We’ve recently held our first University of Toronto Trauma Conference at the BMO Institute with a focus on Mass Casualty Planning, which will be critical as we head into the Pan Am Games.

Probably one of the more exciting areas in the program is our development of our website (<http://surgery.utoronto.ca/programs/trauma.htm>) and the University of Toronto trauma protocols. We have worked together to standardize our care and made our care protocols available on a mobile web site (m.trauma.utoronto.ca) and apps available on both Android and Apple platforms. To accomplish this, we used the expertise of our residents, Marisa Louridas, Matt Strickland, and Balisi Bakanisi, who we can’t thank enough for moving this project forward.

“Andy Smith has been a great support of this enterprise, which fits perfectly with the Department’s new Strategic Plan, calling for greater integration across the centres. We have found that the key driver to program development was infrastructure support to provide consistency. It is very difficult to move a program forward when we are distracted by everyday crises. Having one individual moving the program forward from the administrative standpoint has been key. Tammy Kowalyk has been remarkably effective in this role, coordinating fellowships, developing the website and keeping her eye on the bigger picture.

Avery’s role models were Ori Rotstein, who guided his research and taught him how to give credit where credit

is due, and to build on the strength of the students, and John Marshall. Both emphasized the axiom: “Do a few things well”. “My advice to residents is: Do a few things very well and do the things that you love to do. When I was in Seattle at Harborview Medical Center, there was a big focus on developing a bariatric program, an important and emerging field at that that time. It was also a potential revenue generator for the hospital. I made a decision to not dilute my focus away from trauma in spite of the pressures to do so. I counsel my residents and surgical scientists to do what interests them and avoid taking on activities that fill others’ expectations or seen to be required by circumstance.”

Avery was a medical student at Queen’s when he did an elective with Bob Mustard, who inspired him to go into surgery. “Bob is an extraordinary mentor. No patient was every too sick and no problem too difficult. I think of him as the MacGyver of surgery. (In a popular television series, MacGyver was the ingenious scientist who could solve complex problems using the simplest of materials.) Bob was an ingenious doctor with a higher calling. Bob went from mentor to one of my division members at St. Michael’s, where over 20 years later, he continued to teach me about keeping patient’s needs at the top of mind. Ron Maier was perhaps my greatest mentor from the trauma perspective. A chief of surgery at Harborview and a world-renowned trauma surgeon, he taught me how to advocate for patients’ out of the hospital environment. His focus on the macro-level of care was the inspiration for my interest in trauma systems. In systems, small tweaks can have a huge impact on the rates of injury, disability and death, far more than one can have in the care of a single patient.

“Trauma surgery has evolved tremendously. Its heyday was during the days of the crack cocaine epidemic in the US, where there was a significant amount of penetrating trauma. As the epidemic disappeared, we began to care for more complex patients with blunt trauma, many of whom were older. Less operative trauma meant more time to focus on other aspects of emergency care. We already had a culture of taking care of any and all patients, regardless of insurance, regardless of the time of day, so our move into Acute Care Surgery was natural. It is also provided the opportunity to develop research programs that focus on relatively common understudied problems like appendicitis, cholecystitis, and diverticu-

litis. The model of care for acute care surgery also lends itself to an academic practice. When your “on”, you have no elective surgery and no clinics, which means you are immediately available for quicker access to emergency care for patients and improved hospital flow. The weeks “off” provide ample opportunity for academic pursuits or administrative work.”

What has been the impact of trauma centres?

“It is better to think of these as trauma systems. The systems are much more than a center - they involve every hospital within a region as well as transportation assets. Care in a trauma centre is associated with a 25% reduction in the risk of death and an improvement in functional outcomes. I have been fortunate to have the opportunity to direct the American College of Surgeons Quality Improvement program which benchmarks trauma care across trauma centres. This program has made it evident that there is wide spectrum of quality across trauma centres. What makes for a high performing centre is an intense area of study. The good news is that our performance in Toronto is on par with the very best in the United States.”



Avery Nathens with his two sons, Justin, 13 and Daniel, 16

What are your graduate students studying?

“All the students are working on projects related to either injury or emergency general surgery. We have a wide variety of collaborators in health systems, epidemiology, public health and geography, which makes every day a tremendous learning experience. ”

Is there an ethics component in your specialty work?

“As an intensivist and trauma surgeon, I see such opportunities for improvement. Care at the end of life is often

treated in a simplistic way: ‘inotropes – yes or no; intubate – yes or no’. We teach the menu, but the big picture focus is needed. I typically ask families to describe what their loved one was like before they became critically ill. What made them love life? What defined them as a person? These conversations become so important as we establish the goals of care for our sickest patients. It turns the conversation from an a la carte menu to a patient focus and families tend to be much more comfortable with their decisions.

Avery enjoys travelling with his boys, Justin, 13 and Daniel, 16. He is an avid cyclist, hiker, runner and triathlete. He lives with Lisa in a recently renovated 1903 Victorian home in Cabbagetown, a great enclave in the middle of the city that is well known for its classic homes and vibrant cast of characters.

M.M.

Homer Tien Appointed the Major Sir Frederick Banting Chair

“Avery Nathens and I have been collaborating for more than a year in the development of a combined trauma program, starting while Avery was still at St. Michael’s. We have organized a single fellowship in Trauma, as well as Joint Trauma Protocols and Joint Rounds. The fellows find the experience very enriching, as they see how different surgeons and others in the trauma programs of the 2 hospitals differ in their approaches. The fellowship has attracted excellent candidates from Canada and United States. This is a quantum leap for trauma in terms of scholarship and organization as well as care. The University of Toronto name provides great branding and gives us one voice, so that we can deal much more effectively with external agencies like the emergency medical transportation and government organizations. Avery brings great experience. Najma Ahmed is the Interim Director of Trauma at St. Michael’s Hospital as well as the Program Director for General Surgery.

“Canadian Forces have a great relationship with academic centers by embedding their surgeons. In academic centers, we can keep our trauma skills up. We bring



Homer Tien with Vivian and their three daughters Evalyn, Julia, and Abigail

advances which often come from the military. The military has less research expertise, for example, in running randomized controlled trials. Sandro Rizoli’s randomized controlled trial on transfusion was based on an idea from the war in Iraq, but had the advantage of the academic infrastructure.

“The Major Sir Frederick Banting Chair in Military Trauma Research recognizes the value of the academic centres for the military. In this role, I can seek civilian collaborators and fund research costs from the military budget. This is generally done as a block grant that comes with the Chair, but I can also go to the Department of Defense and others for more funds based on this entry access. It’s a door to the Department of Defense.

What advice would you give to a student based on your experience?

“There is a traditional model for entering academic surgery. I went the non-traditional route, through the military. I was very fortunate to have Andy Smith, Robin Richards, Richard Reznick and Fred Brenaman as encouraging and thoughtful mentors. I originally intended to go into community general surgery. I was at Sunnybrook when 9/11 occurred. I signed up for the fellowship in Trauma and did research with Robin McLeod and Sandro Rizoli and Don Redelmeier as my academic mentors. My Master’s Degree was in Clinical Epidemiology where I studied the causes of death in military personnel. The study was based on autopsy records kept in Ottawa. I spent the first year full time in research, the second year part-time while deploying some of the time for military duty. Frederick Banting was a military man.” Homer had a lot to do with the development of the Chair, and he chose Sir Frederick Banting as the appropriate symbol.

Few know that Sir Frederick had a military career. He received the Military Cross for heroism in the battle of Cambrai, France during World War I. While serving as a medic, he tended the injuries of other soldiers for 16 hours despite his own wound. He later died of wounds and exposure following a plane crash during World War II en route to England to conduct research for the Canadian Air Force. “He led military research for the Canadian Forces in an era before there was a CIHR. He greatly preferred to be a frontline surgeon, compared to conducting research. He had already made his monumental contribution- the discovery of insulin. I can relate to his preference to be a frontline surgical officer.”

Homer lives across the street from Sunnybrook. His wife Vivian has a dental practice in Stouffville and they have three children, ages 12, 10 and 6. 12 year old Abigail is a regional soccer player, involving the family in considerable travel. 10 year old Julia is a basketball and violin enthusiast.

His mentors in the military were doctors Hans Jung and J.R. Bernier, who were successively Surgeons-General in the Canadian Forces. “Both were great facilitators and importantly supported the publication of Canadian Forces supplements in the Journal of Trauma, the Canadian Journal of Surgery and the journal Injury, providing a repository of information to educate surgeons about the distinctive injuries that are characteristic of wartime, and to focus attention on war-related trauma research.

Currently there are several military surgeons in our department in addition to Homer: Andrew Beckett is a trauma fellow at St. Mike’s, Dylan Pannell is a PGY2 in General Surgery, Josh Mayich is an orthopaedic fellow at St. Mike’s. Gerald Slobogan was a fellow with Mike McKee and is now transferred to Vancouver. There are other military doctors in family medicine, intensive care and other programs. Queen’s University has family medicine military people and Homer has added lectures to help train them in military trauma. He has also added didactic training in the Trauma section of our surgical residency, so that our residents are familiar with CBRI (i.e. chemical, blast, ballistic, biological radiation injury and mass casualty management).

“Surgery is a great adventure and a privilege. Patients walk in and trust you after 10 minutes exposure or less, based in large part on our University of Toronto training program. You can’t view it as job and you have to love it.”

What are the ethical issues that you face in your practice?

“The largest is bed occupancy and patient flow. Making beds available is complicated by the fact that patients like to stay at our centres. The rapport and trust that develops during their care makes them say ‘We don’t want to leave’ when it’s time to transfer them to their own doctor or hospital. The second is resource allocation – triage is an essential skill in trauma surgery.”

M.M.

Enhancing Surgical Performance Using Simulation

THE GEORGE ARMSTRONG PETERS PRIZE

The George Armstrong Peters Prize celebrates the memory of Dr. Peters who was described by William Gallie as “the best technical surgeon of all of my teachers”. The Peters prize is awarded to a young investigator who has shown outstanding productivity during their initial period as an independent investigator, as evidenced by research publications in peer reviewed journals, grants held, and students trained. In his Peters Prize Lecture, Teodor Grantcharov, this year’s winner, told us that “the operating room is a high risk environment in which patients encounter major complications in 3-17% of cases. Between 44,000 and 98,000 patients in the United States die because of medical errors. 40% of these are operating room errors, of which 50% are avoidable.”

“The current pressures on surgical education require a revision in our thinking and training. The hours are shorter for training, there are decreased clinical opportunities for residents compared to their teachers, the technology has become more complex, there is a focus on error, patients are demanding, and there is a focus on quality of life for residents. All of these pressures diminish the opportunities for trainees. Currently, we still hold to the idea that time is the constant and proficiency is the variable. We still use subjective assessment, learning by doing, and there has been little change in the curricula over the last several decades. It is time for us to move from a fixed time to proficiency as the

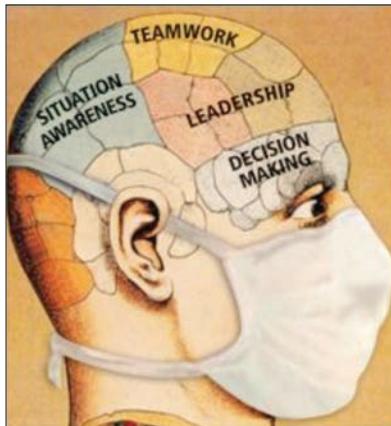


Figure 1

simulation training in shortening the learning curves for surgical trainees. The simulation-trained residents achieved proficiency before they entered the operating room. When the cost of training techniques is estimated, operating room training is far more expensive and the transfer effectiveness of simulation training is more than twice that of box or actual operating room experience. A competency based curriculum accounts for differences in ability and skill at the outset, eliminates the learning curve in the operating room, and pre-trained residents learn much more effectively when they do enter the operating room. It also ensures that basic competencies are achieved and tested. The essential components of a successful curriculum based on American College of Surgeons consensus meetings¹ include development of cognitive, psychomotor and team skills. The animal lab serves as the final testing ground before the operating room. Team training has been largely ignored in surgical education and there is a need for educational interventions in this domain (currently only half of the Canadian and 30% of the US programs offer team training component). Figure 1 illustrates the essential elements of team training: situation awareness, leadership, teamwork and decision making.

Teodor told us that error is inevitable if humans are involved and the “deny, forget, ignore and repeat” response is unacceptable. The solution is performance analysis, education, and deliberate practice to mitigate errors and interrupt the chain of events that leads to adverse outcomes (Fig. 2). Teodor’s group has developed a black box multichannel performance analyzer to reduce surgical errors. It records many variables in the operating room, including noise and distractions. The pathway for interrupting this is analysis,

criterion for completion of training.”

Teodor’s first research project in Toronto asked the question: Can simulation training produce skills that transfer to the operating room? The study results clearly confirmed the effectiveness of

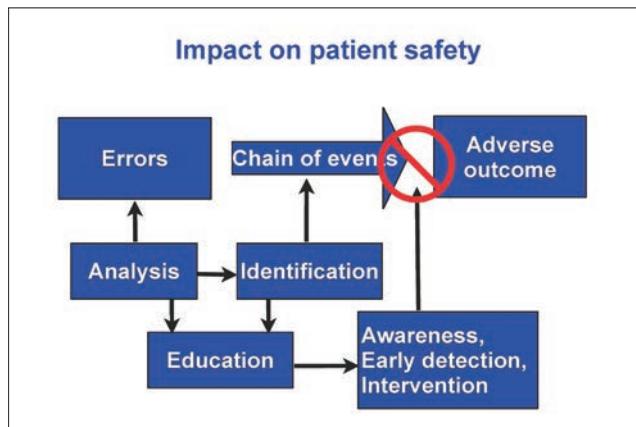


Figure 2

identification, awareness, early detection.

Vanessa Palter, working with Teodor, reported a randomized control trial in the *Annals of Surgery*, comparing conventionally trained with competency-based curriculum trained surgical residents. The difference was striking (Fig. 3).

In the discussion period, Jim Rutka asked about the problem of taking uncorrectably non-proficient surgeons all the way through training. Teodor answered that 5% of residents show outstanding abilities at the outset, 8% never become proficient and the rest achieve proficiency with training. Training individuals who don’t have the innate abilities is a waste of personal and training-system resources. To find a way to screen out those who should not become surgeons, Teodor is working with medical student volunteers, using functional MRI to determine aptitude or ineptitude.

M.M.

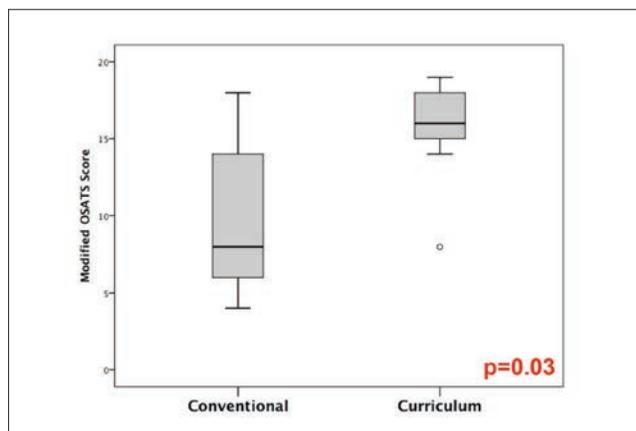


Figure 3

Teodor Grantcharov on Metabolic Surgery

Teodor Grantcharov was trained in Copenhagen, completed his minimally invasive surgery fellowship in Pittsburgh, and then joined the University of Toronto faculty with an academic interest in surgical education and a clinical interest in minimally invasive foregut surgery (<http://www.surgicalspotlight.ca/Shared/PDF/Winter07.pdf>). His research on surgical training is conducted with surgical scientists at the Skills Centre in the Li Ka Shing Knowledge Institute, and with Oleg Safir at the Mount Sinai Skills Centre. A major theme of the research is the development of training curricula and testing their effectiveness, as described nearby in Teodor's Peters Prize lecture.

Teodor and Ori Rotstein provide surgical treatment for obesity at St. Michael's Hospital. Their team performs about 130 bariatric procedures per year, in addition to other minimal access and open general surgical procedures. "We enjoy the bariatric patients' new lease on life. It is amazing to see them coming in without their oxygen, without their wheelchair, without their cane. They arrive in shorts and are extremely happy and gratifying for us to see."

How does it happen?

"It's hormonal. The surgery reduces hunger, cures diabetes and other components of the metabolic syndrome. The mechanism is still mysterious, but becoming clearer. We get patients from othopaedics because of arthritis, respirology because of apnea, endocrinology because of diabetes and family practice for all of these indications. The patients are cured in a limited sense. It is a forcing function to modify their behaviour, but they must comply to avoid regaining weight after one year."

Teodor and his family love Toronto. They have been here for 5 and a half years. His children were born in Denmark, spent 2 years in the United States during training. Ori and Richard Reznick recruited him. "Our family adopts all the teams, no matter how bad they are – Raptors, Leafs and Jays. You can choose your friends, but you can't choose your relatives or your home teams."



Teodor Grantcharov with his wife Tania, their 2 children Phillip and Peter, and Bautista

What are you reading?

"Nothing, because the family is learning golf together. It takes all our time. 13 year old Phillip, 16 year old Peter and wife Tania go out and golf with every spare minute. Tania is an economist, a writer and an equestrian who keeps her horses on a farm near Stouffville.

M.M.

Surgical Treatment of Hypertension

Renal denervation has recently been reintroduced as a technique for dealing with refractory hypertension. George Oreopoulos is the surgical member of the Renal Denervation Project led by nephrologists Sandy Logan and cardiologist John Floras at the University Health Network and Mount Sinai Hospitals. The project is re-exploring an approach that was introduced in the 1950s to denervate the kidney. In the earlier versions, this was accomplished by dividing the renal artery. The current technique involves hyperthermic interruption of the nerves to the kidney, which travel in the adventitia of the renal arteries. This is accomplished by heating the artery in a controlled burn for two minutes at multiple sites.

George got into this project because of his experience in renal artery surgery and stenting. He is a vascular surgeon with interventional radiology training. The project at the University Health Network is the first in Canada.

The fourth patient is currently undergoing treatment. “The radio frequency Symplicity catheter manufactured by the Medtronic company is actively deployed and often used elsewhere in the world. Preliminary experience with this technique has been promising. Patients who are on six medications and still have unacceptably high blood pressure have been brought under satisfactory control with reduction in their medication and acceptable systolic pressures. It does not make them medication free. However, the patients who are currently treated are those with the most difficult form of the disease, requiring high doses of multiple medications. The early trials with the catheter have shown promising results, with drops in systolic pressure of greater than 30 millimeters of mercury systolic (trials of new drugs to lower blood pressure celebrate an average drop of 5 millimeters). There is some risk of dissection of the renal artery by the intravascular catheter, and residual scars from the burns could potentially result in late stenosis or aneurysms. Though the UHN team is using very strict criteria for its study, there is a very large population of potential patients who might benefit from the technique if it becomes practicable for less severe hypertension. In the future, the technique may be appropriate for patients with mild hypertension, chronic renal failure, diabetes, and medication intolerance. Our goal is to perform the procedure in 25-50 patients per year.”

“The team started with a maximalist approach, carrying out the procedures in the operating room with intubation and general anesthesia. We are now stripping the technique down to working in the angio suite and then observing the patients on the vascular ward, rather than taking them to the ICU. It is conceivable that one day soon, this could become an outpatient procedure. The patients undergo an aortogram first, then the catheter is introduced percutaneously and guided into the renal artery. Four burns of two minutes each are carried out in both renal arteries. Each non-reusable catheter costs \$6,000.”

“The European studies show that the blood pressure drop is generally gradual over a three month period, but there have been patients with dramatic drops overnight. One of the problems in the early surgical denervation experience in the 1950s was that patients developed intractable hypotension. Patients who might choose to undergo denervation would be those non-compliant with medications, those who cannot tolerate medications and potentially patients with renal failure, diabetes etc.”

Following undergraduate training at McMaster University, George Oreopoulos completed medical school, surgery residency and a vascular residency at the University of Toronto. He subsequently completed an interventional radiology fellowship at UHN and Mount Sinai Hospital. He is married to Amrit, who is a nephrologist at St. Joseph’s Hospital. They have two sons - Dimitrios, 8, and Constantine, 4, who have been overheard saying: “No, there are no beds there, we’ll have to try another hospital”, when they were playing ‘rescue squad’. George has recently resumed the study of martial arts, in which he was a black belt in an earlier version of his career. “Like surgery, the martial arts focus on attention, intention and commitment, emphasizing the right steps with full attention at the right time and in the right way. They also emphasize tempo.”

George likes to work with trainees and though he was an outstanding surgeon scientist in Ori Rotstein’s lab, he plans to focus on a career as a surgical educator and innovator. He likes the manager role and emphasizes it in his teaching of the residents.

M.M.

DIRECT ENTRY INTO VASCULAR SURGERY RESIDENCY

The five –year direct entry vascular residency began this year. It will include training in endovascular procedures. Program Director George Oreopoulos developed his skills in this area during a one-year sabbatical at UHN and Mount Sinai Hospital, “one of the most exciting years of my life”. The angioplasty patients were overtaking the practice of vascular surgery and I was fortunate to have a very collaborative group of interventional radiologists to work with. I was trained in both vascular and non-vascular interventions. The skills required are similar and transferable. It was an eye-opening and challenging experience, but necessary for the long term. Interventional fellows teach me as I teach them. I bring clinical judgment and experience and knowledge of how to get things done in the hospital.”

George takes interventional radiology call and is surprised by the prevalence of calls for interventions for almost everything. “I can spend 11 hours straight performing interventional procedures when I am on call. They are easier to book, shorter and offer the convenience of a stable experienced team. There are interesting problems, lots of innovation and great rounds and great working relations. Because of the collaboration with vascular surgery, the interventional fellows learn to run a vascular clinic, a unique experience for a radiologist. The patients are very rewarding to see following the interventions. They are discharged early, return to the clinic extremely grateful for the improvement that is gained with a minimum of inconvenience and discomfort. The only open cases that we are doing in vascular surgery are those of maximum complexity”.

“The paradigm has shifted and the residency must necessarily shift its focus. Trainees will need cardiac surgery experience to provide them with technical skills. They will need a nephrology rotation, where they will provide access for dialysis. They will need to be on the trauma service, as well as surgical oncology to develop their exposure to open surgery. Graduates will have become accustomed to using a very expensive angio-operating suite. They may encounter resistance because their skills can threaten other specialists. They may also be resisted by the administration of some hospitals that are unprepared to invest in the equipment required for an angio-OR. The solution to this problem will be regionalized care, rather than vascular interventions in every hospital, using a collaborative model that is not yet prevalent.”

TEN TIPS FOR THE POSTGRADUATE EXTERNAL REVIEW

1. The date of the external review is April 7 – 13, 2013. The reviewers meet with the chairman, program director, the members of the Resident Program Committee (RPC), faculty and residents. Only for exceptional reasons should faculty or residents take holiday during this week.
2. All educational activities should be protected downtime for residents.
3. There should be an open dialogue with the residents about the external review process. The purpose of the review is issues now. There should be a culture in the specialty that issues can be to improve the program. The residents should be encouraged to bring forward brought forward without negative consequences for the resident. Hopefully the first time a problem is brought forward is not during the external review.
4. Each rotation must have specific goals and objectives. These goals and objectives should be discussed with the resident when they start a rotation. All faculty should be aware of the goals and objectives of their rotation. The goals and objectives of each rotation should be used and not only a document in the PSQ.
5. ITERS should be completed in a timely manner. The head of service of a rotation or their designate should meet with the resident mid-rotation and at the end of the rotation for a face-to-face discussion of the ITER and the residents experience on the service.
6. The ITER should be based on the specific goals and objectives for a rotation.

7. There should be specific criteria for promotion in each year of residency. The RPC must discuss promotion for each resident for each year of their residency using these criteria. All residents and faculty must be kept up to date on all activities in their specialty. This could be done by a newsletter or circulating the minutes of the RPC.
8. All junior surgical residents must go home by 12 noon the day after in house call.
9. All senior surgical residents can stay after 12 noon the day after in house call for educational purposes only and not for service reasons. (This may change. The new PAIRO contract has just been ratified. We have not seen the new contract and its implication for work hours.)
10. Each specialty should have a safety policy. The policy should be reviewed, with the attendings and the residents at the RPC.

*Ron Levine,
Director, Postgraduate Education*

Transforming Surgery

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

The new strategic plan for the Department of Surgery has now been released, and we are in the process of implementing its many goals. With the new plan, we hope to improve health care of patients with surgical diseases through innovation and excellence in surgical practice, research and education. To transform surgery beyond the traditional “cutting edge”, we will focus on quality and best practices in surgery; foster innovation in surgical practice, education, and research; support all faculty in achieving their full academic potential while recognizing the important of work-life balance; welcome new community-affiliated partners and facilitate

their engagement in the Department; promote greater integration and interdisciplinarity across Divisions, hospitals, and research institutes; embody transparency and fairness in all our strategic directions; extend our reach locally and globally to fulfill our social responsibility; and pursue a bold advancement strategy that engages partners from beyond our traditional spheres.

As we look ever upward, we will draw on the collective talent of our faculty, learners, staff and partners. We will build on our strengths in research, education, and surgical practice, and pursue a new model of surgical care that promotes the highest quality of care, integration, innovation, and best practices. As a world leader in surgery, we will engage locally, provincially, and globally to promote sustainable access to high quality surgical care.

<http://surgery.utoronto.ca/Assets/Surgery+Digital+Assets/About/Plan2012.pdf>

James Rutka

RESIDENT'S CORNER

ICE-TIME AND SURGERY



from left to right- Caroline Scott with her brother Ian and her sister Katherine

Caroline Scott grew up in Toronto, then attended Cornell University in Ithaca, New York for undergraduate studies in Biology and Society. She chose Cornell for its excellent Biology program and for its Varsity Hockey team. “I wanted science and ice-time”. She went with her cousin to Ithaca and found “it was great fun, though Varsity athletics is a full time job”. She continues to play hockey now with the Orthopaedics Division in the men’s league. “I play Tuesday night with some of the orthopedic residents and staff, and Wednesday with The Bipolar Bears team, that includes anesthesia, plastic surgery and

family medicine friends from medical school. It keeps me in touch and gives me a great workout.”

She likes trauma, sports medicine and pediatrics, all recent rotations in the orthopedics competency-based curriculum. Her mother is an orthopaedic surgeon at Scarborough Grace Hospital. She enjoyed the reflective writing elective with Mount Sinai psychiatrist Allan Peterkin. “The project was to illustrate CanMeds roles based on experiences as a medical student – how I advocated, managed etc. I got more out of my rotations because of these writing assignments.”

She enjoys international research and travelling. “It has made me a better resident in my own Toronto setting.” She also enjoyed studying HIV medication counseling in Zambia. She focused on the counselors and the barriers to their success like communication and compliance problems. “If there is no transportation, no alarm clocks, and no feedback on CD4 counts from lab data to motivate them, patients are less compliant.” “I lived on the University campus and then travelled in Africa to Zambia, Ethiopia and Tanzania with my cousin.” Her current residency research project involves a needs assessment of low cost imaging technology in low resource settings. Her field work will be in Uganda. This is a continuation of her supervisor Maryse Bouchard’s work. She has studied the effects of sleep deprivation, including studies in which she participated as a subject. She learned “not to pull all-nighters,” which, though commonly misconceived as virtuous, are not effective for study or for patient care. “There isn’t a simple solution to the patients’ need for 24 hour care and the harmful effect of sleep deprivation on resident performance.”

M.M.

MICHAEL MACKECHNIE - INTERNATIONAL SURGEON

Michael is a second year resident in the department of orthopedic surgery. Born in Seattle WA, he grew up in the United States, Great Britain, and New Zealand before arriving in Canada. He attended York University and graduated from medical school at McGill University.



Michael MacKechnie in Barcelona-Parc Gruel

His enthusiasm lies in the field of global health, an interest which first started with his work with the Canada International Scientific Exchange Program (www.cisepo.ca) where he spent twelve weeks in Jordan working with Jordanian, Israeli and Palestinian groups, with a special focus on performing hearing screening in newborn babies. Michael went on to work with the Canadian Association of Medical Teams Abroad, where he was a translator for an orthopedic surgery mission to Quito, Ecuador. He has been mentored in many of his international endeavors by Arnold M. Noyek, ENT surgeon at Mt. Sinai Hospital. Arnold is a very active and internationally engaged surgeon and humanitarian, the founder of CISEPO, and a wonderful mentor to generations of young doctors.

Michael became interested in orthopedic surgery as an undergraduate student when he watched orthopedic surgeons in Ecuador. These doctors enabled people who had spent years without the ability to walk to return quickly to being active members of their communities. In many cases these patients were from the Ecuadorian Amazon jungle, and had been unable to leave their houses for years.

Michael’s research interests include international health education. He is presently working on an education video to teach fracture reduction and casting which he hopes will be widely available in North America and the developing world. The technology boom has made interesting new methods of teaching available around the world.

Michael is also the recent recipient of a Health Volunteers Oversees Orthopaedics Traveling Fellowship. He will use this award to spend four weeks on orthopedic

assignment to Malawi in early 2013. He is grateful for the support and encouragement of his faculty, especially program director Peter Ferguson, and his co-residents.

Michael plans to use his six months of research time in his third year of residency to examine the possibility of creating an orthopedic surgery residency program in Botswana. He will work with Arnold Noyek, Georges Azzie, and Lucas Murnaghan at the Hospital for Sick Children.

Following the teaching of Arnold Noyek, Michael also has an interest in ways that international health can work towards peace building in conflicted areas such as the Middle East. "It's Maslow's hierarchy of needs - people first need food and shelter and health; they next need safety, then work, all before they can start to actualize their true potential, and work for peace."

He is close to his parents and three younger siblings, all in the GTA. His parents run university programs teaching English as a Second Language, and appear to have transmitted their nomadic allele of the traveling gene to Michael. He is in a relationship with Lauren, a Masters student in pediatric nursing. He runs, golfs and plays intramural soccer and basketball. The latest book that he has read is the biography of cancer- "Emperor of all Maladies" by Siddhartha Mukherjee and "Theodore Rex", a biography of Theodore Roosevelt. He also enjoys the Spanish literature of Mario Vargas Llosa.

M.M.

The first year General surgery residents must all complete a mandatory essay on professionalism during their first year. They hold a competition and a prize is awarded. As a member of the Postgraduate Education Committee in General Surgery, I have been a judge for this competition and I have been impressed by the quality of the submissions. I think they should be published and read by a wide audience.

This year there were 3 excellent thoughtful entries that shared first prize. The following essay is one of these.

Alexandra M. Easson

PROFESSIONALISM IN PRACTICE

Dealing with Death

As an eager medical student, I had prepared myself to tackle the physical and emotional hurdles that would await me during a general surgery residency. I was anticipating the complex knowledge base and intricate technical skills that I would have to try and master. I had a plan to maintain a good work-life balance despite the challenging schedules and heavy work load that required long work hours. I felt that medical school had helped me cultivate the skills and qualities required to provide patient-centred care, to honour ethical principles and to act with professionalism. However, I was not prepared to be comfortable with death.

One month into residency, I had my first experience with dying. Mr. S was a 60 year old male who was scheduled for an elective esophagectomy for esophageal cancer. Unfortunately, in the operating theatre, he was found to have an inoperable tumour as there was evidence of tumour encasement of the aorta and right atrium, which was not evident on recent imaging. Our thoracic surgery staff informed the patient and his family about the intra-operative findings and recommended getting palliative care involved. While the patient had come to terms with his prognosis, the family was optimistic and reluctant to give up hope. As a result, the patient gave in to his family's wishes and requested a consult with medical oncology to discuss the role of chemotherapy.

While recovering from this unfortunate surgery, his health rapidly declined. He required a gastrostomy tube for nutritional intake. After only a week in hospital, he developed a bronchoesophageal and a bronchopleural fistula. As a result, he developed a right pneumothorax and severe pneumonia. Treatment was initiated with a chest tube and broad-spectrum intravenous antibiotics. It was becoming evident that his cancer was rapidly progressing and that no medical or surgical treatments could rescue him. I was on call the day his fistulas were diagnosed. Together with the thoracic surgery fellow, we prepared for the family meeting. Our goals were clear; we were to update the family on the clinical status of the patient, the options available, and the expected prognosis. We were going to discuss code status, palliative care involvement, and end of life issues. We had cleared our schedules to allow for ample time with the

family and reserved the quiet room designated for such meetings. The fellow I was working with allowed me to take the lead and begin the conversation. Soon into the conversation, the patient's daughter began to cry. She squeezed the hands of her mother, who began to weep and tremble uncontrollably. Upon witnessing their emotional burden, I was unable to continue. I froze. I felt a lump in my throat and that my eyes would soon well up with tears. I knew that if I continued, they would be able to sense my sadness. I needed to maintain my composure so that the focus would not shift to me. But I was no longer in control.

Luckily, the thoracics fellow was with me. I watched with amazement and awe as he communicated with ease. He demonstrated empathy and compassion without becoming overly emotional, and demonstrated a high level of professionalism. Whether knowingly or unknowingly, he used all of the nonverbal and verbal communications skills we were taught in medical school. He made appropriate eye contact, demonstrated active listening, used reflective statements, and summarized appropriately. In a calm and steady voice, he used his medical knowledge to explain why further interventions would be futile. He wasn't afraid of the silent pauses. He gave them time. He remained composed and patient while answering all of their questions, and repeated his responses multiple times using various terms until he was sure they understood. He went beyond the ethical principles of informed consent and patient-centred care by understanding their vulnerability, experiences and fears. In doing so, he was able to earn their trust. The family was confident that he was putting their loved one's best interests first. And so, he was able to ask the difficult questions surrounding palliative care, comfort measures and DNR status. He used layman terms to emphasize the concepts of patient autonomy and advance directives. From this conversation, the family realized that any medical or surgical efforts would be prolonging death and they accepted that comfort care would be in the patient's best interest.

At the end of five months into residency, I had another encounter with the discussion of death. Mr. W was an 83 year old man with known metastatic colon cancer involving the liver and lungs for which he was receiving chemotherapy. He presented to the hospital with a high-grade bowel obstruction with marked dilatation of

his cecum to over 13 cm secondary to a colonic stent failure. On admission, code status was established and he was deemed DNR. While in hospital he underwent stent replacement via interventional radiology, which was initially thought to be successful. However, while I was on call that night, I was paged to assess Mr. W for SVT with a heart rate ranging from 170-200 and increasing oxygen requirements on nasal prongs. He was otherwise asymptomatic. After ordering routine investigations for tachycardia, I checked the stat chest x-ray. I was surprised to see a moderate amount of pneumoperitoneum. I reviewed the findings with the senior on home call and we decided to order a CT scan of his abdomen. The CT scan confirmed a perforation near the distal site of the stent placement with moderate free fluid and extraluminal air. Given his clinical status, age and comorbidities he was high risk for surgery and the outcomes were poor given his end stage cancer. It was almost certain that he would require a stoma. However, the patient's wishes were uncertain as he was confused. Since I was the only one in the hospital that night, my senior resident asked me to communicate the findings to the patient's wife and discuss the patient's wishes, including the option for surgical management, the high risk of requiring a stoma, and to confirm code status, while he informed the staff surgeon on call.

At first, I was nervous. I was afraid of how the wife would react and how I would respond to her questions. This time, however, I was armed with some experience. I recalled my encounter during thoracics and the salient features that helped the fellow break bad news. I made sure I knew all of the medical information, options and outcomes. I was prepared for the silent pauses and the emotions and uncertainty that would ensue. I remembered how important it was to be empathic and to gain an understanding of the patient and family's wishes, fears, and concerns. And I realized that even though there wasn't a fellow by my side, this still wasn't a discussion I would be having alone with the family. The senior resident and staff would discuss the prognosis further in the morning. Social work, the hospital chaplain, and the family's minister would be available for additional support and guidance. With this knowledge and experience, I was comfortable and I didn't lose control. This encounter came full circle for me when at the end of the discussion the patient's wife commented on how much

she appreciated the time, care, and ‘good bedside manner’ that I provided.

Most surgeons remain uncomfortable with death, as it is an outcome they might equate with defeat¹. However, evidence suggests that students do as their teacher do². And so, with positive role models, professionalism surrounding ‘breaking bad news’ can be taught. Dealing with the concept of death and dying is still not second nature to me, nor should I ever want it to be. It is not a routine practice since it is a unique and extreme situation that each patient and their family are faced with. It requires compassion, empathy, good communication and a mutual understanding to reach common goals for the patient. With the excellent mentorship I received, I am now more comfortable in my role as a physician and as a professional during these trying times.

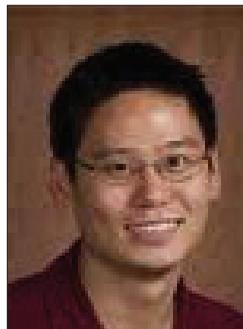
*Nathalie Wong-Chong,
PGY1 General Surgery*

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[This is a well described example of the role of near-peer mentoring. Junior residents often miss the chance to observe these emotionally charged conversations or stumble through them unmentored. M.M.]

Global Surgery Exposure in Geneva



Marvin Hsiao

The WHO Trauma Care Checklist project began in 2009, following the successes of the Surgical Checklist project in which the University of Toronto, led by Bryce Taylor and Richard Reznick, played an integral role. The trauma checklist follows the Advanced Trauma Life Support structure. It includes items designated to prevent or to avoid critical mistakes during initial resuscitation of injured patients. Similar to the original Surgical Checklist study design, the Trauma Care Checklist has been piloted in 12 hospitals in diverse settings worldwide, ranging from St. Michael’s Hospital in Toronto to Limbe Regional Hospital in Cameroon. Preliminary results show significant improvements in almost all process measures across diverse practice settings.

As an intern with both surgical and research training, Marvin Hsiao was well positioned to immerse himself quickly in the study, which included literature reviews, qualitative, and quantitative data analyses. Marvin said he learned the most from seeing first-hand how the WHO functions and how it conducts research. During the internship, he participated in noon hour seminars, had small group meetings with the WHO Director General Margaret Chan, and attended the 65th World Health Assembly.

This internship helped Marvin plan how he would like to incorporate global surgery work into his career. While he has no immediate plans to work at the WHO, he thinks the Department of Surgery at UofT, with decades of dedication and hard work from the ranks of Georges Azzie, Mark Bernstein, and Andrew Howard, can become a global leader in improving surgical care in low- and middle-income countries. To this end, with support from Avery Nathens and James Rutka, Marvin will be compiling a detailed inventory of global surgery activities within the Department of Surgery. Within the Department’s new 5-year strategic plan “Transforming

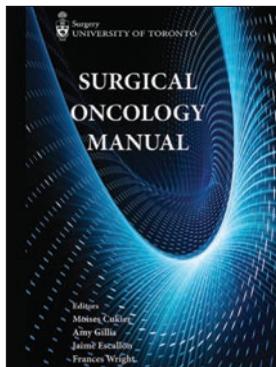
Surgery: Beyond the Cutting Edge”, the long-term goals are to (1) develop a concerted University of Toronto strategic plan in global surgery; (2) create a formal academic pathway for surgeons with a focus in global surgery; and (3) improve surgical care in low-resource settings globally through clinical, research, educational, and advocacy activities.

Marvin is a General Surgery resident currently completing his final year of PhD studies in Global Surgery research (Quantification and Characterization of Road Traffic Injury Deaths and Surgical Care Access in India) at the Institute of Medical Science under the supervision of Avery Nathens and Prabhat Jha. Marvin had a unique opportunity to contribute to a World Health Organization (WHO) project to improve trauma care globally through a recent two-month internship in Geneva this past spring.

M.M.

Book Review

SURGICAL ONCOLOGY MANUAL



Surgical Oncology Manual

Surgical Oncology at the University of Toronto has enjoyed a dramatic increase in growth, profile and impact in recent years. A major part of the surgical oncology presence in Toronto is the Surgical Oncology Fellowship Program. In the program, fellows have the opportunity to benefit from every hospital affiliated with the University

of Toronto. But the core of their training is at the Princess Margaret Hospital and the Sunnybrook Odette Cancer Centre, the fifth and sixth largest comprehensive cancer centres in North America.

One of the strengths of the Division of General Surgery has been our ability to work together and come to a consensus of opinion that reflects the excellent care provided by our healthcare team. The 1st Edition of the Surgical Oncology manual is a good example of this collaborative spirit.

In this initial volume, edited by Moises Cukier, Amy Gillis, Jaime Escallon, and Frances Wright, a wide array of clinicians have collaborated to produce a pithy and practical approach to common problems faced by the surgical oncologist. Fifteen Fellows and forty attending Oncologists have collaborated to produce the various chapters. The attending staff come from our surgical oncology faculty in collaboration with medical oncology, radiation oncology and pathology. The chapters are very much management focused and great effort has been made to ensure that the points made are representative of “how we do it in Toronto” balancing our experience and guidelines with evidence-supported practice.

It was with great pride that this volume was prepared and published. It is an excellent reference source for residents, practicing surgeons, and an evolving legion of surgical oncology specialists tackling the problem of cancer. The manual is available at the University of Toronto Bookstores.

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

Colon Cancer Canada Establishes New Scholarship in the Department of Surgery



Darina Landa

Recognizing that people have grown tired of rubber chicken dinners, endless speeches and unnecessary auction items, Colon Cancer Canada has turned their annual gala upside down. In honour of Drs. Zane Cohen and Andy Smith – past and current holders of the Bernard and Ryna Langer Chair in General Surgery – Colon Cancer Canada has established a new scholarship in colon cancer research within the Division of General Surgery’s Surgeon Scientist Training Program.

As we know, Surgeon Scientists are a rare breed. They bring important questions from everyday practice into the lab and translate scientific discovery into better health for all Canadians – bridging the gap between the laboratory bench and the patient’s bedside. The Surgeon Scientist Training Program is the flagship program of the Department of Surgery, attracting outstanding trainees from across North America. Funds raised through Colon Cancer Canada’s Top to Bottom campaign will support the next generation of colon cancer specialists within the Division of General Surgery.

For over 10 years, Colon Cancer Canada has been dedicated to saving lives by increasing public awareness of colorectal cancer and access to screening, funding research initiatives, and providing colorectal cancer patient support. By eliminating many of the typical gala expenses, they are ensuring more funds are directed towards essential research into colon cancer.

In large part due to some healthy fundraising competition between Drs. Cohen and Smith, Colon Cancer Canada has raised over \$150,000 for the scholarship! Funds will be endowed as part of the Langer Chair and, in perpetuity, will support colon cancer research at the University of Toronto.

*Darina Landa,
Senior Development Officer*

Division of Plastic & Reconstructive Surgery Inaugural Paintball Competition

The Inaugural Paintball Competition was held in the Division of Plastic & Reconstructive Surgery at Sergeant Splatters, Monday November 12th.

I just wanted to thank those of you who were brave enough to venture to Sergeant Splatters on a wet Monday evening to participate in the Inaugural Division of Plastic & Reconstructive Surgery (soon-to-be) Annual



The Crew at Sgt Splatters

Paintball Competition, Kunaal Jindal for the concept and Kathy Pavlovic for doing all the organizing.

The observant amongst you will notice the James Bond-like pose of Dr. Stefan Hofer, the angelic face on Victoria that belies her killer instinct, the two-hand grip of Dr. Greg Borschel who can’t wait to start shooting, the twist ties at the bottom of Homan’s overalls and me with my mental age group getting prepped on how to avoid getting shot. I obviously didn’t listen well as the welts and bruises on my back can attest. For those of you who couldn’t attend, I hope to see you at the next event. I think luminescent name tags are a must so that you can identify who it was that shot you.



Paintball Competition

Thanks again, everyone!

*Christopher R. Forrest,
Interim Chair, Division of Plastic and Reconstructive
Surgery
University of Toronto*

RICHARD REZNICK'S METABOLIC SURGERY NETWORK AND OTHER CO-ORDINATED DEPARTMENTAL PROGRAMS



Martin McKneally

In my report on bariatric surgery in the last issue (http://www.surgicalspotlight.ca/Article.aspx?ver=Spring-Summer_2012&f=OsteoarthritisMetabolic), I neglected an important foundational point. Richard Reznick brought the surgical community and the Ontario government together in 2009 to establish a coordinated Bariatric Surgery program. Patients enter the program through the registry (<http://www.bariatricregistry.ca/default.aspx>). They are interviewed at one of the Network's assessment centers. There they are carefully evaluated by a team of dietitians, psychiatrists and nurse practitioners, and prepared for surgical treatment. Surgery is performed in dedicated treatment centers in the network. As Teodor Grantcharov (see article in this issue) describes it, "the hospitals work not as isolated units, but as part of a well-coordinated program put in place by Richard Reznick. He is an amazing leader who brought everyone to the table, including the government, and solved the problems that arose when Ontario was sending patients to the United States for bariatric surgery. Those patients did not do well because they did not have a total program of diet, psychiatry and other supports. Surgery is an important part, but the multi-disciplinary program is essential. Richard is doing the same thing in Kingston. His leadership made Toronto a world centre for surgical education and is now doing the same with bariatric surgery. Bariatric surgery two decades ago was regarded as weird and questionable. Now it is regarded as a wonderful advance."

Networked programs offer synergistic use of clinical and research resources, enhance the academic impact of our department's members, and provide patients with a sense of order and purposefulness in an often bewildering healthcare environment. The trauma program and the spine program (http://www.surgicalspotlight.ca/Article.aspx?ver=Fall_2008&f=Announcements) are examples of the collaborative model of healthcare delivery. Similarly, the Surgeon Scientist program attracts scholars to our department because it is coordinated and harmonized

with clinical training, not simply a collection of unrelated laboratories, competing investigators, and unplanned interruptions to pursue research questions.

I recently had the opportunity to address my classmates at Cornell's 50th year medical school reunion. Their moral distress at the state of the competitive, entrepreneurial practice of medicine and surgery in the US was palpable – expressed as reluctance to encourage their grandchildren to pursue a medical career. They were competing for patients, and with insurers. "We only accept cash" one surgeon from the wealthiest county in the US told me. My classmates were surprised by the experience I was able to describe as a surgeon in our Department.

A colleague from New York University related the effects of the competitive, entrepreneurial non-system of care when hurricane Sandy flooded lower Manhattan. "The power was knocked out in our hospitals (Langone, Bellevue, and the Manhattan VA). Carrying the patients down 25 floors by flashlight with no loss of life was a lot easier than getting them accepted at the other hospitals. They bickered about taking uninsured and Medicaid patients despite the crisis."

Our Department, meanwhile, is moving onward and upward as we add new faculty and new residents, and embark on an ambitious next strategic plan. Visitors, accreditors and other external reviewers are impressed by the energy and accomplishments of our surgeons, residents, scientists, students and staff. We wish all of them and all our readers a cheerful and healthful holiday with friends and family, and look forward to a productive new year together.

M.M.

SURGICAL ETHICS COURSE

The University of Toronto Department of Surgery will present a one day Surgical Ethics Course at the Rim Rock Hotel in Banff, Alberta on May 28, 2013, immediately preceding the Canadian Bioethics Society annual meeting. The course will focus on surgical Innovation, life sustaining treatment, and recent developments in organ donation.

For information on registration contact martin.mckneally@utoronto.ca

NEW STAFF



Shady Ashamalla

We are delighted to welcome **Shady Ashamalla** to the University of Toronto, Division of General Surgery. Shady grew up in Toronto playing hockey and lacrosse on the streets of Leaside, just south of Sunnybrook Health Sciences Centre. He has now been appointed as a minimally invasive surgical oncologist at Sunnybrook in the Division of General Surgery in the Odette Cancer Program.

Shady did his undergraduate studies at the University of Guelph in biomedical sciences while simultaneously playing professional and varsity lacrosse. Following that he went to Kingston to complete a Masters of Science degree in Physiology. Shady then returned home to Toronto to attend medical school, General Surgery residency, and fellowship training in Minimally Invasive Surgery and Surgical Oncology at the University of Toronto.

His clinical focus will be in the management of advanced lower intestinal oncology. He is expected to be a game changer due to his great skill and focus on minimally invasive techniques. Shady has been appointed as an Assistant Professor and Surgeon Teacher. He has particular academic interest in Surgical Simulation, competency-based training and knowledge translation.

Shady and his wife Alison, a family physician who inspires him on a daily basis, and their children Dylan, 3, and Kristen, 1, are excited to join the U of T family.

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

The Division of Orthopaedics at Women's College Hospital would like to welcome **Jaskarndip Chahal**, Orthopaedic Surgeon. His practice is focused on treating patients with orthopaedic sports medicine disorders with a special interest in biologics and cartilage restoration. He com-



Jaskarndip Chahal

pleted his Bachelor's in Science at the University of Toronto followed by medical school at the University of Manitoba. In 2005, he moved back to Toronto for orthopaedic residency training, admission in to the Surgeon-Scientist Program, and graduate training in Clinical Epidemiology. His subsequent fellowship training in sports medicine has allowed him to work with Drs. Daniel Whelan and Paul Marks in 2010-2011 followed by a year long fellowship at Rush University Medical Center in Chicago where he developed and was exposed to cutting edge cartilage restoration and joint preservation procedures. His research will focus on cartilage regeneration, clinical measurement and conducting translation outcomes research of novel cartilage repair techniques. Dr. Chahal looks forward to contributing to the Department of Surgery, collaborating with his peers at the University, and improving the care and quality of life of patients, as well as returning injured athletes of all levels and abilities back to their activities!

Jas may be contacted by phone: 416-603-5630 ext 3213
fax: 416-603-3437 or via email: jchahal@utoronto.ca

*John L Semple, Surgeon in Chief,
Women's College Hospital*



Sandra de Montbrun

Sandra de Montbrun has joined the Division of General Surgery at St. Michael's Hospital with a clinical interest in colorectal oncology, and has been appointed to the University of Toronto as an Assistant Professor and Surgeon Scientist. Sandra obtained her Honours Bachelor of Science degree from the University of Waterloo followed by her MD at the University of Toronto. She completed her residency in General Surgery at Dalhousie University in Halifax. Following this, she returned to Toronto to complete a clinical fellowship in colorectal surgery and an MSc from the Ontario Institute for Studies in Education at the University of Toronto. Her research interests and academic focus lie in the assessment of technical competence and the evaluation of advanced technical skills. Dr. de Montbrun has been working with both the American

Society of Colon and Rectal Surgeons and the American Board of Colon and Rectal Surgery to develop an objective structured assessment of technical skill for colorectal graduates.

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



Karen Devon

The Division of General Surgery at Women's College Hospital welcomes **Karen Devon**, an Endocrine and Thyroid Surgeon with an interest in Medical Ethics and Education. After receiving her MDCM at McGill University Dr. Devon entered the General Surgery Training Programme and the Surgeon Scientist Programme here at the University of Toronto. She was awarded her MSc in Clinical Epidemiology in 2008 and her FRCSC in General Surgery in 2010. Karen then completed 6 months of postgraduate training in Breast Surgical Oncology at UHN, followed by a Clinical Fellowship in Endocrine Surgery at the University of Chicago. This Fellowship included one month in the Philippines studying the surgical treatment of goitre. Additionally, Karen completed a Surgical Ethics Fellowship at the MacLean Center for Clinical Ethics at the University of Chicago. Presently, Karen is enrolled in the Education Scholar Programme at the Centre for Faculty Development and Education at the University of Toronto. Karen has a primary appointment at Women's College Hospital and an Associate Staff Appointment at UHN, where she will also have a clinical presence.

Karen may be reached at Women's College Hospital, 2nd Floor Room 264G, Tel: 416-323-6400 ext. 7352 Fax: 416-323-6308 or via email: Karen.Devon@wchospital.ca.

*John L Semple, Surgeon in Chief,
Women's College Hospital*



Dr. Robert Hamilton

The Department of Surgical Oncology, Division of Urology is pleased to welcome **Robert Hamilton** to the University Health Network, Princess Margaret Hospital. He completed medical school and urology residency at the University of Toronto. During residency, he earned a Masters of Public

Health (MPH) from the University of North Carolina at Chapel Hill and completed a research fellowship at Duke University. Before joining the Faculty, he completed a fellowship in Urologic Oncology at Memorial Sloan-Kettering Cancer Center in New York City.

His clinical practice encompasses all genitourinary malignancies, with special interest in prostate and testis cancer. His research interests focus on epidemiology and biomarkers in predicting risk and progression of these cancers. He has helped characterize the role of statin medications in prostate cancer primary and secondary prevention. He is working towards understanding mechanisms of prevention, and personalizing prevention using genetic markers.

Robert is married to Catherine Varner, a staff physician in the Division of Emergency Medicine at Mt. Sinai Hospital. Robert and Catherine are expecting their first child in the spring.

*Neil Fleshner,
Chair, Division of Urology*

The Division of Neurosurgery is pleased to welcome **Paul Kongkham** to the Department of Surgery. Paul obtained his MD at the University of Toronto in 2001, following which he entered the Neurosurgical residency program here at the University of Toronto.

During residency Paul enrolled in the Surgeon Scientist Programme, completing his PhD in the laboratory of Dr. James Rutka. After obtaining his Royal College Certificate in 2011, Paul traveled to Houston for a one-year clinical fellowship in Neurosurgical Oncology at the University of Texas MD Anderson Cancer Center.

Paul returns to Toronto, joining the faculty within the Division of Neurosurgery at the University Health



Paul Kongkham with his wife Dini Hui, and their daughters, Natalie and Naomi

Network as a Surgeon-Scientist. His clinical interest lies in the treatment of adult patients with primary and secondary intra-axial brain tumours, awake craniotomy, and image-guided surgery. His research will be focused on the study of epigenetic factors involved in the pathogenesis of primary glial tumours as well as CNS metastatic disease.

Paul is married to Dr. Dini Hui (Obstetrics, Sunnybrook), and together they have two daughters, Natalie (6) and Naomi (3).



Steve McCabe

Stefan Hofer is extremely happy to welcome **Steven J McCabe, MD, MSc** as Director of the Hand Program at the Toronto Western Hospital effective August 1st, 2012. Steven graduated from The University of Toronto Medical School in 1980 and trained in Plastic and Reconstructive

Surgery in London, Ontario. He worked with Dr. James Murray as a hand surgery fellow at Sunnybrook Health Science Center and the Workers' Compensation Board of Ontario. He further trained in hand and microsurgery at the Kleinert Institute in Louisville Kentucky for two years before coming back to work at Sunnybrook. While in Toronto he studied in the Clinical Epidemiology program at McMaster University finishing with a Master's of Science degree.

Dr. McCabe moved back to Kentucky to join the faculty at the University of Louisville and the Kleinert Institute. He has been the President of the American Society for Peripheral Nerve and the American Association for Hand

Surgery. In Louisville Dr. McCabe finished a certificate program in health professions education and had an appointment in the Department of Surgery and as a senior faculty member at the School of Public Health in the Department of Biostatistics where he taught research methodology and decision analysis to graduate students, clinical fellows, and young faculty. He earned the Distinguished Teaching Professor Award for this contribution.

Dr. McCabe's research interests include elucidation of the cause of carpal tunnel syndrome, clinical research on the diagnosis and management of carpal tunnel syndrome, and decision modeling as applied to the upper extremity. His clinical interests lie in upper extremity trauma, nerve compression, and arthritis. He has just returned from a Fulbright scholarship in Italy where he taught research methodology at the University of Siena.

As Director of the Hand Program, his goals are to transform the Program into a University wide collaborative group, to develop a program in hand transplantation, and to invigorate the academic activities of the Program. Dr. McCabe is married and has three children and is located on 2 East at the Toronto Western.

*Stefan Hofer,
Division of Plastic Surgery*

The Division of General Surgery is pleased to announce the recruitment of **Fayez Quereshey**, a graduate of the University of Toronto Medical School and General Surgery Training Program. During his General Surgery training Fayez entered the Surgeon Scientist Program and was awarded a Masters of



Fayez Quereshey

Business Administration (MBA) from the Joseph L. Rotman School of Management at the University of Toronto. He became a Fellow of the Royal College of Surgeons in 2010. Fayez subsequently completed Fellowship training in Surgical Oncology at the University of Toronto and Robotic Surgery Training in Hong Kong. His clinical practice is centered on minimally invasive surgery and colorectal surgical oncology. Fayez's research will focus on Operations Management and Process-level

Evaluation and Optimization of Outcomes.

Dr. Quereshy is based at Toronto Western Hospital: 8 Main Pavilion, Room 320, and he can be reached at 13-5553.

Lorne E. Rotstein,

Peter Crossgrove Chair in General Surgery



Tom Willett with his wife, Leah, and their children, Josie and Sam

The Division of Orthopaedic Surgery and Mount Sinai Hospital are pleased to welcome **Thomas Willett** as assistant professor and research scientist/engineer. Tom trained in mechanical engineering at Queen's University, receiving his BSc and MSc before pursuing a PhD in biomedical engineering at Dalhousie University. His research interests span biomechanics and mechanics of biomaterials in orthopaedics and the musculoskeletal system including: (a) improving materials and methods for intercalary defect reconstruction of long bones, (b) developing methods to produce irradiation-sterilized allograft bone with improved strength and toughness in order to avoid graft fracture in load-bearing applications, (c) developing a better understanding of the mechanisms that lead to pathologic fractures, especially in oncology patients who have received radiotherapy, (d) studying the effects of bone collagen modifications occurring in ageing and disease on the mechanical behaviour and fracture susceptibility of cortical bone and (e) mechanical testing of various orthopaedic implants and reconstruction techniques.

Ben Alman

Chair, Division of Orthopaedic Surgery

ANNOUNCEMENTS

IN MEMORIAM: DR. HUGH G. THOMSON

Dr. Hugh G. Thomson (Emeritus, Plastic and Reconstruction Surgery) passed away November 17, 2012 at the age of 82.



Hugh G. Thomson

Dr. Thomson received his MD degree from the University of Toronto in 1954 and completed his training in Plastic Surgery in the Gallie Program at the University of Toronto in 1960 before doing a preceptorship under the supervision of Dr. H. Campbell in 1961. He commenced his position at the Hospital for Sick Children in 1961, became a full Professor in 1982 and remained in active practice until 2000. During his academic career, he gave over 140 presentations and invited lectures and published 102 peer reviewed publications and book chapters.

Dr. Thomson contributed significantly to the Canadian Society of Plastic Surgery. He served as the Society President in 1980 and was instrumental in the development of the "Resident's Corner" which for most, is the focal point of the annual meeting. In addition to creating the Society logo, he should be recognized for establishing the "Beyond the Knife" segment of the Annual Canadian National Meeting. This recognizes the extracurricular activities of the members of our Society and once more typifies the thoughtful nature of this individual who feels that play is as crucial to well-being as work.

In 2009, Dr. Thomson was awarded the highest accolade by the Canadian Society of Plastic Surgeons, the Lifetime Achievement Award at its annual meeting in Kelowna, BC.

James Rutka

EARL BOGOCH RECOGNIZED WITH DISTINCTION BY THE JOURNAL OF HAND SURGERY



Earl Bogoch

A research team led by Earl Bogoch has been recognized by The Journal of Hand Surgery for publishing a scientific article that generated interest in the surgical community. This article entitled “NeuFlex and Swanson Metacarpophalangeal Implants for Rheumatoid Arthritis: Prospective, Randomized Controlled Clinical Trial”, by BG Escott, K Ronald, MGP Judd and ER Bogoch, was selected as one of the 25 most popular scientific articles in The Journal of Hand Surgery in 2010. The American Society for Surgery of the Hand (ASSH) has republished the article verbatim in their e-book, JHS Select, released in August 2012. JHS Select editor Michael R. Hausman, MD determined article popularity by evaluating the online click statistics of every JHS article that was published in 2010.

Dagmar Gross, Editorial Assistant for Dr Bogoch

NEW APPOINTMENTS

APPOINTMENT OF AVERY NATHENS AS SURGEON-IN-CHIEF, SUNNYBROOK HEALTH SCIENCES CENTRE



Avery Nathens

I am pleased to inform you that Avery Nathens has been appointed as the new Surgeon-in-Chief at Sunnybrook Health Sciences Centre effective September 17th, 2012. Avery follows Robin Richards in this position. Robin has served as Surgeon-in-Chief at Sunnybrook since September 2001. During his tenure, Dr. Richards has provided strong, and trusted leadership to an accomplished and diverse surgical faculty that has made many contributions to the University of

Toronto. For this, I would like to thank Robin sincerely for all of his efforts and dedication over 11 years.

Dr. Nathens has an international reputation in trauma research, education and patient care. He was a trauma surgeon and Director of Surgical Critical Care at Harborview Medical Center, Seattle, WA, where he was also the Director of the Acute Care Section of the Harborview Injury Prevention and Research Center.

Since 2006, he has been the Director of Trauma and the Division Head of General Surgery at St. Michael's Hospital in Toronto, where he held a Canada Research Chair in Systems of Trauma Care. He holds appointments in the Institute of Health Policy, Management and Evaluation and the Institute of Medical Sciences at the University of Toronto as well as the Institute for Clinical Evaluative Sciences. Dr. Nathens is currently a Professor in the Department of Surgery at the University of Toronto, who has published over 225 peer reviewed scientific papers, and has received numerous grants from national granting agencies.

Please help me congratulate Avery Nathens on his new appointment as Surgeon-in-Chief at Sunnybrook Health Sciences Centre!

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

APPOINTMENT OF CHRISTOPHER COMPEAU, CHIEF OF SURGERY, ST. JOSEPH'S HEALTH CENTRE



Christopher Compeau

St. Joseph's Health Centre is pleased to announce the appointment of Christopher Compeau as the new Chief of the Department of Surgery, St. Joseph's Health Centre, effective September 1, 2012. Christopher has been a member of the Department of Surgery since 1996. His recent leadership roles include serving as Head of General Surgery for the past 2 years, and Head of Thoracic Surgery for the past 5 years. Dr. Compeau graduated from medical school at the University of Toronto where he completed his residency. He has

received a number of prestigious awards and honours for excellence in both research and teaching. This appointment follows the successful completion of a 10 year term by Lloyd Smith whom we thank for all of his many contributions to the Department of Surgery.

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

RALPH GILBERT APPOINTED THE NEW CHIEF OF OTOLARYNGOLOGY & HEAD AND NECK SURGERY



Ralph Gilbert

For longer than virtually anyone can remember Pat Gullane has led UHN's Department of Otolaryngology & Head and Neck Surgery. During his term as Chief, UHN's Department has been recognized as a world leader—especially in the management of patients suffering from head and neck cancer. Pat will continue to work in our Head and Neck group at Princess Margaret and TGH. However he is stepping down as Chief after a remarkable leadership career.

Following an intensive search I am delighted to let you know that Ralph Gilbert will assume the position of Chief of the Department, effective November 1, 2012. Dr. Gilbert is a Professor in the Departments of Otolaryngology & Head and Neck Surgery and the Department of Surgery at the University of Toronto. He completed his undergraduate and surgical training at the University of Toronto in 1980. Dr. Gilbert did a post residency fellowship in Microvascular Surgery at the University of Linköping in Sweden. He is a Fellow of the Royal College of Surgeons of Canada.

Dr. Gilbert's academic focus is in head and neck oncology and reconstructive microsurgery. His current research is focused in clinical trials in Head and Neck Oncology and outcomes based research in Head and Neck with a particular focus on the outcomes related to reconstruction and function. He has delivered numerous international keynote presentations and published extensively on head and neck oncology and innovation in head and neck reconstruction. Most notably in 2010 he was invited along with seven other international leaders in head and neck oncology to be a

member of the International Federation of Head and Neck Oncology Society World Tour Event.

Dr Gilbert has served in a number of administrative roles in his career. He served as the inaugural Head of Surgical Oncology at Sunnybrook Health Science Centre from 1991-2001. At UHN he has served as Chair of the Medical Advisory Committee, Chair of the Cancer Committee at Princess Margaret Cancer Center and Deputy-Chief of Otolaryngology at UHN. Currently Dr Gilbert Chairs the Princess Margaret Cancer Center Quality Committee.

It is a tribute to Dr. Gullane that Dr. Gilbert considers Pat to be a mentor and role model. Please join me in congratulating both of these fine surgeons for the past, present and future success of our Otolaryngology Department.

*Robert S. Bell,
President and Chief Executive Officer,
University Health Network*

WORKSHOPS FOR MID-CAREER FACULTY

The "Next For U" events are luncheon sessions for Associate Professors and Senior Lecturers who started at the University anytime since 2004. These workshops are designed to provide mid-career faculty with the opportunity to meet key people at the University in an informal setting to discuss aspects of career development.

I would encourage the mid-career faculty to attend these luncheon events.

- * **Academic Leadership - 12pm-2pm - February 11, 2013**
- * **Grow Your Research Career - 12pm-2pm - March 19, 2013**

Faculty may register at: <http://www.provost.utoronto.ca/link/events/mcfevents/Next-for-u-2012-13.htm>

If you would like any further information on events or workshops for new or mid-career faculty, please contact academic.hr@utoronto.ca

*James T. Rutka
RS McLaughlin Professor and Chair*

Reaching Out to Pre-Clerkship Medical Students in Surgery

As many of you recall, last year the Surgery Exploration and Discovery (SEAD) program was launched as a summer program for pre-clerkship medical students at the University of Toronto interested in careers surgery. Details of this course and its success can be found by going to the following youtube link, and seeing the video that was made by Nada Gawad who organized the program with her medical student colleagues. <http://www.youtube.com/watch?v=oZjqe81OxvQ>

James T. Rutka
RS McLaughlin Professor and Chair

NEWSWORTHY ITEMS

James Rutka, the R.S. McLaughlin Chair of the Department of Surgery, has been featured in AANS Neurosurgeon (August 2012, Vol. 21, No. 3), published by the American Association of Neurological Surgeons. The excellent interview reflecting on his training and career-to-date can be accessed online at: <http://www.aansneurosurgeon.org/210312/7/1825>

MICHAEL CUSIMANO USES 3D PITUITARY ENDOSCOPE – FIRST IN CANADA

Michael Cusimano and his operating room team were featured on the front page of the Toronto Star <http://www.thestar.com/news/gta/article/1278688--3d-camera-for-brain-surgery-a-big-leap-forward> on the use of 3D endoscopes for pituitary surgery. Congratulations to Michael for bringing such positive attention to St Michael's Hospital and the University of Toronto for the advanced work that is being done with pituitary surgery.

ARTIC GRANT AWARDED TO BEST PRACTICES IN GENERAL SURGERY GROUP

The Best Practices in General Surgery Group led by Robin McLeod received an ARTIC (Adopting Research To Improve Care) grant from the Council of Academic Hospitals of Ontario (CAHO) to implement the Enhanced Recovery after Surgery (ERAS) guidelines. This grant is valued at over 1 million dollars over two years and will be used to implement the ERAS guidelines at eight of the hospitals within the University of Toronto system, as well as other academic hospitals across the province. Congratulations to Robin McLeod and colleagues for this tremendous achievement!

JTR

Taufik Valiante was featured in the video “Epilepsy and the Surgery Solution in Ontario” for his work with the Epilepsy Monitoring Unit at Toronto Western Hospital. http://www.uhn.ca/applications/iNews/ViewStory.aspx?s_id=2068

ERROR CORRECTION

We apologize for the omission of the Neurosurgery team name in the Hockey photo on page 19 in the previous issue. The text under the photo should have read: General Surgery, Neurosurgery, and Plastic Surgery Hockey Teams.



AWARDS/HONOURS/ ACCOMPLISHMENTS

Paulo Koeberle (Anatomy) was awarded tenure at the rank of Associate Professor in the Department of Surgery, the University of Toronto, effective July 1, 2012.

Sawata Deb (CardSurg) won the Vanier Canada Graduate Scholarship, which is offered to world-class doctoral students who demonstrate both leadership skills and a high standard of scholarly achievement in graduate studies in the social sciences, humanities, natural sciences, engineering, and health. The scholarship provides three years of funding and during this time Sas will work with Steve Fremes on a PhD thesis entitled: 'Patient and Operative Factors Affecting Short and Long-Term Graft Patency After CABG'.

Fuad Moussa (CardSurg) received his Masters Degree in Medical Education from the University of Dundee. Fuad pursued this degree while in clinical practice and submitting numerous funding proposals to investigate techniques in teaching cardiac surgery to residents and medical students.

Hugh Scully (CardSurg) is the first physician to be elected to Membership in the Canadian Motorsport Hall of Fame in 2000 "for outstanding contributions to prehospital care and safety in motorsport". He was also selected as the Chairman of the Canadian Motorsport Foundation Hall of Fame. Hugh has also been appointed to the new Advisory Committee on Injury Prevention and Control at the Royal College.

Subodh Verma (CardSurg) is the recipient of the 2013 Royal College Medal Award in Surgery. This award is given annually to one surgeon in Canada across all surgical disciplines who has demonstrated excellence as an academic surgeon and whose work has made a significant impact and resulted in a paradigm shift. Specifically, Subodh has been recognized for spearheading his research team to their recent success at identifying a novel role for the breast cancer genes BRCA1 and BRCA2 in the realm of cardiology and metabolism.

Subodh has recently been invited by the University of Ottawa Heart Institute Foundation to be its 2013 Visiting lecturer for the Anand and Saroj Aggarwal South Asian Heart Health Endowed Lectureship. This invitation recognizes Subodh's continuous clinical and research efforts to decipher the basis of why the South Asian ethnicity is an independent cardiovascular risk factor and how to appropriately risk stratify South Asian patients.

Subodh is also co-chair of the annual St Michael's Heart Valve Symposium (established 2013), Toronto Acute Coronary Syndrome Summit (established 2012) and the State of the Heart Symposium (established in 2010).

Tulin Cil, Carol-Anne Moulton and Lucas Murnaghan (GenSurg) received an Operating Grant from Physicians' Services Inc. Foundation for their work on "Visual imagery and mental rehearsal in surgery."

Anna Gagliardi (GenSurg), **O Bhattacharyya** and **M Brouwers** received a one year Canadian Institutes of Health Research grant for their work on "Harmonizing and prioritizing implementability research with Canadian guideline developers, implementers and researchers".

Anna Gagliardi (GenSurg), **M Umoquit, F Webster, MC Brouwers, N Baxter, A Finelli,** and **S. Gallinger** received a one year grant from CCO-OICR Health Services Research Program – Knowledge Translation Research Network for the project entitled "How does context influence knowledge exchange?: an ethnographic study to identify strategies for improving researcher-research user collaboration".

Anna Gagliardi (GenSurg), **T Stuart-McEwan, J Gilbert, M Dobrow, J Hoch, FC Wright, MC Brouwers, E Meertens, M. Kaan, B Campbell, M McCready, T Waddell, S McKnight, J. Lacourciere, C McFadyen, M Berry, S Kaune,** and **G. Doiron** received a 3 year grant from the Canadian Breast Cancer Foundation – Ontario Chapter for their work entitled "Enhancing inter-professional collaborative care for cancer: Evaluation of diagnostic assessment programs".

Anand Ghanekar (GenSurg) and co-PI **John Dick** were awarded a 2-year grant from the Cancer Research Society for their project entitled “Identification and Characterization of Tumor-Initiating Cells in Primary Human Hepatocellular Carcinoma.”

Wolfgang M. Kuebler (GenSurg) received a CIHR grant for his work on “Role of CFTR and sphingolipids in hypoxic pulmonary vasoconstriction.”

Andrea McCart (GenSurg) received an Innovation Grant from the Canadian Cancer Society for her work “Designing a next generation oncolytic vaccinia virus using high throughput functional screening”.

Robin McLeod (GenSurg) was elected to Fellowship in the Canadian Academy of Health Sciences (CAHS). Fellows of the Academy are elected on the basis of their demonstrated leadership, creativity, distinctive competencies and commitment to advance academic health sciences. Membership is considered one of the highest honours for members of the Canadian health sciences community.

Robin also received approval for her project “Implementing an enhanced recovery after surgery guideline to optimize outcome following colorectal surgery” from the Council of Academic Hospitals of Ontario.

Robert Mustard (GenSurg) was the recipient of the Waddell Mentorship Award which recognizes surgeons with excellent character who serve as mentors for students, residents and Junior Faculty.



Avery Nathens (GenSurg) has been re-elected to the Board of Governors of the American College of Surgeons (ACS) as a Governor-at-Large representing the ACS Fellows in Ontario, 2012-2015.

Allan Okrainec (GenSurg) received an Association for Surgical Education (ASE) Center for Excellence in Surgical Education (CESERT) grant for his project entitled “The Reliability of Remote Fundamentals of Laparoscopic Surgery Certification Using Web-Based Technology”.

Allan also received funding for his submission entitled “The Reliability of Remote FLS Certification Using Web-Based Technology” from the ASE Foundation.

PGY1 **Chris Ahuja** (NeurSurg) has been elected to the General Council of the Professional Association of Interns and Residents of Ontario (PAIRO). In this role, he will work to effect changes that achieve optimal training for residents while providing the best patient care possible.

David Cadotte (NeurSurg), under the mentorship of Michael Fehlings received funding from CIHR for his work “Characterizing the spinal cord neurovascular response to sensory stimuli using functional optical coherence tomography.”

David Cadotte also received the Synthesis Award for Resident Research on Spinal Cord and Spinal Column Injury, presented at the 62nd Annual Meeting of the Congress of Neurological Surgeons.

St. Michael’s Hospital fellow **Antonio Di Ieva** (NeurSurg) has been awarded First Prize for Research in Neuroscience at the 61st Congress of the Italian Society for Neurosurgery (SINch), in Rimini, Italy for his project entitled “Quantitative and qualitative analysis of the microvasculature in normal brain parenchyma and brain gliomas: Comparison of the histological results with the ultra-high field (7 Tesla) MR findings”.

Michael Fehlings (NeurSurg) received an Operating Grant from Physicians’ Services Inc. Foundation for his work on “Enhancing recovery following cervical spinal cord injury by modulating inflammation with IgG.”

Michael Fehlings was also elected as Chairperson of AO Spine North America for a 3 year term commencing August 1, 2013.

Michael was appointed as a 2012 Active Fellow of the Scoliosis Research Society.

His paper entitled “Anterior versus posterior surgical approaches to treat cervical spondylotic myelopathy: Outcomes of the prospective multicenter AOSpine North America CSM study in 278 patients” was ranked Best Paper at the 2012 NASS meeting in Dallas, TX.

Mojgan Hodaie (NeurSurg) was invited to be part of the Scientific Committee of the Society for the Advancement of Science in Africa at the University of Limpopo, South Africa.

PGY4 **George Ibrahim** (NeurSurg) received the KJR Wightman Award for Scholarship in Ethics from the Royal College of Physicians and Surgeons of Canada for his work on ethical issues in surgical decision-making in pediatric epilepsy surgery.

George Ibrahim also received the Bisby Prize from the Canadian Institutes of Health Research (CIHR), for ranking first among all applicants in the CIHR Fall 2011 Health Professional Awards fellowship competition.

Abhaya Kulkarni (NeurSurg) has been elected to membership in the Society for Neurological Surgeons. He joins Drs. Mark Bernstein, Michael Fehlings, Andres Lozano, Loch Macdonald, James Rutka and Michael Schwartz as the Department’s newest member of this prestigious society.

Andres Lozano (NeurSurg) was elected to Fellowship in the Canadian Academy of Health Sciences (CAHS). Fellows of the Academy are elected on the basis of their demonstrated leadership, creativity, distinctive competences and commitment to advance academic health sciences. Membership is considered one of the highest honours for members of the Canadian health sciences community.

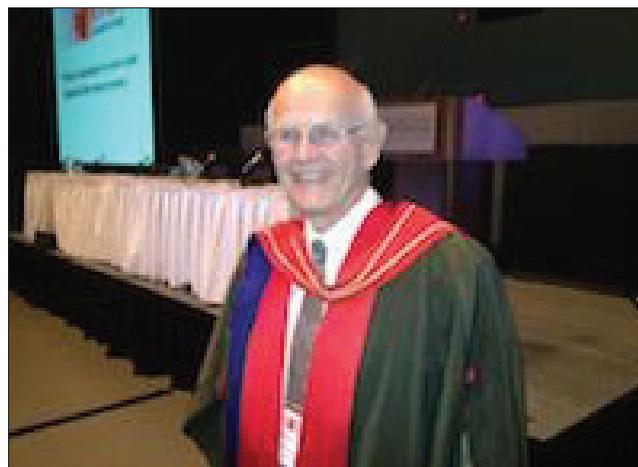
Andres Lozano has been awarded a 5-year, \$3.39M grant from the National Institutes of Health (NIH) for the project entitled “Deep Brain Stimulation for Alzheimer’s Disease”.

Andres also received the 2012 ICGP Senior Investigator Award from the International College of Geriatric Psychoneuropharmacology in recognition of important contributions to novel neurosurgical interventions for neuropsychiatric and neurodegenerative diseases, as well as mentorship and leadership in the field.

Andres is the recipient of the 2012 Olivecrona Medal from the Karolinska Institutet. The institute honors an international neurosurgeon annually for his contribution to brain and spinal cord surgery or research. Andres is recognized internationally for his work on Deep Brain Stimulation, with which his group has pioneered treatment for several disorders including depression, Huntington’s disease and Alzheimer’s disease.

Arne Mehrkens (NeurSurg), a research fellow with Mark Erwin and Michael Fehlings, has received a North American Spine Society Young Investigator Award for the project entitled “Mechanistic Determination of Notochordal Cell-Induced Anti-Apoptotic Signaling in Human Nucleus Pulposus Cells”.

Jim Rutka (NeurSurg) is the recipient of the 2012 Abhijit Guha Award and Lecture selected by the Society for Neuro-Oncology and the Section on Tumors of the AANS/CNS.



Charles Tator wearing the actual University robe worn by Dr. Gallie in the 1940’s

This new award seeks to recognize an investigator that emulates the qualities demonstrated by Ab Guha during his career, including being an outstanding clinician with an active research laboratory and having an excellent track record of training and mentoring. Jim delivered the 1st Annual Abhijit Guha Lecture at the 2012 SNO meeting in Washington, DC, with Dr. Guha's wife, son and daughter taking part as invited guests of the SNO to present the inaugural award to Dr. Rutka.

Jim Rutka also served as President of the American Academy of Neurological Surgery at its annual meeting October 17-21, Chatham MA. His Presidential Address was entitled: William S Keith and the Founder Effect.

Charles Tator (NeurSurg) is the recipient of this year's Gallie Award Lecture by The Royal College of Physicians and Surgeons of Canada at the Canadian Surgery Forum in Calgary. In the attached photo, Dr. Tator is seen wearing the actual University robe worn by Dr. Gallie in the 1940's!

Michael Tymianski (NeurSurg) received the Paul Morley Mentorship Award from the Canadian Stroke Network, which recognizes the efforts of others who, like Paul, have made significant contributions to the training of new stroke researchers in Canada.

PGY4 resident **Shobhan Vachhrajani** (NeurSurg) was appointed as the Vice-Chair of the Clinical Practice Guidelines Committee of the Canadian Neurological Sciences Federation commencing on July 1, 2012. In this new role, Shobhan will contribute to the review and endorsement of evidence-based clinical practice guidelines for the entire Canadian neurosciences community. This will be a valuable contribution to academic neurosciences and to the care of our patients.

Gelareh Zadeh (NeurSurg) was successful at getting one of the only three Terry Fox New Investigator awards given out this year across North America for her research work on human brain tumours entitled "Exploring Novel Mechanisms of Tumor Vascularization in Malignant Brain Tumors".

Gelareh was also appointed to the Research Committee of North American Skull Base Society.

Gelareh presented the Top Rated Abstract and was given an Award for Excellence in Translational Research at the Society of NeuroOncology Annual Meeting.

Ben Alman (OrthoSurg) received a grant from the U.S. Department of Defense Neurofibromatosis Research Program of the Office of the Congressionally Directed Medical Research Programs (CDMRP) for his project entitled "Discovery of novel drugs to improve bone health in Neurofibromatosis Type-1: The Wnt/ β -catenin pathway in fracture repair and pseudarthrosis.

Tim Daniels (OrthoSurg) received the 2012 Roger A. Mann Award by the American Orthopaedic Foot & Ankle Society (AOFAS) for his manuscript entitled "COFAS Multicenter Study Comparing Total Ankle Replacement and Ankle Fusion: Mid-Term Results". The Mann Award is given for the best clinical paper accepted for presentation at the AOFAS Annual Meeting.

Aaron Nauth (OrthoSurg) won the Founders' Medal from the Canadian Orthopaedic Research Society for Best Basic Science presentation titled "Fracture Healing with Endothelial Progenitor Cells in a Bone Defect Model: A MicroCT and Biomechanical Comparison with Mesenchymal Stem Cells (MSCs)".

Aaron won the 2012 Orthopaedic Trauma Association Clinical Research Grant for his work: "Isolated locked compression plating versus cable plating and strut allografts with cerclage wiring for Vancouver B1 periprosthetic femoral fractures: A Randomized Controlled Trial".

Aaron also won the 2012 Orthopaedic Trauma Association Basic Science Research Grant for "A comparison of Endothelial Progenitor Cell -Based Gene Therapy versus Mesenchymal Stem Cell-Based Gene Therapy for the Healing of Bone Defects".

Aaron also won the 2012 AO Foundation Start-Up Clinical Research Grant for his study “Reamer Irrigator Aspirator versus Autogenous Iliac Crest Bone Graft for the Treatment of Non-Unions: A Randomized, Prospective, Multi-Centre Clinical Trial”.

Ranil Sonnadara and the Surgical Skills lab team were the recipients of the 2013 Association for Surgical Education Award for Excellence in Innovation, for the Toronto Orthopaedic Boot Camp project. This award is given annually to a group of individuals who have demonstrated exemplary performance in surgical education with the intent to recognize novel ideas and/or methods for improving teaching and learning.

Shaf Keshavjee (ThorSurg) has been appointed as Vice Chair of Surgical Innovation in the Department of Surgery. In this new position, Shaf will serve on the Executive Committee, and promote surgical innovation across all our fully affiliated and community affiliated hospitals.

Ren-Ke Li (ThorSurg) received a Queen Elizabeth II Diamond Jubilee Award. This medal is awarded to those who have made significant contributions to their community or to Canada during their careers.

Thomas Waddell (ThorSurg) is the recipient of 2012 Ross Fleming Surgical Educator Award. This award is presented by the Surgeon -in- Chief at UHN for excellence in Surgical Education.

Bharati Bapat (UrolSurg) recently received an award from the GAP Movember group for her project entitled “Global Urine Biomarker Project”. This award will utilize the biobank specimens as part of a global network of prostate biomarker discovery.

Laurence Klotz, Neil Fleshner, and Michael Jewett (UrolSurg) received the Queen’s Jubilee Medal, given by the Government of Canada in honour of the Queen’s Jubilee to recognize meritorious public service.



Wayne Johnston

Alex Zlotta (UrolSurg) received a European Association of Urology Platinum Award for dedication and innovation in urological research and practice.

K. Wayne Johnston (VascSurg) has recently joined a distinguished group of physicians receiving the 2011-2012 Pioneers in Performance Award - an annual recognition sponsored by W. L. Gore & Associates for physicians demonstrating an unrelenting dedication to advancing endovascular therapy and minimally invasive treatment options for patients worldwide.

SURGICAL ETHICS COURSE

The University of Toronto Department of Surgery will present a one day Surgical Ethics Course at the Rim Rock Hotel in Banff, Alberta on May 28, 2013, immediately preceding the Canadian Bioethics Society annual meeting. The course will focus on surgical Innovation, life sustaining treatment, and recent developments in organ donation.

For information on registration contact martin.mckneally@utoronto.ca

The Deadline for the next Surgery Newsletter is February 28, 2013. All members and friends of the Department are invited to submit items, articles, pictures, ideas or announcements.

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