UNIVERSITY OF TORONTO

The Surgical Spotlight

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

EVENTS AND STORIES FROM SPRING AND SUMMER 2017



Welcoming Syrian Migrants



Zane Cohen (right) with Nour and Omya Abbas and their sons Amr (12) and Abdul-Br (16)

The Syrian migrant project started with a call to Carol Swallow from Zane Cohen: "Would the Division of General Surgery be interested in sponsoring a Syrian family?". Carol gave enthusiastic approval. Carol and Zane then sent a note to members of the Division, including both the staff and the residents, listing the requirements as defined by "Lifeline Syria", a non-governmental organization (NGO):

- 1. A committed group
- 2. \$27,000 to support the incoming family for one year.

Lifeline Syria was launched in June of 2015 and incorporated as a not-forprofit in September of 2015 in response to the ongoing humanitarian refugee crisis, to assist sponsor groups to welcome and resettle Syrian refugees as permanent residents in the GTA. The organization is committed to helping Syrian refugees settle in Canada.



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Carol and Zane polled the Division and received an immediate positive response. Some did raise the question whether it was appropriate to bring in more people when we have indigenous and homeless people already here, but a Committee formed quickly and began making contributions, mostly small donations. The Division quickly raised \$35,000. Zane Cohen describes the preparations:

"The next step was to break up into specific task forces to organize an apartment, food, look after language issues, and arrange for transportation and guidance of the family around the city. The residents held a raffle for tickets to a Raptors game, a Jays game, and a Leafs game. These tickets were provided by Maple Leafs co-owner Larry Tannenbaum, a member of the Mount Sinai Hospital board. Lifeline Syria gave the group a choice between a government sponsored family, or a family with a Syrian relative here in Canada. We chose the latter. The mother of our sponsored family is the sister of a Syrian Canadian in Toronto. The father works in Human Relations in Syria. There are 2 boys ages 12 and 10. The sponsoring brother worked for Rogers on wireless systems. Everyone wanted to know the story of the family. They were bombed out of their home, fled to Turkey, and then came to Toronto on February 28, 2017.

Zane contacted the philanthropic Latner family who helped by providing an apartment on Dunfield Ave. near Yonge and Eglinton. "The Committee organized donations of furnishings for the apartment. Shiva Jayaraman provided a bedroom set. Jim and Mari Rutka provided plates, place settings and chairs. Furniture was moved at no charge by Polanski movers. It was not necessary to buy anything except for a couch. Everything else was contributed by members of the Division. Sav Brar provided room for collecting the donated furniture and appliances at his home. Everybody, especially residents, picked up and helped store the donations. Resident Rod Turzer provided a pick-up truck.

"The next step is to settle them in", says Zane. "We have great organization. Carol's assistant Faryal Mehboob was an organizing force. Lifeline Syria will direct the new arrivals to establish channels for English classes, school and emergency needs. These and other private sponsors will take Justin Trudeau's promise of 25,000 placements to well over 30,000 just within the Toronto area.

"The one year contract with the Latner family expired and they did not arrive until one year later so the apartment was left barren with all the furnishings. The Latner family have renewed this for another year on a pro-bono and that is quite generous of them to do that. They finally arrived at Pearson on February the 28th. I picked them up along with Hala Muadi, one of our surgical residents. There was an incredible response, particularly from our residents, eight of whom speak Arabic, as well as from Najma Ahmed. I also had Salah Metwaly, my IT person at our Digestive Diseases Centre meet them. We had three cars there. They had 12 suitcases and they were unbelievably grateful, crying, and very relieved. It was quite an emotional scene at the airport.

"We took them to their apartment and we have worked with them, a number of us, on various aspects. First and foremost, we took them shopping. Najma Ahmed organized a Halal dinner and we found them a community centre where they could pray. Importantly, the parents had full assessments done by one of the Toronto Community Centres that placed them in an English as a Second Language school at Eglinton and Yonge, nearby to where they live. The mother has some English background and in fact, in school she took some courses in English literature. The father speaks less English. They have been put at level 5 and 4 respectively and they are in school every day and they have to get up to a level 8 before we can really try to find a job for them.

"As far as the children are concerned, they are 12 and 16, both boys. The 12 year old was placed at Hodgson Public School and he integrated almost immediately and has a ton of friends already. It was a different story for the older boy who needed to be assessed as far as his skills were concerned. His home school was chosen to be Forest Hill but they didn't have a specialized program for him to catch up and, therefore, for the next few months he goes to George Harvey, which is at Keele and Eglinton. They are fully aware of the transportation system in the city. When they arrived they were given permanent residence status as well as federal health cards and have already applied for OHIP. They have opened a bank account. We do give them a certain allotment each month and they have a credit card as well. They have a television that they are watching for English language as well as learning from the internet. In my opinion, they are doing very well and the kids in particular, are being integrated into the system. The parents are a little more challenged. They need their language skills improved. I



think that the father feels marginalized because he does not yet have a job, but hopefully that will come.

"So, that is exactly where we are. I have been keeping in fairly close touch with them. Their Canadian family has been keeping in close touch with them and our residents, particularly those who speak Arabic, have been wonderful and have been calling to see them and also to give them advice. Most recently one of our residents gave them advice with regard to a minor medical problem. They do not have a family physician yet but we are working on that."

Zane helped organize a similar charitable drive by the Division of General Surgery at Toronto General when he was on the staff there in the late '70s and early '80s. They brought in 4 Vietnam boat people, using donations and matching government funds. The 4 people they brought in were provided with a house in the Danforth area. "The father of the family got a job picking worms for fisheries, wearing a headlight and crawling around at night in the London area. He was well paid and we got lots of donations. I kept in touch with the family. The Syrian project was a similar experience, this time at the end of my career. It is easy because doctors are altruistic. They only need to see the need and they respond. My wife and I later went to Vietnam for 2 weeks and saw what life was like there for ourselves. We enjoy helping people. I can't answer the question Why we should do this, when there are so many homeless and underresourced indigenous and others in Canada?, but we have to start somewhere. This is a very appealing and fun project that gets us out of the medical rut. The organizing committee can be named, but Carol and I agreed that we will not name donors and their donations.

"This was a big project with lots of work, lots of fun, a wonderful communal spirit, giving enthusiasm, time, money and energy. Many of the residents come from immigrant families who were happy to be giving back."

M.M.

Paying Tribute to Dr. Martin McKneally



James Rutka

With this issue of the *Spotlight*, we will be witnessing the final editorial written by Dr. Martin McKneally, and celebrating all the issues over which he has presided since his term as Editor-in-Chief began in 2002. Over the past 15 years, Dr. McKneally has continued to improve upon the manner in which we disseminate news and information

to members of our faculty in the Department of Surgery and to our Alumni. The Spotlight began as a rather simple project with just a few pages of information that was distributed quarterly; it has now turned into a very robust and highly professional online and print periodical which summarizes in detail the progress made in the Department of Surgery.

As you know, each issue of *Spotlight* has a lead article with timely information for faculty. There are also descriptions of events which are highlights in the Department of Surgery, including Gallie Day, various University Rounds and lectures, promotions, new appointments, awards, and of course the Editor's column.

Dr. McKneally has been more than a beacon of light for the Department of Surgery through his many communications and editorials. For example, in the summer/fall issue 2016, he discussed the newly designated job description of Surgeon-Ethicist, in the Department of Surgery – a job description he was instrumental in creating along with his colleagues. Dr McKneally was also instrumental in establishing the Balfour Lecture in Surgical Ethics, an annual lecture now in its fourth year. We are indeed pleased that Dr. McKneally could be named the third annual Balfour Lecturer last year.



Martin McKneally with the Joe Wilder painting of contemplation before surgery

Dr. McKneally did his residency training in surgery at the University of Minnesota where he also obtained a PhD in Immunology. He subsequently became Head of Thoracic Surgery at Albany Medical College. Then, an opportunity arose for him and his family at the University of Toronto in 1990, and he came to be the Division Chair of this specialty.

Over the years, he has developed very strong interests in Surgical Bioethics, and has received graduate training in this area from the University of Chicago, and the University of Toronto's Joint Centre for Bio Ethics.

Not only have I been impressed with his humanism in surgery, but his kind, caring, and effective teaching style, which I know has benefited numerous faculty members in our Department.

Please help me in thanking and congratulating Dr. McKneally for his many contributions to the Division of Thoracic Surgery, Department of Surgery, and his role as Editor-in-Chief of the *Surgical Spotlight*. Our history since 2002 has been written, in no small part, because of his tremendous efforts and attention to detail. We wish Dr. McKneally, and his lovely wife Deborah well as they transition their homes and future careers to Boston, Massachussetts where they will be closer to their children and grandchildren.

James Rutka

THIRD ANNUAL BALFOUR LECTURE

THE STORY OF SURGICAL ETHICS



Donald Church Balfour

Donald Church Balfour, 1882 – 1963, received his MD from the University of Toronto, interned at Hamilton City Hospital, and studied surgery at the Mayo Clinic. His father was president of the Balfour Tool Company. Donald devised and intro-

duced numerous instruments – an operating table, operating room mirror for teaching, an abdominal retractor. He married Carrie, Will Mayo's daughter, and spent his distinguished career at the Mayo Clinic. He became Chief of General Surgery and President of the Mayo Foundation for Education and Research. He received many honors and awards as a surgical educator and scholar. His family endowed the annual Balfour Lecture that celebrates his memory and brings distinguished scholars in Surgical Ethics to teach in our Department.

This year's Balfour Lecture in Surgical Ethics celebrated the outstanding career of Dr. Martin McKneally. Martin has been a contributor to surgery and surgical ethics for several decades both locally and worldwide. In the engaging style of a master storyteller Martin addressed several themes that are unique to surgery: the definition of surgical ethics, surgical innovation, rethinking surgical consent and learning surgical ethics.

He suggested that the surgical ethics is founded on "trustworthiness" which is defined by both competence and commitment. Both of these have a number of components but strikingly, "the immediacy of the surgeon-patient relationship distinguishes it from other caregiving experience". This trust leads one to question when it is okay to try something new, and as Martin adds "on someone's mother". He discussed his journey through this and other questions leading to some of his landmark



Martin McKneally is celebrated at Balfour Lecture L-R: Ryan Snelgrove, Karan Devon, Martin McKneally, Mark Camp, Tieghan Killackey and Annie Fecteau

work on innovation. This work has provided guidance on the appropriate oversight for innovations and has been implemented very practically in our system, demonstrating the way in which one can begin with thinking about ethics and end in practical patient-centered solutions. He also helped us to understand the sometimes blurry boundary between research and innovation. Trust also leads us to reconsider consent, not as a list of 'risks, benefits and alternatives' but as a tool to garner the trust of surgical patients. He enlightened us on some work regarding high-risk surgery, and the patient's perspective of what is important to them. This was linked to some of the problems encountered by clinicians who would like to discuss the challenging issue of life-sustaining treatment after surgery. He continued by raising the questions and challenging age-old assumptions about who should be having certain types of conversations and in what context.

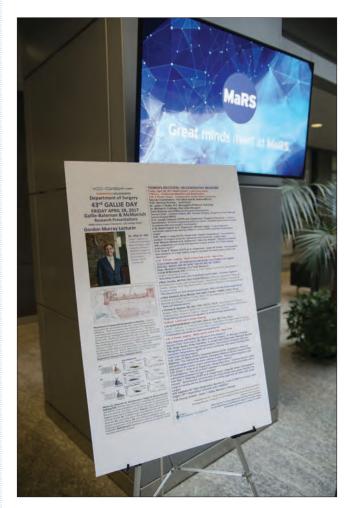
Finally, he highlighted the increasing importance of a focus on ethics training as an integral part of surgical training and paid tribute to old and new colleague and mentors, and of course his "managing partner Deborah McKneally and beloved family. We were delighted to have Martin be the third Balfour lecturer. He, as he always does, has raised the bar.

Karen Devon, Assistant Professor Division of General Surgery, University of Toronto

Celebrating Clinical and Basic Science at Gallie Day 2017

Each year we strive to establish a welcome agenda for staff, students, residents and guest speakers, with a theme that will attract all. We are very happy with the triumphant success of the 43rd Gallie Day, which complemented the brilliance in the Department of Surgery at the University of Toronto.

James Rutka and Michael Fehlings reflected on the major medical, scientific, social, and political changes that have occurred over the past 43 years. The theme of this year's Gallie Day was "*Transplantation / Regenerative Medicine*".



Gallie Day



Transplantation/Regenerative Medicine symposium "Generative Medicine Solutions for Human Disease: Where Are We Now: Where Are We Going" was chaired by Michael G. Fehlings, and featured 4 incomparable speakers. Cindi M Morshead (PhD; Professor & Chair, Division of Anatomy, Department of Surgery, University of Toronto) began the symposium with her thought-provoking talk on "Activating resident stem cells to promote neural repair: A stroke of genius".

Marc Jeschke [MD, PhD, FACS, FCCM, FRCSC; Professor, Divisions of Plastic & Reconstructive Surgery and General Surgery, Department of Surgery, University of Toronto; Director Ross Tilley Burn Centre, Chair in Burn Research, Sunnybrook Health Sciences Centrel continued with an exciting talk on "The future of burn and complex wound care: Stem cell and tissue engineering". This was followed by Peter Zandstra [BEng (McGill), PhD (UBC), FAAAS, FAIMBE, FRSC, PEng; Professor & Canada Research Chair, Stem Cell Bioengineering, Centre for Cellular & Biomolecular Research, University of Toronto] with his amazing talk on "Stem cell bio-



Michael Fehlings and Cindi Morshead



Michael Fehlings with Rosalind Bradford, Allan Kirk and James Rutka

engineering". This couldn't be wrapped better than to finish the symposium with **Thomas K. Waddell** (MD, MSc, PhD, FRCSC, FACS; Head, Division of Thoracic Surgery, UHN; Thomson Family Chair in Translational Research; Professor and Pearson-Ginsberg Chair, Division of Thoracic Surgery; University of Toronto) with his astounding talk on "Engineering (mechanical and genetic) to advance lung regeneration".

This year's **Gordon Murray Lecturer** was **Allan D. Kirk, MD, PhD, FACS** (David C. Sabiston, Jr. Professor and Chairman, Department of Surgery Duke University School of Medicine; Surgeon-in-Chief, Duke University Health System, Durham, NC USA). His lecture was entitled, "Costimulation blockade for organ transplantation". One of the articles Dr. Kirk spoke about was "More surgeons must start doing basic science – They say they don't have time or incentive to do research – and that's dangerous for translational medicine" https://www.nature.com/news/more-surgeons-must-start-doing-basic-science-1.21874.

We had a record number of abstracts submitted by trainees working with our faculty. There were 17 platform presentation groups with a total of 81 e-poster presentations. The Gallie Bateman Awards (for Surgeon Scientist Training Program participants) and the McMurrich Awards (for any trainee working with a member of the faculty of surgery) were judged for both platform presentations and poster presentations. The range of assorted topics and researchers highlighted the wide-ranging and immensely high quality research being conducted throughout our Department.

The 10 remarkable oral presentations were scored so closely that they could have all been awardees. The



Photo: James Byrne, Joseph Catapano, Dale Podolsky and Michael Fehlings

quality of the research and presentations as a result of the research were exceptional. Surgeon Scientist Training Program (SSTP) residents are awarded the Gallie Bateman prizes for best oral presentation and e-poster presentation. First prize oral presentation awardee was James P. Byrne [Stephanie Mason (SSTP), (Supervisor: Avery B. Nathens)] for his outstanding talk on "The relationship between Emergency Medical Service response time and prehospital death from motor vehicle crashes: Rural-urban disparities and implications for trauma system performance improvement". Joseph Catapano (SSTP), Simon Fung, Asim Ali, Cecilia Jobst, Douglas Cheyne, Ronald Zuker, Gregory Borschel (Supervisor: Gregory H. Borschel) received second prize for his remarkable talk on "Corneal neurotization: A novel surgical procedure to restore sensation and preserve vision in patients with neurotrophic keratopathy". Third prize was received by Dale Podolsky (SSTP), David Fisher, Karen Wong, Thomas Looi, James Drake, Christopher Forrest (Supervisors: James Drake, Christopher Forrest) for his excellent presentation on "Development and evaluation of a high-fidelity cleft palate simulator for surgical training and for development of a robotic approach to infant cleft palate surgery". It is a true reflection on the great work our SSTP trainees have done while in the Program, since they will be going back to clinic in July 2017 and can boast that they were awarded the Gallie-Bateman Award in their final month before finishing.

SSTP Resident E-Poster presentation 1st prize for was awarded to **Sean A. Crawford (SSTP)** [Ryan M. Sanford, Matthew G. Doyle, Naomi Eisenberg, Mark Wheatcroft, Cristina H. Amon, Thomas L. Forbes (Supervisor)], for his presentation entitled "*Iliac artery torsion and calcifica*-

tion predicts endovascular device rotation and poor patient outcomes in advanced EVAR". Christopher J.D. Wallis (SSTP) [David Naimark, Robert K. Nam (Supervisor)] received second prize for his research entitled, "Adjuvant versus salvage radiotherapy for patients with adverse pathological findings radical prostatectomy: A decision analysis". 3rd prize was bestowed on Mohamad A. Hussain (SSTP) [Muhammad Mamdani, Jack V. Tu, Gustavo Saposnik, Konrad Salata (SSTP), Deepak L. Bhatt, Subodh Verma, Mohammed Al-Omran (Supervisor)] for his presentation entitled, "Effect of operator specialty on the outcomes of carotid artery revascularization".

Department of Surgery at the University of Toronto honoured Bryce Taylor at the 2017 Gallie Day gala by establishing the Bryce Taylor Mentorship Award. This award recognizes those faculty members who emulate the traits that Dr. Taylor exhibited throughout his long and illustrious career at the University of Toronto. Dr. Bryce Taylor, former Surgeon in Chief at the University Health Network and Associate Chair in the Department of Surgery, has been described as being a naturally gifted clinical surgeon and educator with a reputation for mentoring students, residents, fellows and, in particular, faculty. Dr. Taylor was known for providing sage advice and counsel to countless medical professionals. He was considered, by all accounts, to be the quintessential role model for professionalism in surgery and trained generations of surgeons. The inaugural recipient of the Bryce R. Taylor Mentorship Award was Paul Greig.



Ori Rotstein, Paul Greig and Bryce Taylor



Robert Qaqish, Michael Fehlings-, Stephanie W.Tobin, Vivian Y. Szeto, Sergio Acuna

The McMurrich Awards are presented to research trainees who are not in the Surgeon Scientist Training Program. The oral presentations were brilliant. The firstplace award was won by Sergio Acuna [Rinku Sutradhar, S. Joseph Kim, (Supervisor: Nancy N. Baxter)] for his superb talk on "Malignancy and solid organ transplantation: Outcomes of recipients with pre-transplant malignancies, uptake of cancer screening, and cancer mortality after solid organ transplantation". The oral presentations were extraordinarily deep-rooted. We had a three-way tie for 2nd prize. Vivian Y. Szeto [Rui Liu, Haitao Wang, Baofeng Xu, Tianru Jin, Edoardo Mannucci, Zhong-Ping Feng (Supervisor: Hong-Shuo Sun)] for her talk on "Cerebrovascular safety of sulfonylureas: The role of KATP channels in neuroprotection and stroke risk in sulfonylurea treatment of Type 2 diabetes". Stephanie Wales Tobin [Supervisor: Ren-Ke Li] for her address on "Loss of ERK1/2 activity in BAV triggers AP-1 degradation and aortic wall instability". Robert Qaqish [Yui Watanabe, Marcos Galasso, Cara Summers, Aadil Ali, Mamoru Takahashi, Anajara Gazzalle, Mingyao Liu, Shaf Keshavjee, Lorenzo Del Sorbo, (Supervisor: Marcelo Cypel)] for his exceptional talk on "Lung lavage and surfactant replacement during ECMO in a severe ARDS aspiration pneumonia model".

McMurrich Awards were also bestowed on a group of individuals who presented remarkable E-posters. **Niloofar Ganji** [Yuhki Koike, Agostino Pierro] received 1st prize for her work on "Remote ischemic conditioning prevents the development of necrotizing enterocolitis", while the 2nd prize was received by **David P Cyr** [Francis



Niloofar Ganji

SW Zih, Jossie Swett-Cosentino, Shelly Luu (SSTP), Bryan J Wells, Ronald L Burkes, Bernard Cummings, Faryal Esmail, Andrew J Smith, Carol J Swallow] for his piece on "Ten-year survival outcomes following resection of locally recurrent rectal cancer". Chihiro Konoeda, Guan Zehong, Tatsuaki Watanabe, Stephen Juvet, Mingyao Liu, Tereza Martinu, Shaf Keshavjee for the excellent presentation on the "Role of club cells in the development of obliterative bronchiolitis in murine transplanted lungs".

Each year we honour our faculty with research awards that demonstrates the great work. **Bernard Langer**



Carol Swallow with Fayez Quereshy and Bernard Langer



Victor Yang and Andres Lozano

Surgeon Scientist Training Program Award - awarded to an outstanding graduate of the Surgeon Scientist Training Program in the Department, who shows the greatest promise for a career in academic surgery went to Fayez Quereshy (Surgeon Investigator, General Surgery, Toronto Western Hospital, UHN). Since Fayez's desire was to work towards a MBA, he was one of 5 residents who were enrolled in an offshoot of the SSTP, which was the Scholarship in Surgery Program (SIS), for residents whose degree were non-thesis based. Fayez was awarded his MBA in June 2008. George-Armstrong Peters Prize - awarded to a young investigator who has shown outstanding productivity during his initial period as an independent investigator as evidenced by research publications in peer reviewed journals, grants held, and students trained was awarded to Victor Yang (Surgeon Scientist, Neurosurgery, Sunnybrook Health Sciences Centre).



Mohammed Al-Omran and Ori Rotstein

Mohammed Al-Omran (Surgeon Investigator, Vascular Surgery, St. Michael's Hospital) received The Charles Tator Surgeon Scientist Mentoring Award - recognizing individuals supervising participants in the SSTP who emulate Professor Tator's qualities, namely excellence in research, commitment to SSTP mentoring and dedication to promotion of Surgeon-Scientists; Geoffrey Fernie (Senior Scientist, Orthopaedics, Toronto Rehabilitation Institute, UHN) received The Lister Prize - awarded to an investigator who has shown outstanding and continuing productivity of international stature as evidenced by research publications, grants held, students trained and other evidence of stature of the work produced.



Michael Fehlings, Geoffrey Fernie and James Rutka

The **Shafie Fazel Award**, established in memory of Dr. Shafie Fazel is presented to an individual who has demonstrated outstanding accomplishments during his/her residency both as a surgeon and as an investigator, was presented to **Alireza Mansouri** (PGY VI, Neurosurgery).

The **Zane Cohen Clinical Fellowship,** presented to a clinical fellow who has practiced and achieved at the highest-level while being a clinical fellow in the Department of Surgery, was awarded to **Cindy Boulanger-Gobeil** (PGY VII, Surgical Oncology).

The Tovee Award, presented to an academic staff member of the Department of Surgery who has made the greatest contribution to the educational activities of the Department, as exemplified by Dr. E. Bruce Tovee during his outstanding career. This year's recipient of the **Tovee Postgraduate Prize is Robert Stewart** (Surgeon Teacher, Urology, St. Michael's Hospital). **Jeremy Hall** (Surgeon Teacher, Orthopaedics, St. Michael's Hospital) received the **Tovee Undergraduate Prize**.



James Rutka, Cindy Boulanger-Gobeil and Zane Cohen



Ron Levine and Robert Stewart



Peter Ferguson with Jeremy Hall

The Surgical Skills Centre Distinguished Educator Award demonstrates the Centre's commitment to surgical skills education. This award recognizes those individuals who have made exemplary, innovative contributions to teaching and learning in the Surgical Skills Centre over the past year. This was presented to **Gideon Cohen** (Surgeon Investigator, Cardiovascular Surgery, Sunnybrook Health Sciences Centre).



Oleg Safir and Gideon Cohen

D.R. Wilson Award for teaching is made annually to the surgical resident who is rated by undergraduate students as being an outstanding teacher. This year the recipient of this award, whose teaching has been highly evaluated by medical students, is **Matthew Murphy** (PGY V, Plastic and Reconstructive Surgery). Matthew demonstrated a positive attitude toward teaching and was considered to be an exemplary surgical role model for undergraduate medical students.

The 52 judges for the e-poster competition as well as the 13 timers, who volunteered their time for the e-poster judging deserve special thanks, as well as the Research Committee members who reviewed and judged the oral presentations. As we take pride on how great the Day and Evening awards ceremony went, we need to acknowledge the tremendous effort it took from everyone involved. The Day could not have gone as well as it did without everyone's participation and collaborative efforts. Thanks again this year to **Andrea McCart** for assigning the judges to the posters, **Elisa Greco** and **Carmine Simone** for expertly moderating the sessions, and **Sylvia Perry** for making sure the day's and evening preparations were adhered to flawlessly.



Sylvia Perry



Val Cabral and Nancy Condo

A very special thanks to **Val Cabral** for her tremendous dedication and hard work in bringing together different facets of Gallie Day to perfection.

As we look forward to the next Gallie Day extravaganza, mark Friday May 11, 2018 in your iPAD, iPOD, Smartphone.

Val Cabral (with contributions from Michael G. Fehlings)

Markku Nousiainen's Update on the Competency Based Curriculum



Markku Nousiainen

"Changing a system of education is difficult, sometimes frustrating, but persistence pays off", says Markku Nousiainen, Orthopaedic Surgery's Program Director. "Our Division knew that switching to the Competency-Based Curriculum (CBC) was a good idea, and our experience since 2009 has shown

it to be true. One of the big reasons why it has been successful has been the support of our faculty and residents. The successful outcomes of our program played an important role in the Royal College's decision to implement Competency-Based Medical Education (CBME) in all postgraduate training programs, through the "Competence by Design" (CBD) initiative which is running between 2015 and 2022. Several surgical specialties in the United States are implementing CBD and it is gaining traction in the United Kingdom and Australia. Our experience, including our mistakes and solutions, has been very helpful to those that are implementing similar programs locally and elsewhere. Richard Reznick (whose idea it was to try a pilot training program that was competency-based over a decade ago), Bill Kraemer, Peter Ferguson and I get lots of calls for advice and we have given many courses in how to design and implement CBME curricula."

As Markku learned it, the story of the CBC begins with a call one day to David Backstein from Richard Reznick, who said: 'Let's give competency-based training a shot.' Despite the doubts entertained by other Divisions, the Orthopaedic Surgery Division (led by Ben Alman and Bill Kraemer at the time) decided to implement a pilot training program based on CBME principles in 2009. With the extensive work in curriculum redesign by Bill Kraemer and Peter Ferguson,

the training in the Division was significantly modified: off-service rotations that usually focused on managing non-clinical "scut work" were eliminated, as the experience on those rotations did not typically lead to successful learning outcomes. The Division applied for approval of the novel training program through the Royal College and got the ok. The new curriculum allowed for more efficient and effective learning. Instead of having orthopaedic residents rotate as the lowest ranking member on an internal medicine service taking care of less exciting, often resolved inpatient cases, residents were moved to the medicine consult service, where the experience was more demanding and relevant to their career in surgery.

The most important aspect of the CBC program is the assessments and feedback the trainees receive. Residents are evaluated intensively at least 3 to 5 times as much as they were before its inception. Evaluation tools, known as Entrustable Professional Activities (EPAs), have been developed to assess trainee competence in the clinic, ward, operating room, and ER. Faculty sign off on the level of competence a trainee exhibits in key activities related to the specialty, such as managing a patient requiring surgery for a hip fracture or total knee arthroplasty. In addition to the assessments, residents obtain summative and formative feedback on their progress, allowing them to understand where they are on their learning curve.

The pilot version of the CBC ran into one big challenge. Initially, trainees would stay on rotations until they achieved competence in the skills targeted for that service. This led to significant scheduling problems, as some trainees would need either more or less time on a rotation until they were found to be competent. In fact, two-thirds of the residents in the pilot finished in 4 years instead of the usual five. The program went back to a time -based curriculum in 2013 in order to solve the scheduling problem. Currently, the vast majority of trainees complete the core training rotations in four years; the fifth year has become an opportunity for enhanced elective or research opportunities to allow the residents to 'transition to practice/fellowship' and to complete their Royal College exams (This solves the Sandra de Montbrun's question: 'Why are surgeons operating in practice before they are certified?' (http://www.surgicalspotlight.ca/ Article.aspx?ver=Fall_2016&f=ColorectalSurgery)".

Markku and his wife Brigid, who is a veterinary technician from Vermont, are raising three children: 11-year old Nora is teaching her parents how to use her insulin pump,

9-year old Ester and 6-year old Johannes are active in sports, dance and music. The family spends time together at the cottage or by travelling to at least one interesting place each year (usually coinciding with a meeting).

Markku describes his job as "living the dream of doing formal research in education while practicing surgery. I devote one half day per week to research and administrative tasks, but in fact the only way to do the job appropriately is by working around the hours dedicated to clinical responsibilities.

After his Bachelor of Arts Honours Degree from Queen's University, Markku completed a Master of Science in Biology, studying osteomyelitis at the University of North Carolina at Charlotte. He then completed his medical degree at the University of Toronto and a Master of Education from the Ontario Institute for Studies in Education, specializing in Health Professions Education. He completed residency training in Orthopaedic Surgery at the University of Toronto, followed by two fellowships, one in adult lower extremity reconstruction with Allan Gross and David Backstein at the Mount Sinai Hospital, and another in orthopaedic trauma with Dr. David Helfet at the Hospital for Special Surgery in New York City. While in New York, Markku looked into the role of computer navigation and its role in teaching surgeons. The technique replaces fluoroscopy, reducing radiation exposure by using infrared or electromagnetic guidance. Although navigation is very useful for precisely and accurately placing orthopaedic implants, it is not used by most surgeons due to the set-up time (which takes about 20 minutes for each case). Markku relates that "if 20 extra minutes for each case at Sunnybrook would mean the number of cases completed each day would be drastically reduced - a problem for patient throughput in an age of restricted resources".

Markku works at both of the campuses of Sunnybrook. He does total hip and knee arthroplasty at the Holland Orthopaedic and Arthritic Institute. He describes it as "a great place to be - extremely well-run; a focused factory of anesthesia, nursing, physiotherapy and surgery". He also does trauma surgery at the Bayview campus. He says that the trauma program is also great — "an excellent collaborative effort of the surgeons, nurses, anesthetists, ER docs, and allied health professionals helping patients when it matters most".

M.M.

[See related article on Education Day on page 13 Ed.]

Education Scholars Symposium

"Education is not the filling of a bucket, but the lighting of a fire." - William Butler Yeats

"Education Scholars Day was proposed by David Latter as a parallel to Gallie Day in surgical science. The inaugural Education Scholars Day, held in February, brought together a core group of surgical educators in the Department, including staff, fellows and residents. Teodor Grantcharov gave the keynote address on his extensive experience doing innovative research in surgical education. Najma Ahmed analyzed the complex issue of resident duty hours, where her research has shown that limitations in work hours can negatively affect the education of surgeons. She has recommended flexibility - enabling residents to stay until noon after call rather than leave unresolved problems at 8 AM. The Department of Surgery at U of T has been granted the ability to allow residents to work post-call until noon for several years."

On Friday, February 24th, the Inaugural Education Scholars Symposium showcased a variety of innovative efforts in scholarly research in education by our faculty members and residents. The morning began with a keynote presentation on *Education, Innovation, and Quality Improvement* by **Teodor Grantcharov** (St. Michael's). He discussed the challenges of a "one-size-fits-all" simulation model, the lack of sufficient evidence in establishing assessment for selection tools, and the limited understanding of factors influencing performance.

Markku Nousiainen (Sunnybrook) presented A Cost-Analysis in Using Simulation for Teaching and Assessing Orthopedic Surgery Residents emphasizing our need to systematically document our simulation costs and outcomes going forward, as a lack of evidence of effectiveness could impede potential funding opportunities. Tulin Cil (UHN) spoke about Mental Practice in Technical Performance and its effectiveness in surgical performance, especially in complex cases. Najma Ahmed (St. Michael's) presented Resident Duty Hours and suggested that time-limited training negates technical skills competence because the trainee may not acquire sufficient

hours of preparation. **Nikki Woods** (Wilson Center) discussed the *Integration of Basic & Clinical Sciences* and spoke to the importance of basic science training, as it leads to the formation of a mental network of clinical concepts that can later be readily applied to complex cases. **Sandra de Montbrun** (St. Michael's) concluded with a presentation on *Assessing Technical Competence for Certification*, a firsthand look at her development of the COSATS. The implementation of this COSATS will be the first time that a North American surgical society has moved forward with a technical skills exam with the purpose of re-certification, which could have potential impact on patient care.



Mitchell Goldenberg with Markku Nousiainen

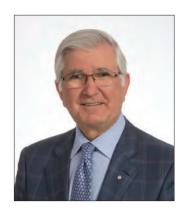
During his term as Chair of the Department of Surgery, Dr. D.R Wilson began to formally recognize and reward excellence in education scholarship in the Department of Surgery. Greatly influenced by such efforts, Richard Reznick went on to champion the Competency by Design curriculum in Orthopedics. It was in this spirit that the Inaugural Richard Reznick Excellence

Awards were given to Mitchell Goldenberg for his poster presentation, Surgical Technical Performance Impacts Patient Outcomes in Robotic-Assisted Radical Prostatectomy, and to Brandon Girardi for his podium presentation Surgical Boot Camp: The Transition from Medical Student to Surgical Resident. Congratulations to our other resident presenters Marissa Bonyun, Andras Fesco, Naif Alotaibi, and fellow presenter Aenone Harper.

I was delighted we could shine a light on the outstanding education scholarship that is taking place in the Department of Surgery. In my eyes, the first Education Scholars Symposium was a resounding success. I should like to sincerely thank Markku Nousiainen and David Latter for organizing a spectacular display of Departmental achievements.

Joanna Giddens, MBA, BAH; Strategic Plan Coordinator, Department of Surgery, University of Toronto

An Interview with Tirone David: A Master Surgeon's Reflections on a Life in Surgery



Tirone David

Tirone David continues to be extremely active, operating two days per week, completing 3-5 reviews per week for 5 journals, travelling, and speaking all over the world. He says 2-year-old Leo misses his grandfather. The David perspective on Canadian cardiac surgery is an interesting one: "clinically car-

diac surgery is performed reasonably well, and cardiac patients are given better than average care, though talents vary. We aim for the stars and get to the moon. I believe we have too many cardiac units in Toronto. Consolidation would lead to improvement in expertise."

"I came to Canada as a surgical resident 5 or 6 years after the nationalization of health insurance. It has changed steadily over the past 40 years. The blended culture of Canada is less homogeneous than in the United States. Newcomers (and there are some 300,000 of them each year in Canada) bring energy and new knowledge to the country, but not at the same level as in the

United States. Look at MIT or the California Institute of Technology. The math leaders may not speak English well, but the stars in those institutions are mostly newcomers.

The explosion in information and expertise is daunting – so many papers from so many sites. For instance, 1% of the world population has bicuspid aortic valves: 8% are probably genetic and 92% are developmental errors. Ten years ago, there were less than 1,000 scientific papers on this subject to review. There are now more than 2,000. "Health expectations have changed and education and research are strong, not just in one center, but in many different centers. The University provides an ideal mechanism for this expansion in knowledge. St. Michael's Li Ka Shing Institute excels in atherogenesis. The University Health Network excels in regenerative medicine and transplantation. It would be best to concentrate these efforts to achieve excellence.

I am against unrestricted competitive medical practice, and even more so to having insurance control quality and volume. Concentration of Centres of Excellence require that patients have to travel, but that is a worthwhile price to pay for higher quality of care. The Cleveland clinic is a good model of collaborative practice. Perhaps we could consolidate three hospitals into one in Toronto to achieve this goal. We are not so good at planning for the future. Just look at the urban development of the City of Toronto. Couldn't our politicians have predicted what is happening with our infrastructure before so many building permits were issued?

Q:What would be your advice to grandson Leo when he is 18 and trying to decide what to do in life?

A: "I'd ask him: 'What is your passion? What do you want to do in the pursuit of excellence?' I had to decide at age 18 and since I was undecided my father made the decision for me: "you are going to be a doctor". It was a lucky decision. I fulfilled my father's wish and I discovered that medicine was a very fulfilling career. So, I would tell Leo: 'Put your heart and soul into whatever you chose." Parents and grandparents shouldn't make those decisions, but we can help our offspring avoid a mismatch between their characters and a career. Mentorship is very important. I loved neurology in medical school, but my mentors guided me toward surgery, and then vascular surgery, and then cardiac surgery. One

of my very influential mentors was Giocondo Artigas, a general surgeon in my home town in Brazil. He said: "It's innate in you to do surgery', and he had me assisting him in the operating room as a medical student. At the Cleveland Clinic, Edwin Beven, a Chilean surgeon, and Caldwell Esselstyn, George Crile's son-in-law were important mentors as well as was George Crile himself. Bill Bigelow was my principal mentor here. He guided me to seek a niche in cardiac surgery and excel in it. He had a major influence in my life and practice. He introduced me to the famous Irish surgeon Denis Burkitt whose outstanding work on bowel cancer, appendicitis, and inflammatory bowel disorders and the role of diet, became a reference standard in medicine. Bill Bigelow sent me to visit Magdi Yacoub, Alain Carpentier and Donald Ross in Europe. I gave a talk at a course sponsored by the American College of Cardiology titled "In Search of Excellence" and described the importance of mentorship and guidance in our professional development. All those individuals influence our lives. Maxwell Wintrobe, a famous haematologist, gave a lecture at the Cleveland Clinic when I was a resident and said that just about any coagulopathy could be corrected by the transfusion of fresh whole blood. I never forgot that coming from Dr. Wintrobe. This led me to donating my own blood to an exsanguinating patient after an extensive open-heart procedure soon after I started practicing. Too bad we can't do this any longer.

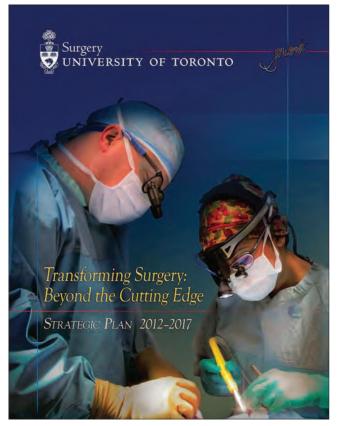
Teaching

"I am more of a model than a mentor. I started out doing one operation and assisting the resident to do the next operation, but my curiosity toward innovation and the referral of more complex cases made this more and more difficult. My true progeny are the fellows who have come and spent 6-12 months with me after their training. Most of them are international surgical stars like Gebrine El Khoury in Brussels, Marc Gillinov in Cleveland, Glen Van Arsdell in Toronto, and others. Irving Kron introduced me at an international meeting by saying: "Tirone taught us to think and how to make things better." That has always been my goal. I published my failed ideas as well as my successful innovations. I am proudest of the new procedures I have developed that changed the lives of so many patients. John Kirklin named it 'David operation' -a procedure whereby the

aneurysmal aortic sinuses are resected but the aortic valve cusps are preserved. This resulted in young patients being able to resume full activity on no medications after surgery. Other innovations include techniques of mitral valve repair, operations for endocarditis, an operation for ruptured ventricular septum, and techniques for repair of aortic dissection. Editor Dick Weisel asked me to write a "how to do it" article for *The Journal of Thoracic and Cardiovascular Surgery* on acute aortic dissection. It has received 10,000 hits because it is a simple step —bystep guide on how to do the operation safely. I should do more of that in a book about the 15,000 patients I have operated upon. I have the data on all of them, but I need more time to complete the follow-up."

M.M

Strategic Plan Refresh Retreat



2012-2017 Strategic Plan

On Friday March 7th 2017, we gathered at the University Club to review the progress of the 2012-2017 Strategic Plan and discuss future endeavours. Dean Trevor Young welcomed and congratulated the Department on its ability to achieve "efficiency in finite resources", a testament to our success and creativity in the collaboration of talents within our own community. In this spirit, the Department of Surgery's Strategic Plan 2018-2023 will be entitled Aspire, Advance, Achieve.

Ori Rotstein discussed the formal institution of a mentoring program for junior faculty members and its future expansion to include the Scientists. The Faculty Development Committee will implement a variety of strategies to target faculty wellness, increased diversity in the surgeon profile, and leadership opportunities.

Robin McLeod spoke about the Quality Committee's accomplishments over the past five years, including hospital-wide guidelines and databases for identifying gaps in care. Future priorities will concentrate on knowledge translation, stakeholder involvement for widespread dissemination, and clinical trials.

As the recently appointed Vice -Chair of Education, Najma Ahmed discussed new priority areas for the next plan. Topics such as satisfaction in the undergraduate experience and its subsequent effect on choosing surgery as a career path will be addressed, as will the role of simulation and technology in clinical learning and practice. All of this in the setting of competency based education.

Michael Fehlings spoke to the ongoing successful contribution of our trainees and faculty in terms of grant capture, impact factor, and innovative knowledge generation. Moving forward, the Research Committee will focus on enhanced collaborative efforts between the Research Institutes and Hospitals, and the generation of interdisciplinary research. Shaf Keshavjee supported these ideas in congruency with the Innovation Committee's action items, including increased peer support for commercial efforts and an educational exchange similar to Stanford's Biodesign Innovation Fellowship.

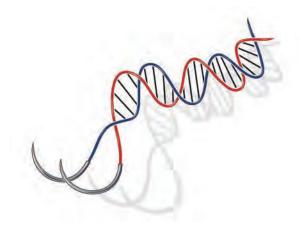
While several of our faculty members and residents travel to low-income countries to develop capacity building in surgical skills, it is often performed in silos and independent of Departmental oversight. Avery Nathens talked about building a formal global surgery office with visible online presence, infrastructure, trainee programs, and philanthropic support over the next few years.

In addition to the pillar leads, Australian neurosurgeon Kate Drummond led an inspired presentation on women in surgery. She attributed her career satisfaction to mentors and peer support, and emphasized the importance of diversity in the workplace. Recommendations for a supportive environment include a cultural change with engaged management, educational outreach, and a complaints management system. To complement the discussion, Karen Devon presented a highly moving look into Intimate Partner Violence in the medical workplace. Guests were invited to contribute their own Department-specific suggestions, which will be reviewed and incorporated into the wellness domain of Faculty Development initiatives.

The day concluded with an exciting keynote address from Steve Williams, an animator and graphic designer whose most notable work includes pioneering the stop-motion animation techniques first utilized in the cinematic blockbuster, Jurassic Park. It was an inspiring reminder to push the conventional boundaries of problem solving.

As the Strategic Plan coordinator, I will facilitate committee meetings to further develop these ideas into defined goals and measurable activities. By the end of 2017, *Aspire, Advance, Achieve: 2018-2023* will be complete, and ready for its January implementation. I look forward to building our new Strategic Plan with all of you. If we aspire on a lofty scale, we can advance, and we will achieve our goals in uncommon hours.

Joanna Giddens, MBA, BAH, Strategic Plan Coordinator, Department of Surgery, University of Toronto



Keith Jarvi: Studies on an Underrated Biological Fluid



Keith Jarvi

Semen is the underrated biological fluid compared to blood and urine. Keith Jarvi, the Director of the Murray Koffler Urologic Wellness Centre and Head of Urology at the Mount Sinai Hospital, said: "in our early studies, we had focused primarily on infertility, where production and plumbing are the two

categories of efficiency. We have to biopsy to make a diagnosis. We have looked at men with production and plumbing problems for markers. We found three that together are 98% sensitive and 100% specific. The Koffler Foundation funded preliminary studies that were promising. Once I had proof of principle, I entered 'the valley of death' that precedes licensure (see also our previous article on Michael Tymianski http://www.surgicalspotlight.ca/Article.aspx?ver=Winter-Spring_2016&f=BenchBedside). MaRS came through with funding to get me across. We are now licensed in China and the United States through MaRS Innovation. Men are still getting biopsies in many jurisdictions, but I am slowly putting my urology colleagues out of this line of work.

"I am now working on refining prostate cancer markers. Years ago, we started looking for markers of prostate cancer. PSA, the commonest marker for prostate cancer, was found in semen at 10,000 times higher concentration than in blood. Prostate cells appear in semen. We look for the cells, and proteins and we more recently are looking at the DNA in the semen as markers for more aggressive cancers. We can identify a better prostate cancer marker, but we are 2 years from licensure. Testicular cancer marker studies are in their infancy. We are looking at DNA in semen. We consider ourselves world authori-

ties in the study of semen, the forgotten biological fluid. We have 8,000 proteins in our database on semen and seminal proteins. With our predictive studies, we will be able to freeze sperm for young men before they eventually become infertile from disease or treatment. This will be important as testicular cancer is increasing in Europe as is the rate of infertility.

"I started the prostate cancer markers studies by surveying 500 patients. 80% of men were willing to donate samples. I am now working with Laurie Klotz, looking at his repeat biopsy cohort in the Active Surveillance Study (http://www.surgicalspotlight.ca/Article.aspx?ver=Spring-Summer_2015&f=Main). We have collaborators in Montreal, Calgary, London, and 2 Toronto sites - PMH and Sunnybrook. For the testicular cancer studies, we have collaborators in Copenhagen and for fertility studies in San Francisco, Cornell New York Hospital, McGill and Calgary. Tony Finelli, Neil Fleshner, Laurie Klotz send samples. We have 280 specimens from Calgary. It all started with funding from the Koffler family. Now one half of our Koffler Center is for research, and one half for clinical work. We have regular meetings with epigenetics expert, bioinformatics expert and mass spectrometry expert. The physical proximity that brought us all together in the Koffler Center has been highly productive. We have grants from CIHR, Prostate Cancer Canada, industry and MaRS Innovation. MARS came through when they saw the commercial prospect. This is a great example of a basic science/ clinician team concept. We have done over 1,000 patients - 350 of them prostate cancer patients. The goal is to avoid needle biopsy in trying to identify high risk prostate cancer, because 4% of cancer biopsies lead to hospitalization.

"The technology now is amazing because of mass spectrometry. Protein analysis that once took lots of time is fast and massive now. The technology is racing ahead of the clinical work. Eleftherios Diamandis is my alter ego, a world authority on PSA. We have worked together for 7 years with 8 postdocs, 4 graduate students, 3 - 4 MSc students, 10 summer students and numerous Centre for Research in Environmental Microbiology (CREM) students, 6 fellows and 4 residents, all funded by grants from PSI, Prostate Cancer Canada, CCSRI, MaRS Innovation, CIHR and various companies.

"A secondary goal is to build a male contraceptive - the reciprocal of the fertility goal. We can knock fertility out in mice. We do thousands of semen tests per year, 1,500 of them from Mount Sinai Hospital alone. We hope to have a predictive marker for testicular cancer 10-20 years before it becomes clinically evident. The male contraceptive study is an option. Our nanofluidics engineer is Sinton. The IVF market in Canada performs 125,000cycles per year at \$10,000 per cycle. We have a \$30 chip, which measures visco- elastic drag in Reynolds units. A home test is in development as an IPhone app. The University of Toronto is an amazing place to work, with experts in everything. The engineers are keen to get involved in these important biologic problems.

"My background was in math and I intended to become a theoretical mathematician when I was a student at Queen's. I later decided I could be at the frontier in medicine if I applied my math- computer background to biological problems. I began with Mike Jewett at Wellesley who took me into the lab measuring sperm motility. I did time lapse cinematography, then went to PMH computer experts to develop a digital analyzer. After 6 months of work, I found that a computer analyzer had already been invented, hit the market, and was sweeping the world.

"I do 50% lab and 50% clinical work - largely on infertility, including microsurgery for obstruction or reconstruction of the vas deferens, microtesting, and treatment of varicocele or undescended testicles.

"My wife Patricia Lee is an ObGyn doctor at Sunnybrook. We have 3 children: our 18 year old son is studying computer science at the University of Toronto and is planning to study medicine. Our teenage highschool girls are at Toronto French School. We enjoy biking, hiking, skiing and other outdoor activities together as a family."

M.M.

Robin McLeod Is Moving Best Practices Model to All Divisions of the Department of Surgery



Robin McLeod

Robin McLeod has a passion for using the best evidence to provide the best patient care. This passion led her, in 2006, to initiate Best Practice in General Surgery-a quality improvement initiative in which the objective was to ensure that general surgery patients receive care based on the

best available evidence. This program is leading toward standardized care across the U of T affiliated hospitals. In 2012, the BPIGS group developed an Enhanced Recovery after Surgery (ERAS) guideline for patients having colorectal surgery. They received a grant from the Council of Academic Hospitals which supported the implementation of the U of T iERAS program across 15 academic hospitals in Ontario. The iERAS program saved 1 hospital day for colorectal surgical cases. Since there are 5,000-10,000 cases per year in Ontario, there is a potential gain of another 5,000 - 10,000 available beds in addition to the cost savings.

Robin reports that the iERAS program changed the way patients were cared for and led to a decrease in the length of stay and lower complication rates and cost. But perhaps the most important impact was how the perioperative teams including nurses, surgeons and anaesthesiologists began to communicate and collaborate. Working as a team made positive changes. One of the iERAS champions commented: "There was a noticeable difference...I think it was after the second data review... and people decided together that we could improve things. People stopped pointing fingers. It all came

together and we decided to look at this as a team". These learnings from the program have strengthened Robin's belief that some resources may be required to improve care, but more importantly, a lot can be accomplished by working collaboratively to implement changes.

With that in mind and with the support of Chairman Jim Rutka, Best Practice in General Surgery has been transformed into Best Practice in Surgery (BPS). The mission is the same-ensure all patients receive optimal care based on best evidence. This has been a good fit with the adoption of NSQIP by many of the hospitals across the province. (NSQIP is the National Surgical Quality Improvement Program sponsored by the American College of Surgeons. The program supports data collection and allows hospitals to compare their outcomes with other institutions). While NSQIP allows hospitals to assess their performance against others and identify where there are gaps in clinical care, they often do not know how to fix those gaps; the guidelines developed by BPS are helpful. A good example is The Ottawa Hospital which adopted NSQIP before becoming a partner in the iERAS program. They found that implementing NSQIP alone did not improve outcomes but once the hospital implemented iERAS, they noted a significant decrease in hospital stay and complications.

The Best Practice in Surgery committee is comprised of members from all hospitals and divisions in the Department as well as representatives from Anaesthesia, Otolaryngology, Opthamology and Gynaecology. There are a number of projects on going. For example, they are developing a *Surgical Wound Management* guideline in conjunction with the Toronto Central CCAC and a Surgical Site Infection guideline with the Antimicrobial Stewardship Committee. Hospitals save \$5,000 for every wound infection prevented, whereas keeping the patient warm and using antibiotics correctly costs far less.

Adina Feinberg, a general surgery resident, and Hance Clarke, an anaesthesiologist at the Western, are leading a group developing a guideline on a very relevant topic-opioid use by patients post-discharge. Prior to undertaking this work, Adina did a systematic review, and found that 50-70% of opioids prescribed for post discharge use are not used and rarely are patients given directions on how to get rid of the excess pills.

Erin Kennedy is leading work on *the patient experience*. She has led 3 workshops to learn about the patients' surgical experience and how we could optimize it. The workshops have been attended by 25 surgical patients as well as surgeons from all disciplines, residents and nurses. Not surprising, communication was top of their list of priorities. While Erin's team has developed a long-term plan to address the identified priorities, they quickly distributed their "5 Easy Things to Improve Patient Experience". One of those has already led to change-all the patients agreed that it was scary when they were wheeled into the operating room and looked around and saw all personnel on their cellphones!

Thoracic surgeon Najib Safieddine has developed a quality improvement curriculum for all first year residents who attend a series of lectures, and work throughout the year in small groups to develop a quality initiative. This year's projects addressed a wide range of topics - from improving resident education to standardizing specific clinical surgical issues to processes to improve and measure patient and family in-hospital experience.

With the emphasis on quality and safety in all health systems today, Jim Rutka has strongly supported Best Practice in Surgery, recognizing that physicians are central to ensuring the best clinical care and patient experience. Best Practice in Surgery offers an opportunity for the Department to be a leader in quality as we are in education and research.

Emily Pearsall, MSc, Manager, Best Practice in Surgery Department of Surgery, University of Toronto

[There is an excellent article about "Why You Should Chew Gum After Surgery" by Erin and Robin in the Toronto Star, describing this program. (https://www.thestar.com/life/health_wellness/2016/05/23/doctors-notes-why-you-should-chew-gum-after-surgery-and-other-recovery-tricks.html).

It's in doctorsnotes@thestar.ca, a weekly column by members of the U of T Faculty of Medicine. This is a great way to communicate with the public. *Ed.*]

Surgery QI Curriculum – An Update



Two years after its initial launch in 2015, the surgery QI curriculum successfully concluded its second year with a presentation and reception event at the U of T Graduate Club on May 23, 2017. The curriculum has now been expanded to both the departments of ENT and Obstetrics and gynecology in addition to all divisions of the Department of Surgery.

A total of fifty-nine PGY-1 surgical residents in 13 small groups presented their QI projects to their colleagues, program directors, division heads and mentors. It was exciting and impressive to witness the breadth and depth of the work done by our first-year residents given their training level, relatively short period provided to complete the projects and the many demands of surgical residency. Topics ranged from patient and physician safety to resident education to maternal and fetal health. The presentations demonstrated a good grasp of daily clinical and administrative challenges to quality improvement in surgery and the qualitative research tools needed to study and implement QI initiatives. The residents' appreciation of the importance of working with allied health workers and the rest of the health care team was evident.

The current setup of trainees working together in small groups has clearly emphasized the significance of collaboration and provided an opportunity for them to interact together outside the context of their surgical rotations and has hopefully fostered comradery and friendship. The success and growth of this course thus far has been possible only with the ongoing support and dedication by the many mentors, division heads, directors and department chairs within the U of T surgical community. We all look forward to their ongoing

support and to another successful and exciting year of resident engagement in surgical quality improvement.

Najib Safieddine, Assistant Professor, Thoracic & Foregut Surgery University of Toronto, Toronto East General Hospital & Odette Cancer Centre- SHSC

Cognitive Dissonance and Evidence Based Medicine - David Naylor's Kergin Lecture



Frederick Gordon Kergin

Frederick Gordon Kergin was born at Port Simpson in British Columbia in 1907. He began his studies at the University of Toronto at age sixteen and graduated from the Biology and Medical Sciences program in 1927. In 1931, Kergin became a Rhodes Scholar and spent the next two

years at Oxford University in a Master's Degree program in physiology and anatomy, graduating with first-class honours. In 1934, he began the four-year Gallie Course in surgery at TGH and obtained the fellowship of the Royal College of Surgeons of England in 1935 and that of the Royal College of Physicians and Surgeons of Canada in 1939. In 1937, he joined the surgical staff of Toronto General Hospital and later took the role as Chair of the Department of Surgery of the University of Toronto and Surgeon-in-Chief of the Toronto General Hospital from 1957 to 1966. He was a pioneer of thoracic surgery in Canada and served as President of the American Association for Thoracic Surgery. In1966, he was appointed Associate Dean

in the Faculty of Medicine and was responsible for developing a new undergraduate curriculum and planning the conversion of Sunnybrook Hospital to a teaching institution with full-time faculty. Dr. Kergin chaired the editorial board of the Canadian Journal of Surgery for many years and served as a trustee of the R.S. McLaughlin Foundation.

His major contribution to the University was in education, particularly in structuring the residency programs such that an integrated program amongst all fully affiliated hospitals was established. Professor Kergin died in 1974, a man with eclectic interests that included teaching, research and university administration, as well as many outside of medicine.

(http://livinghistory.med.utoronto.ca/people/
frederick-gordon-kergin)
(http://surgery.utoronto.ca/events/kergin-lecturers.
htm)



lames Rutka and David Naylor

The 2017 Kergin Lecture was delivered by **David Naylor**, former Dean of the Faculty of Medicine and President Emeritus of the University of Toronto. Naylor's theme was 'Cognitive Dissonance and Evidence-Based Medicine' [EBM]. Based on his studies of an American religious cult, psychologist Leon Feininger coined the term 'cognitive dissonance' in 1956 to designate the distress people feel when reality conflicts with deeply-held beliefs. Cognitive dissonance is resolved by denying, ignoring, or reinterpreting the contradictory finding which does not fit with our biases or beliefs. Naylor drew on his long experience as a researcher and policy advisor to examine applied health

research, healthcare policy-making, and clinical reasoning, all viewed through the lens of cognitive dissonance.

Starting with research, Naylor observed that clinical epidemiology emerged in the 1970s and 1980s as a discipline that aimed to enhance the rigor of clinical studies and bring research results to bear more fully on clinical decisions. These insights were synthesized and presented to the profession in the early 1990s as 'Evidence-Based Medicine' [EBM]. EBM was described as a new clinical 'paradigm', i.e. a system of assumptions, concepts, values and practices that constitutes a way of viewing reality. It characterized clinical experience as an unreliable source of evidence - an apparent devaluation of clinical judgement that understandably unsettled many surgeons given the highly case-based nature of their work. Naylor observed that, more generally, EBM as a paradigm has continued to struggle with the dilemma of the applicability of evidence and the unreality of the 'average patient'. Small effects that turn out to be statistically significant in giant randomized trials mean that many patients are exposed to side-effects for everyone who benefits from a given 'evidence-based' treatment. EBM acolytes often argued that the solution was to stratify subgroups of patients by baseline risk, assume the same relative benefit would accrue to all, and therefore infer that the highest-risk patients would gain the most in absolute terms. However, studies using sophisticated biomarkers are starting to overturn this mode of reasoning.

To illustrate this point, Naylor showed us a randomized trial of the cardiovascular drug Dalcetrapib (Tardif JC et al, Circ Cardiovasc Genet. 2015;8(2):372-82) that initially found no difference when the drug was compared to placebo. Use of biomarkers later revealed that the drug was highly beneficial in one genetic subgroup and harmful in another. The two effects cancelled, leading to an erroneous 'evidence-based' conclusion. Naylor suggested that this result was a bellwether for the challenge facing the current incarnation of EBM as 'the medicine of averages'. He observed that a counter-paradigm was emerging as biomolecular characterization of patients continued to advance, thereby enabling better tailoring of treatments. He predicted that new molecular markers and other measures such as functional imaging were likely to compel reconsideration not just of who received specific treatments, but how we define disease entities, particularly in disciplines such as psychiatry, with its descriptive Diagnostic and Statistical Manual of Mental Disorders (DSM).

Naylor emphasized that consideration of variations in patient characteristics and anticipated responses to treatment has been an integral part of expert judgement dating back centuries in clinical medicine. What is different now is the convergence of our deepening understanding of human biology with other factors such as the use of digital devices to enable continuous monitoring of patients with sophisticated sensors, improved imaging, automated treatments based on digital monitoring and the application of artificial intelligence. Sophisticated tissue engineering techniques may transform not just the field of transplantation but surgery in general. This layering of diverse disruptive forces has meant that the once-popular term, 'molecular medicine', is already being largely supplanted by terms such as 'personalized' or 'precision medicine'.

Just as the emergence of EBM seemed to engender cognitive dissonance among those attached to other modes of thought and action, so also was it now ironically the case that EBM fundamentalists were among the most vocal critics of personalized or precision medicine. Naylor cautioned, however, that personalized or precision medicine was far from a panacea. It had the potential to provide remarkable improvements over the "shot-gun approach" of EBM, but many exaggerated claims were already being made for this latest paradigm and the potential costs and risks are enormous.

Other countries such as the UK and Australia were more enthusiastic about precision medicine, and more thoughtful about developing a reliable knowledge base and strong framework for funding and using these concepts in practice. Developing a Canadian national strategy for personalized medicine was accordingly among the recommendations made in 2015 by a distinguished Advisory Panel on Healthcare Innovation that Naylor chaired for the federal government (accessible on http://www.healthycanadians.gc.ca/publications/healthsystem-systeme-sante/report-healthcare-innovationrapport-soins/alt/report-healthcare-innovation-rapportsoins-eng.pdf). Although the Conservative Government of the day shelved the report, it has found new life under the current Liberal Government, underscoring Naylor's comment that political ideology of all types carries its own forms of cognitive dissonance. Naylor among others who promoted EBM in the 1990s had emphasized that clinical decisions would continue to rest not only

on evidence, but on a given patient's values or preferences and the context of the clinical encounter (Naylor CD. Lancet 1995; 345 (8953):840–2). He wondered if that list should now be expanded to include cognitive psychological factors, and particularly in the realm of healthcare reform, overtly political or ideological considerations.

In support of that point, Naylor reviewed some work from his early years at the Institute for Clinical Evaluative Sciences (ICES), showing remarkable variation in rates of caesarian sections, hysterectomy, knee replacement, and breast conserving operations. This work had caused a media sensation when it first appeared in 1994. Politicians were quick to criticize the profession; physicians and surgeons in turn rushed to explain away the variations in very creative ways.



Naylor emphasized that while some practice variations reflected indefensible departures from rigorously assessed practice standards, in other instances they reflected evidentiary uncertainties, different financial and organizational contexts, and regional or national clinical cultures. On the latter point, he reminded the audience that expert panels from different countries would arrive at different views about the appropriateness of surgery when given the same evidence and patient case scenarios. Naylor then showed real-world examples of this phenomenon in the realm of differences between Canadian and American practice patterns in use of cardiovascular procedures after myocardial infarction (Mark DB et al. *N Engl J Med* 1994; 331:130-135).

Naylor also summarized several studies led by Toronto researchers illustrating how errors in cognitive processing affect decision-making. For example, physicians were more likely to favour testing and treatment when considering their recommendation to an individual patient than when they were asked to consider how they would write

guidelines for a group of similar patients (Redelmeier DA, Tversky A. *N Engl J Med.* 1990;322:1162-4). The framing of treatment data also has a powerful effect. A new drug might reduce death rates for a given condition from 4 per 100 patients treated to 3 per 100 -- a 25% relative risk reduction. However, if the same data are shown as a 1% absolute reduction, or represented fairly by the statement that 100 patients must be treated with the drug to save one life, then physicians become much more cautious about recommending the new medicine (Naylor CD, Chen E, Strauss B. *Ann Intern Med.* 1992;117(11):916-21).

As a final example of how politics and cognitive dissonance can shape the use of evidence, Naylor pointed out that in the early 1980s a rigorous randomized trial undertaken by RAND researchers had shown that costs were lower and outcomes similar with a comprehensive capitated plan (then known as an HMO and now more commonly termed an integrated delivery system) as compared to Canadian-style health insurance (Manning WG et al. N Engl J Med 1984;310:1505-15). The findings had limited uptake in the US due to lobbying by organized medicine and the private insurance industry, and were downplayed here because of smugness about Canada's superior healthcare system and physician unease about changes in compensation modalities. In part because of our refusal to embrace such changes, the performance of Canada's healthcare system is now seen by many experts as lagging behind a number of OECD peer nations.

Naylor closed the Kergin Lecture with two aphorisms that encapsulated his theme of cognitive dissonance and evidence-based medicine/policy-making. The first was from a collection of essays on medical history published in 1991: "The enduring lesson of history may be that social change is inevitable and institutional progress possible, but human nature is wonderfully intransigent". The second, arising from three decades of experience as reflected in the lecture, was shorter: "How we think is more important than what we know --- or think we know".

Interview with Martin McKneally



Martin McKneally

1. What attracted you to come to Toronto? Four decades ago, when I was practicing in Albany, NY, I began a stimulating collaboration with the Toronto thoracic surgical group in clinical trials of the Lung Cancer Study Group. Griff Pearson and Bob Ginsburg were world leaders in academic thoracic surgery. I

became a student of the Toronto school of thoracic surgery by correspondence and frequent visits. When I was invited to join the Toronto faculty in 1990, I was delighted to accept.

- 2. What sparked your interest in pursuing surgical ethics? During the 1960's, I was appointed as a general surgery resident at the University of Minnesota to serve on the transplant committee. We were charged with advising on decisions about dialysis, kidney donor selection, and other ethical issues related to those completely new technologies. Ethical issues in surgery continued to interest me during my career. When I retired from clinical surgery, surgical ethics was a logical next chapter to explore, and the Joint Centre for Bioethics had just appointed Peter Singer as its dynamic young founding director.
- 3. You have published many papers is there a particular article of which you are most proud? The Entrustment paper (McKneally MF, Martin DK. An entrustment model of consent for surgical treatment of life-threatening illness: Perspective of patients requiring esophagectomy. JTCVS 2000; 120:264-269). That study taught me the value of qualitative research and confirmed the importance of asking for the patients' perspective. Their common-sense view of informed consent was quite different from the one I was learning and teaching as a novice in bioethics. The opening quotes tell the story: "The surgeon said, 'So, it's your decision.' I said, 'I'm going to leave it in your hands.' -Esophagectomy patient."

Naylor CD, ed. Canadian Health Care and the State. Montreal: McGill-Queen's University Press, 1992, p12.

4. You have trained many surgeons – when looking at your disciples in Thoracic Surgery, who has surprised you most with their career achievements? I am not surprised, but dazzled by the accomplishments of Shaf Keshavjee who has risen to a world leadership position in the scientific development of lung transplantation, while managing an outstanding surgery department, research lab and building a clinical practice focused on the most complex thoracic problems.

5. Since 2003 you have interviewed many for the Spotlight – which stands out most in your memory?

I followed the interview suggestions of my chairs and others in the department who volunteered ideas. There were so many stars, it's hard to choose. One of the most instructive was interviewing the first orthopedic residents to enter the Competency Based Curriculum. I learned the positives and the negatives by hearing the first-hand experience of Jeremy LaRouche and Sebastian Tomescu (http://surgicalspotlight. ca/Article.aspx?ver=Summer_2010&f=ResidentsCorner). Their enthusiasm and lessons from the early phase of the learning curve have helped the program flourish to its present level, described in this issue by Markku Nousianen's recent update (see page 11). A recent fun experience was reporting David Naylor's Kergin Lecture (see page 20). I had the opportunity to learn from his skilled editing of my draft. He declined my offer to add his name to the byline, so I left mine off as well.

- 6. After your distinguished career in Academic Surgery, do you have any advice for surgeons at the start of their careers? Find a problem that stirs your enthusiasm and creative imagination. Attract and work with colleagues who are better than you are. Share credit, income, responsibility, and all the rewards of academic surgery the highs and the lows. Put family and friendship first, and the rest will follow.
- 7. What are your academic goals in Boston? I'd like to establish a formal program that will help surgeons become scholars in Surgical Ethics.

Mark Camp, Assistant Professor, Division of Orthopaedic Surgery, University of Toronto

Val Cabral- Keeper of Research Flame



Val Cabral

Val Cabral, the Department of Surgery Research Program Manager was recruited by Ori Rotstein in 1997. Ori asked her to help expand the research office when he was Vice Chair of Research for the Department. The Surgeon-Scientist Program, quite successful at that time, has expanded remarkably since then. Val worked with

former Chairman Bernard Langer to put together a history of the Surgeon Scientist Program. Val continuously updates a database of grants in the Department which has been in used the Annual Reports of the Department and by the Divisions for their 5-year reviews.

Val says "Every Vice - Chair of Research has new projects and agendas. They have all been delightful to work with. One of the current projects is SSTP career guidance for present members of the Surgeon-Scientist Training Program. Graduates are invited to come to a catered evening meeting at the Peter Gilgan Centre and the speakers, all former surgeon scientists, SSTP supervisors, or SSTP graduates, make the rounds moving from table to table. Sixteen surgeons and scientists participated last year with 38 trainees."

"Gallie Day, our annual celebration of Surgical Science, starts planning with Michael Fehlings and the Research Committee members suggestions and immense commitment. James Byrne and Chris Ahuja are the SSTP representatives who work along with 22 others from the divisions, meeting bi-monthly to plan PGY 1 & 2 Research Orientation, Gallie Day and Alman Research Rounds, among many other issues. At the Research Strategic Plan Retreat, there were 58 participants from the Surgeon-Scientist, Surgeon-Investigator, Surgeon- Teacher and Scientist ranks. They held panels on Memoranda of Agreement, PAC meetings and advice on two year reviews. There was a full discussion of the program, including fundraising, funding, future plans."

"This year, we received 31 abstracts to compete for the 10 oral presentation openings, and 66 applications for the poster presentations - the biggest year ever for submissions. Since two years ago, all poster presentations are done electronically - 5 minutes presentations before electronic screens in the MaRS building. There are 10 screens in 3 rooms. The Presentations 2 Go company from Mississauga sets them up at 6.30 in the morning of Gallie Day. One screen in the lobby scrolls all of the presentations continuously to give attendees an opportunity to decide in advance which presentations to attend."

"The Surgeon-Scientist Training Program was supported generously by the Johnson and Johnson company for 10 years until Malcom Eade retired. Other support comes from the Rutka Trust and other endowment trust funds. Neil Fleshner, Chris Forrest, and Tom Forbes are working to raise funds for the SSTP in their divisions."

Val writes draft reference letters, reports such as the research report and Gallie Day synopsis for the Vice Chair of Research. She also drafts the research reports for the Spotlight for the Vice Chair of Research. She continues to say that she has been mentored by the best of the best, starting in Pharmacology and continuing in Surgery.



Belmira Fumo Lane family

Val is an excellent writer, as evidenced by poetry prizes that she has won, and a moving tribute to her mother, which won one of the Seaton Village Lane Naming contest. The "Belmira Fumo Lane" in the Bloor and Bathurst area was named in her mother's honour. A neighbor nominated Belmira who was a supportive and loving presence in the community. Val serves as a Minister at St. Dominic's Church in Mississauga, volunteers at Toronto Rehabilitation Institute by bringing patients to mass once a week, and prepares tax returns pro bono for Portuguese seniors, carrying on the public service and neighborliness inspired by her mother.

M.M.



"The World Needs More Canada" - Bono



Martin McKneally

This last column gives me the opportunity to say thanks to all I have worked with, interviewed, and written about these last 15 years. I'll start with Richard Reznick, who asked me to give the Surgery Newsletter a personal, familial rather than archival feel. "What are they doing down there in the Department, and what are these people like?"

That's the style we've tried for. I knew we were close when Sylvia Perry described the Spotlight "like a small town newspaper that everybody reads".

So, here is some family news. After 27 years in Toronto, and now well into my 9th decade, Deborah and I have recently become aware that we need to be closer to our family. We will be the 14th and 15th members of the family circle to move into the Boston area, with 6 more American offspring visiting regularly. We are renovating a century old house on the same street, just 2 blocks from our children and grandchildren. There will be plenty of room to welcome Toronto visitors.

I am planning a seminar in Surgical Ethics with colleagues at Harvard's Center for Bioethics – further proof that I haven't yet mastered "the art of retirement" (a title Ron Levine suggested for a final column). My excuse is that the opportunity to meet with younger colleagues, as I have throughout our Department of Surgery, and to learn from them about leading edge thinking, techniques, and controversies, has been a fountain of youthful ideas and experience that prevents hardening of the attitudes, and continually rewires aging synapses.

I encourage maturing surgeons to try it. Volunteer to help the next editor, as a reporter, or associate editor. Enroll in the MHSc in Bioethics and teach - so that each of the divisions can have a Mark Bernstein or a Karen Devon or a Mark Camp, stimulating members and trainees to engage in thoughtful discourse about how the specialty should think about the complex issues we are encountering with increasing frequency.



Martin and Deborah McKneally at Scaramouche with the Spotlight book

New York Times columnist Tom Freidman reminds us in his stimulating recent book "Thank You for Being Late" of the disequilibrating forces of technology, globalism, and climate change that are accelerating the transformation of everything - from the way we hail a taxi to the world economy to the weather in the Arctic and the Gulf of Mexico. Similarly, costly technological changes in the OR, waiting lists that deprive patients of timely care, and economic segmentation of society are forces disequilibrating surgery. Time-bankrupted daily schedules pre-empt reflective discussion and planning for thoughtful action. Jim Rutka's introduction of the Balfour Lectures in Surgical Ethics and Karen Devon's establishment of the Humanism in Surgery Lectures at Women's College Hospital and the Ethics M & M in General Surgery are encouraging signs of our progress. The altruism of the global surgery initiative, including efforts to advance surgical care for indigenous and homeless Canadians, provides an opportunity for reflection as well as action.

I'll close with thanks to Jim Rutka, John Wedge, Richard Reznick, Bernie Langer, Bryce Taylor, Shaf Keshavjee and all of my colleagues for their guidance. Special thanks to Jim for his friendship and a parting gift illustrated nearby a 10-pound bound volume of 15 years of Spotlights.

Thanks to Alina, Julie, Nancy, Sylvia, Stephanie, Val, Tess, Joanna, and all of the Surgery Department staff. "A fist bump to all" and to our new editor, soon to be inducted by Jim Rutka. I will send occasional notes from Boston, and return from time to time for thesis meetings and celebrations, to keep me attached to my Toronto roots, refreshed for my mission to "Bring the world more Canada".

M.M.

NEW STAFF



Amit Atrey with his wife, Alison and his two daughters Angelie and Alessandra

The Department of Orthopaedics would like to welcome Amit Atrey as a Surgeon- Investigator at St. Michael's Hospital. Amit received his MD degree from the University of London, UK in 2000. After basic surgical training in London, he attained an MSc from Imperial College in London. He completed a 6-year orthopaedic rotation in the same region and specialized in hip and knee arthroplasty. He did a trauma fellowship in Hamburg, Germany, arthroplasty in Warwick, and then came to work under the tutelage of Drs Waddell and Schemitsch at St. Michael's Hospital as a fellow. He has been a staff surgeon in the UK for the last 3 years.

Amit's research has been focused in arthroplasty and particular tribology and long-term implant survivorship.

He is delighted to be returning to Toronto with his wife, Alison and his two daughters Angelie and Alessandra. They are very much looking forward to making Toronto their home once again.

Peter Ferguson, Chair of the Division of Orthopaedic Surgery, University of Toronto



Tim Leroux with his wife Jenny and son James

Please join me in welcoming **Timothy Leroux** in the Division of Orthopaedic Surgery at Toronto Western Hospital.

Tim graduated from the University of Toronto Orthopaedic Surgery Residency Program in 2015. During his six-year residency, he participated in the Surgeon Scientist Program, and received his Masters in Education through the Ontario Institute for Studies in Education (OISE) at the University of Toronto. Following residency, he received subspecialty training in sports medicine and upper extremity reconstruction at Rush University Medical Centre in Chicago, Illinois, and completed a six-month fellowship in orthopaedic trauma and sports medicine at Sunnybrook Health Sciences Centre.

Tim is excited to return home to Toronto with his wife Jenny and son James. He joins the Division of Orthopaedic Surgery at Toronto Western Hospital, University Health Network as an Assistant Professor and Surgeon Investigator, with a clinical focus in shoulder and elbow reconstruction, and an interest in health services and education research. He feels privileged to join this prestigious Division, and looks forward to collaborating with everyone in the future!

Peter Ferguson, Chair of the Division of Orthopaedic Surgery, University of Toronto The Division of Neurosurgery at Sunnybrook Health Sciences Centre welcomes **Nir Lipsman** as a new surgeon-scientist on faculty.



Nir Lipsman

Nir grew up in the greater Toronto area, and completed his medical training at Queen's University in Kingston, Ontario and then entered the neurosurgery residency program at University of Toronto. While in residency, he completed his Ph.D. through IMS under the supervision and mentorship of Dr. Andres Lozano,

focused on early phase clinical trials of deep brain stimulation and MR-guided focused ultrasound. Following residency, Nir completed a fellowship in Stereotactic & Functional Neurosurgery at University Health Network.

Nir's primary research interests are investigating the brain circuits driving neurologic and psychiatric disorders. He helped develop the first human trials of deep brain stimulation in anorexia nervosa, bipolar disorder, and schizophrenia, and the first human experience of focused ultrasound in essential tremor, Parkinson's disease and Alzheimer's. He has received the K.G. McKenzie Prize from the Canadian Federation of Neurological Sciences as well as the Shafie S. Fazel Outstanding Resident Surgeon and Investigator Award from the U of T Department of Surgery. Nir's work has been funded by several peer-reviewed grants, including CIHR and the Focused Ultrasound Foundation, and he has published over 70 papers and textbook chapters.

Nir was recruited to Sunnybrook to help build the functional neurosurgery program, and where he hopes to further develop novel clinical applications for focused ultrasound. Appreciating the wide scope of his activity, he has cross -appointments to both the Division of Neurology (Department of Medicine) and the Department of Psychiatry. The Division of Neurosurgery at Sunnybrook Health Science Centre is proud to have attracted Dr. Lipsman as a recruit and is looking forward working with him.

Outside of work, Nir loves nothing more than to spend time with his wife, Sarit, a visual artist, and their two children, Leah and Elie.

Todd Mainprize, Hospital Head, Division of Neurosurgery Sunnybrook Health Sciences Centre



Sami Chadi with his wife Salua and son Riad

Drs. Allan Okrainec & Shaf Keshavjee are pleased to introduce **Sami Chadi** who joined the Division of General Surgery, Sprott Department of Surgery on July 1, 2016. Sami is appointed as an Assistant Professor in the Department of Surgery at the University of Toronto. His practice focus will be in Colorectal Surgery and Surgical Oncology.

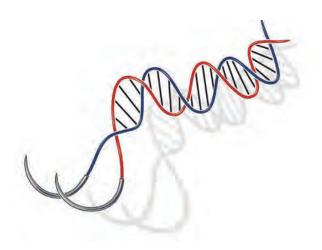
Sami completed his undergraduate degree in Genetics at Western University and his medical degree at the University of Toronto for. After graduating, he attended Western University's General Surgery program in London. He completed a Master's Degree in Clinical Epidemiology and Health Research Methodology at McMaster University. During residency, he received a number of PSI research grants as well as the Murray Girotti, Class of '49 and Canadian Association of General Surgeons (CAGS) awards in surgical education. He served as the national Chair of the Resident's Committee for CAGS in 2012/13. Upon obtaining Royal College certification in General Surgery, he completed a fellowship at the Cleveland Clinic in Florida (CCF) in Colorectal Surgery, where he obtained American Board of Surgery Certification in General and Colorectal Surgery. He went on to complete a second year at CCF in Minimally Invasive and Advanced Colorectal Surgery focusing on minimally invasive approaches to re-operative surgery.

Sami focused on mentoring many of the clinical and research fellows in research methodology during his fellowship, also establishing a number of evidence - based medicine lectures for the residents. He was a co-author in the submission of 18 scientific abstracts and peer-reviewed submissions and the recipient of the Northern California Society of Colorectal Surgery award at the American Society of Colon and Rectal Surgeons meeting. Upon graduating from CCF, he received the researcher of the year award and an award for the best oral presentation for his project assessing minimally invasive approaches to rectal cancer in obese patients.

His plan is to continue his research in Toronto focusing on functional and oncologic outcomes in Colorectal Surgical Oncology, while mentoring medical students and residents through the successful completion of research initiatives. He is also avidly involved in promoting social media access to medical professionals (@ SChadi_CRS) that has allowed for the establishment of international clinical and research collaborative initiatives.

Outside of work, Sami's interests include soccer and scuba diving. Sami and his wife Salua have a 15-month old son, Riad. They are very excited to have made Toronto their home.

Allan Okrainec, Hospital Head, Division of General Surgery, University Health Network



ANNOUNCEMENTS

NAJMA AHMED APPOINTED VICE-CHAIR OF EDUCATION, DEPARTMENT OF SURGERY, U OF T.



Najma Ahmed

Najma Ahmed (General Surgery) has accepted the position of Vice-Chair of Education in the Department of Surgery, U of T effective January 1st, 2017. Najma is a Trauma Surgeon at St. Michael's Hospital and the former Director of the Residency Program Committee in General Surgery. She follows David Latter in this position, who is currently the Director MD Admissions and Student Finances in Undergraduate Medical Education in the Faculty of Medicine. We welcome Najma in her new role and thank David for his many years of service to the Department of Surgery!

FRED BRENNEMAN APPOINTED GENERAL SURGERY PROGRAM DIRECTOR, UNIVERSITY OF TORONTO.



Fred Brenneman

Fred Brenneman (General Surgery) has accepted the position of General Surgery Program Director for the University of Toronto. He will be succeeding Dr. Ahmed who stepped down from the role to become Vice-Chair Education for the Department of Surgery, U of T. He has officially

taken over as of July 1, 2017. Congratulations Fred!

NEW PRESIDENT AND CEO OF SUNNYBROOK HEALTH SCIENCES CENTRE



Andy Smith (General Surgery) has been appointed as the new President and CEO of Sunnybrook Health Sciences Centre, effective July 1, 2017. He succeeds Barry McLellan who has held the position for the past 10 years. Congratulations Andy!

Andy Smith

PROGRAM DIRECTOR OF THE DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Kyle Wanzel has been appointed as Program Director for the Division of Plastic and Reconstructive Surgery, U of T effective July 1, 2017. He will succeed Dr. Mitch Brown who has held the position for the past 10 years. Congratulations Kyle!



Kyle Wanzel

2016-17 MICHAEL & AMIRA DAN FELLOWS IN NEUROSURGERY DINNER

This year's dinner in appreciation of Michael and Amira Dan's generosity to the Division of Neurosurgery was held on May 4th, 2017. The Dan Fellows in Neurosurgery program is now in its fifth year and our 2016-17 Dan Fellows, Ibrahim Jalloh (SickKids) and Adetunji Adeniyi (Sunnybrook), were in attendance to share the positive impact the Fellowships have had on their careers and training. (Dan Fellow Shoichi Haimoto, St. Michael's Hospital was absent due to a schedule conflict.) We are extremely grateful for the Dan Family's continued dedication to neurosurgical education and the opportunities their support provides to our Fellows.



Michael & Amira Dan Fellows in Neurosurgery Dinner
Back row: (L to R) Adetunji Adeniyi , Olukemi Oremakinde, Michael Dan,
Marie Slegr, Andres Lozano.
Front row: (L to R) Darina Landa Amira Dan, Ibrahim Jalloh, Mari Rutka

Front row: (L to R) Darina Landa, Amira Dan, Ibrahim Jalloh, Mari Rutka, James Rutka.

On May 18, 2017, Dr. Michael Dan presented a joint lecture between the Departments of Medicine and Surgery entitled "Impact of Colonization on the Health of Indigenous People in Canada" at the Banting Institute in Toronto. Dr. Dan has been an exceptional leader in philanthropy, most recently in the area of First Nations health care, for which he was recognized by appointment as a Member of the Order of Canada in 2016.

TRANSITIONS IN PLASTIC AND RECONSTRUCTIVE SURGERY DIVISION!



Brett Beber

I would like to thank **Brett Beber** (Michael Garron
Hospital and Women's
College Hospital) for all his
hard work in the role as
Resident Wellness Director
for the past 9 years. Brett
stepped out of this position at the end of the past
academic year and I am
most grateful for all that he
has done to contribute to

the health and well-being of our residents. In addition, Brett has attended countless meetings of the Residency Program Committee and been a valuable member of the CaRMS selection process each year.



Karen Cross

I would like to welcome **Karen Cross** (St. Michael's Hospital) who has kindly agreed to take on the important role of Resident Wellness Director. Karen is well known to us all having graduated from the Surgeon-Scientist Training Program here at the University of Toronto in 2013 before taking a staff

position at St. Michael's Hospital. As many of you are aware, Karen is passionate about pursuing dreams and making things happen. She has done a remarkable job of marrying innovation, tech and clinical practice in Plastic and Reconstructive Surgery and is currently enrolled in the Creative-Destructive Labs at the Rotman School of Business. Thanks, Karen, for taking on this important role and we look forward to your input at the RPC.

Christopher Forrest, Chair of the Division of Plastic and Reconstructive Surgery, University of Toronto

NEWSWORTHY ITEMS

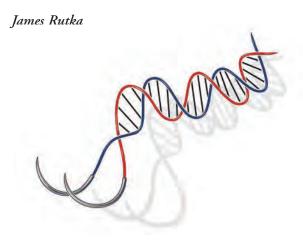
Paediatric Urology is now recognized as an Area of Focused Competence (Diploma) discipline. This will allow the program to be recognized by the American Board of Urology and will allow US fellows to continue to come to Sick Kids Hospital for their training.

Vaibhav Gupta (PGY3, GenSurg) launched the inaugural *Esophageal Cancer Survivors' Night* at TGH on April 25, 2017 with funds received through the RBC 150 Program. The funding was to be used to "show the impact young people can have on their communities." It was a great success and in addition to an online support group which is already active. They are hoping to have in-person support groups every 3 months. If this continues to be successful, it will expand to other hospitals in Toronto and the GTA.



lames Rutka with Sean Cleary

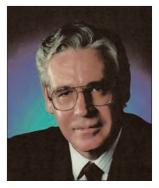
Sean Cleary (General Surgery, UHN) accepted the position of Associate Professor of Surgery at Mayo Clinic, Rochester MN, effective April 1, 2017. Sean was a faculty member in the Department of Surgery at UofT since 2007. He was also a Research Associate at the Samuel Lunenfeld Research Institute of Mount Sinai Hospital. He received his MD from the University of Western Ontario and did his General Surgery Residency training at U. of T., followed by a fellowship in Pancreatic and Heptobiliary Surgical Oncology and Transplantation at the Toronto General Hospital. He has a Master's of Science in Cancer Genetics and completed an MHSc in Public Health and Epidemiology in the Department of Public Health Sciences. Congratulations Sean! And we wish you all the best at Mayo Clinic!



IN MEMORIAM

DR. RONALD JAMES BAIRD - A PIONEER IN VASCULAR AND CARDIAC SURGERY

May 3, 1930 - March 26, 2017



Ronald Baird

Born, raised and educated in Toronto, Ron was Gold Medalist in the Medical Class of 1954 at the University of Toronto.

Invited to join the Gallie Course by Dr. Robert Janes, he completed his Fellowship in General Surgery in 1959, and in Cardiovascular and

Thoracic Surgery in

1964. He won the Roscoe Graham Award in 1960, the Lister Award in Surgery in 1964 and the Medal in Surgery from the Royal College of Physicians and Surgeons of Canada in 1969.

His mentors were Drs. Gordon Murray, Bill Mustard and Bill Bigelow.



Ronald Baird with his mentor Bill Bigelow

In 1960 Ron was appointed to the cardiovascular surgical staff at the Toronto General Hospital. In 1964, he moved to the Toronto Western Hospital, where he was Head of CVS from 1972 – 1977. When Dr. Bigelow retired in 1977, Ron moved back to the Toronto General Hospital as Head of CVS and Chairman of CVS at the University of Toronto from 1977 – 1987 {when he was succeeded by Dr. Tirone David}. He retired from independent surgical practice in 1994, but continued as an assistant and mentor to residents and fellows until 2002.

Academically, Ron progressed rapidly from Assistant Professor in 1964 to Associate Professor in 1968 and full Professor in 1973.

He was well-known as an innovative vascular surgeon, and a pioneer in the early days of adult cardiac surgery in the evolution of coronary artery, valve replacement, pacemaker and heart transplant surgery.

He was an exceptional teacher of the craft of surgery, and greatly admired and respected as a mentor to generations of residents and international fellows from many different countries.

Ron was an author of many peer-reviewed articles both in vascular and cardiac surgery, numerous abstracts, book chapters and editorials.

He was an invited speaker at many international CV meetings, travelling widely and always enhancing the reputation of the quality of cardiovascular surgery in the Department of Surgery at the University of Toronto.

In his quiet way, Ron Baird was a remarkable leader. He served on the Council of the Society of University Surgeons {SUS}, the Board of Governors of the American College of Surgeons {ACS}, the Council for CVS with the American Heart Association {AHA}, President of the North American Chapter of the International Society for Vascular Surgery, President of the Canadian Society of Thoracic & CVS, and was one of only four CV surgeons to be elected President of the Canadian Cardiology Society {CCS} in over 50 years... He was active in virtually all of the top societies in cardiology, cardiothoracic and vascular surgery.

Ron Baird was a renaissance man, keenly interested in nature, science, history and international travel. He had a wide circle of friends outside of medicine, and greatly enjoyed bridge and bonvivant companionship at the Toronto York Club.

He was devoted to his family. His wife, Fern, was his greatest champion and supporter. They took great pride in their children: Ron Jr. {unhappily deceased from cancer recently}, Catherine and Fraser and respective spouses and grandchildren. There were many happy family times at their farm close to Toronto and their Bahamian retreat in Hope Town.

Ron Baird lived life fully and well. He leaves a rich legacy, and will be missed by all.

Hugh Scully, MD, MSc, FRCSC, FACS, FCCS, Professor of Surgery and Health Policy, University of Toronto,

Consultant Cardiac Surgeon, UHN Toronto General Hospital

AWARDS/ HONOURS/ ACCOMPLISHMENTS

Barbara (**Dee**) **Ballyk** (Anat) has been chosen as the 2017 W.T. Aikins Award winner in the Excellence in Individual Teaching Performance, Large Group. This award is presented to a teacher who has significantly contributed to high-quality undergraduate teaching by establishing and integrating new and effective methods of instruction into the curriculum.

Michael Wiley (Anat) received Dr. E. Mary Hollington Teaching Award Excellence in Preclinical or Basic Science Teaching. This award is given for demonstrated excellence in pre-clinical or basic science teaching.

Gideon Cohen (CardSurg) received the Surgical Skills Centre Distinguished Educator Award for his longtime support in the area of education at the Surgical Skills Centre. His continued support and development of the cardiac residency boot and camp made him the prime choice for this year's award.

Maral Ouzounian (CardSurg) was awarded the 2017 Nina Braunwald Fellowship from the Thoracic Surgery Foundation in recognition of an outstanding female young surgical investigator.

Subodh Verma (CardSurg) and David Mazer have been invited to evaluate the impact of evolocumab in coronary artery bypass patients in a randomized trial. This comes with a budget of CAD 7M. This trial adds significant momentum to the CardioLink effort.

Subodh was also awarded a 5-year CIHR Project Grant for the proposal entitled "BRCA1 therapy for heart failure".

Subodh Verma has also been invited to sit on the Diabetes Committee of the American Heart Association Council on Lifestyle and Cardiometabolic Health.

Najma Ahmed (GenSurg) is the recipient of the 2017 Award for Excellence in Postgraduate Medical Education in the category of Teaching Performance, Mentorship and Advocacy, which hounours an individual who has demonstrated sustained commitment to postgraduate medical education.

Nancy Baxter (GenSurg) made the top 5 of the 25 most cited articles over the past 25 years through ICES (http://www.ices.on.ca/About-ICES/25th-anniversary/Top-25-in-25).

Natalie Coburn (GenSurg) received a CIHR Catalyst Grant: Health Services and Economics Research in Cancer Control for her project "Comparison of Adjuvant Chemotherapy to Chemoradiation Following Curative-Intent Resection for Pancreatic Cancer: A Population-Based Cost-Effectiveness Analysis".

Karen Devon (GenSurg) has been selected as a co-recipient of the University of Toronto Faculty of Medicine David Fear Fellowship Award for an innovative program in continuing professional development for health professionals. Karen's innovations include development of Surgical Ethics Morbidity and Mortality rounds, which is now a foundation at University of Toronto in the Department of Surgery.

Jaime Escallon (GenSurg) has been granted The National Merit Award of the Republic of Colombia. This recognizes his work in Colombia, but it also takes into consideration the support that the Department of Surgery of the University of Toronto has given to education and advances in surgical principles and practices, having been able to guarantee the participation of Faculty from Toronto at the Annual meeting of the Colombian Surgical Society for the last 20 years. Over the years, Dr. Escallon has been able to help many physicians at different levels of training successfully enrolled in different programs. Some of them stayed in Canada after completing their training and now have a successful career. Many have return to Colombia and are now a permanent link with U of T to continue growing this partnership.

Jaime also received the Frank Mills Teaching Award for Faculty in recognition of an outstanding contribution to the education of medical students, residents and faculty in the Division of General Surgery.

Anand Ghanekar (GenSurg) has received a 2-year Operating Grant from the Canadian Liver Foundation for his project entitled "Role and Regulation of Dual Specificity Phosphatase 9 in Human Hepatocellular Carcinoma".

Anand is also co-investigator on a project entitled "Non-Invasive Monitoring of Liver Cancer Recurrence Following Surgery Using Circulating Tumour DNA Sequencing" that was awarded a 5 year Project Grant from CIHR (PI: Trevor Pugh, Medical Biophysics).

Rebecca Gladdy (GenSurg) was a co-winner of 2017-19 Clinical Investigator Awards for her work "Metabolic Reprogramming in Sarcoma-Repurposing Statins as Anticancer Agents".

Anand Govandirajan (GenSurg) was the recipient of the Innovation Funds in Surgical Oncology (IF-SO)-Young Investigator for his work "Pilot randomized controlled trial of Prehabilitation to Improve Cancer Surgery Outcomes (PICaSO".

Teodor Grantcharov (GenSurg) was named Keenan Chair in Surgery at St. Michael's Hospital and the University of Toronto. The five-year chair was developed to support a world-class surgeon-scientist at St. Michael's.

Teodor is also the recipient of the 2017 Award for Excellence in Postgraduate Medical Education in the category of Development and Innovation, which is given to an individual who has demonstrated sustained commitment to postgraduate medical education.



Paul Greig and Bryce Taylor Greig with 2002 Fellows and Faculty Front: Chuck Vollmer, Ian McGilvary, Elijah Dixon, Mark Cattral, Back: Bernie Langer, Bryce Taylor, Steve Gallinger, David Grant, Paul Greig

Paul Greig (GenSurg) is the inaugural recipient of the Bryce R. Taylor Mentorship Award from The Department of Surgery, University of Toronto which celebrates faculty members who emulate the traits that Dr. Taylor exhibited throughout his long and illustrious career at the University of Toronto: naturally gifted clinical surgeon and educator with a reputation for mentoring students, residents, fellows and, in particular, faculty.

Paul Karanicolas (GenSurg) has been awarded the ACS Traveling Fellowship to Germany.

Paul also received a CIHR Project CIHR Project Grant-1 year Bridge Funding his project "The HeLiX Trial: A Randomized Controlled Trial of Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Liver Resection".

Robin McLeod (GenSurg) has been awarded the 2017 Royal College Duncan Graham Award, which celebrates extensive and outstanding contributions to medical education. Dr. McLeod is recognized for initiating and developing the "Evidence-Based Reviews in Surgery" (EBRS).



Stephanie Mason and ACS RCOT Chair Leonard J. Weireter

Stephanie Mason (GenSurg) won the 1st Place, Clinical Research in the ACS Trauma resident paper competition for "Self-harm emergencies after major burn injury: A population-based analysis".

Khaled Ramadan received the Paddy Lewis Award for Junior

Resident TGH in recognition of an outstanding contribution to education in the Division of General Surgery.

Jonah Shiroky (GenSurg) received the Paddy Lewis Award for Senior Resident TGH in recognition of an outstanding contribution to the education of medical students, residents in the Division of General Surgery.

Katalin Szaszi (GenSurg) is the recipient of a 2017 NSERC Discovery Grant for her work "Regulation of expression and trafficking of junction proteins".

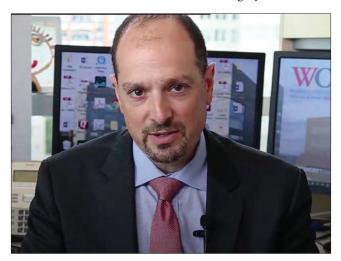
Department of Surgery at the University of Toronto hounoured Bryce Taylor (GenSurg) at the 2017 Gallie Day by establishing the Bryce Taylor Mentorship Award. This award recognizes those faculty members who emulate the traits that Dr. Taylor exhibited throughout his long and illustrious career at the University of Toronto. Dr. Bryce Taylor, former Surgeon in Chief at the University Health Network and Associate Chair in the Department of Surgery, has been described as being a naturally gifted clinical surgeon and educator with a reputation for mentoring students, residents, fellows and, in particular, faculty. Dr. Taylor was known for providing sage advice and counsel to countless medical professionals. He was considered, by all accounts, to be the quintessential role model for professionalism in surgery and trained generations of surgeons.

Stephanie Tung (GenSurg) received the Paddy Lewis Award for Junior Resident TWHin recognition of an outstanding contribution to education in the Division of General Surgery.



L-R Jaime Escallon, Jonah Shiroky, Khaled Ramadan, Stephanie Tung, Sha Ullah. Nathan Zilbert and Division Head. Allan Okrainec

Sha Ullah (GenSurg) received the Paddy Lewis Award for Senior Resident TWH in recognition of an outstanding contribution to the education of medical students, residents in the Division of General Surgery.



David Urbach

David Urbach (GenSurg) was elected to Fellowship in the Canadian Academy of Health Sciences (CAHS). Fellows are nominated for exceptional achievements through a body of publications, intellectual endeavours or creative activities exhibiting original contributions in the arts, humanities or sciences, as well as in public life. He is joining an elite group of experts who are considered the best in their respective fields.

Nathan Zilbert (GenSurg) received the Paddy Lewis Award for Clinical Fellow in recognition of an outstanding contribution to the education of medical students, residents in the Division of General Surgery.

Lorraine Tremblay (GenSurg) has been appointed as President, Trauma Association of Canada for 2018-20. Her appointment as president is a recognition of her contributions to trauma care in Canada over the course of her career.

Jetan Badhiwala (NeurSurg, PGY3) received second prize of the 2016 William J. Horsey Neurosurgical Resident Prize Competition for his work "*Endovascular Thrombectomy for Acute Ischemic Stroke: A Meta-analysis*".

Vivek Bodani (PGY4, NeurSurg) (supervisor: James Drake) won the AANS Neurosurgery Technology Development Grant for his project entitled "Development And Validation Of A High-Fidelity Surgical Simulator For Endoscopic Colloid Cyst Resection."

Michael Cusimano (NeurSurg) was one of 6 Canadian scientists selected to be this year's recipient of the Partners in Research Biomedical Science Ambassador Award. This award recognizes a Canadian researcher whose outstanding body of work over a period of time has contributed to the fields of biomedical science and/or clinical medicine, and the promotion of this research to the Canadian public. Michael's work has contributed significantly to our understanding of traumatic brain injury and its prevention and he has been pivotal in disseminating this important information to the public, predominantly through his work with children and young adults. Michael is the first surgeon to receive this award. http://www.pirweb.org/pir/en/pir-event/

Michael Cusimano was also elected to Fellowship in the Canadian Academy of Health Sciences (CAHS). Fellows are nominated for exceptional achievements through a body of publications, intellectual endeavours or creative activities exhibiting original contributions in the arts, humanities or sciences, as well as in public life. He is joining an elite group of experts who are considered the best in their respective fields.

Michael also received a 2017 Physicians' Services Inc. Foundation - Operating Grants for his project "Tranexamic Acid in the Treatment of Residual Chronic Subdural Hematoma: A Single-Centre, Observer-Blinded, Randomized, Controlled Trial".



Michael Fehlings receiving David Lostchuck Memorial Award

Karen Davis (NeurSurg) received the Outstanding Pain Mentorship Award from The Canadian Pain Society. This award celebrates a researcher and/or clinician who consistently exemplifies outstanding mentorship in the training of future pain researchers and/or clinicians.

Peter Dirks and **Michael Taylor** (NeurSurg) were awarded \$4.8 million for brain cancer research. SickKids is one of five major studies that will receive a portion of \$24 million in Translational Research Initiatives (TRIs) funding over two years from the Ontario Institute for

Cancer Research (OICR). This is a brain cancer research project led by The Hospital for Sick Children (http://www.sickkids.ca/AboutSickKids/Newsroom/Past-News/2017/SickKids-researchers-awarded-4.8million-brain-cancer-research.html)

James H. Eubanks (NeurSurg) received a 3 year CIHR Project Grant for the work entitled "Altered Microtubule Regulation: A Novel Mechanism Underlying Rett Syndrome Pathogenesis?".

Michael Fehlings (NeurSurg) was appointed to the Editorial Board of StemCellsTM.

Michael and his team received a two-year Wings for Life grant with possible extension for another 3 years for the project "Next Generation Stem Cell Therapy for Cervical Spinal Cord Injury: Cervical Identity iPSC-Derived Neural Precursor Cells Optimized to Modulate the Injury Microenvironment".

Michael Fehlings received the David Lostchuck Memorial Award at the CSC & OSCIRN meeting for his commitment and accomplishment to SC research.

Michael also received the Germán Ochoa Traveling Fellowship at the Global Spine Congress 2017.

Mario Ganau (NeurSurg), Spine Fellow, received 1st Poster Prize from at the Combined Canadian Spinal Cord & Ontario Spinal Cord Injury Research Network Meeting for the work entitled "Bioengineering and Nanotechnology Contributions to the Management of Spinal Cord Injuries. Where Are We Now, and Where Are We Heading?"

Fred Gentili and **Andres Lozano** (NeurSurg) were made honorary members of the Spanish Society of Neurosurgery.

Deep Guha (NeurSurg, PGY4) received a Charles Kuntz Scholar Award from the Congress of Neurological Surgeons (CNS) Joint Section on Disorders of the Spine and Peripheral Nerves for his work entitled "Optical Topographic Imaging for Intra-Operative Three-Dimensional Navigation in the Cervical Spine: Accuracy Validation and Initial Clinical Feasibility".

Deep Guha (supervisor: Victor Yang) received a 2017 Optics and Photonics Education Scholarship from the SPIE - International Society of Optics and Photonics.



Deep Guha receiving the AANS Sanford J. Larson Award

Deep (MSc supervisors: Victor Yang and Albert Yee) was also selected to receive the Sanford J. Larson, MD, PhD Award from the American Association of Neurological Surgeons for his work titled "Optical Topographic Imaging for Intra-Operative Three-Dimensional Navigation in the Cervical Spine: Accuracy Validation and Initial Clinical Feasibility".

Deep Guha won the 2017 K.G. McKenzie Memorial Prize for Basic Neuroscience Research, the most prestigious resident award in neurosurgery in Canada. Deep also won the 2015 McKenzie Prize for Clinical Neuroscience Research. He joins Michael Fehlings (1987, 1991) and Shah Siddiqi (1994, 1995) as Toronto neurosurgery residents who have won the McKenzie Prize more than once.



Mojgan Hodaie

Mojgan Hodaie (NeurSurg) was presented with the Grand Cross of the Legion of Honor of Monisaraphon by the Kingdom of Cambodia for her efforts in the development and strengthening of neurosurgery in Cambodia. This is one the highest civilian honors bestowed by the country for services in the

fields of literature and the fine arts, education, justice, administration, and science. We congratulate Mojgan on her tremendous efforts in international neurosurgery.

Mojgan Hodaie was elected as an officer of the Board of Directors of the World Society of Stereotactic and Functional Neurosurgery for 2017-2019 and will hold the position of Treasurer.

Mojgan is also the winner of the 2017 Institute of Medical Science Course Director Award in recognition of her highly regarded course *MSC1006H:* Neuroanatomy - Introduction to Anatomical Organization of the Brain. This award is presented to a faculty member with a sustained contribution of more than three years.

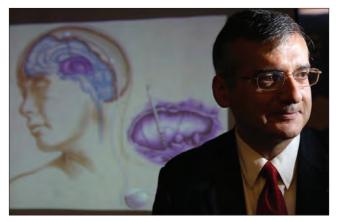
William Hutchison, Suneil Kalia, Mojgan Hodaie, and Andres Lozano (NeurSurg) received a two-year grant from the Dystonia Medical Research Foundation, Chicago, for the work entitled "Tremor, Oscillations, Synaptic Plasticity and DBS for Dystonia".

Two papers of **Abhaya Kulkarni** and **James Drake** (NeurSurg) were featured in the *Journal of Neurosurgery*'s supplement "Best of 2016", which includes the 10 best papers of the year.

Nir Lipsman (NeurSurg) is mentioned in the Ontario Hospital Association Newsletter, June 1, 2017. Nir, together with scientists at Sunnybrook have made history as they used focused ultrasound to safely and non-invasively breach the blood-brain barrier (BBB) temporarily in patients with Alzheimer's disease (AD) in a clinical trial.



Toronto Dominion Bank 2016 Most Influential Hispanic Canadians



Andres Lozano awarded Order of Canada

Andres Lozano (NeurSurg) was inducted as an Officer of the Order of Canada at a ceremony at Rideau Hall in Ottawa on February 15, 2017. He has been honoured primarily for his research into Deep Brain Stimulation, a process whereby electricity is used to regulate the activity of malfunctioning brain circuits and control the symptoms of many disorders, such as Parkinson's disease

Andres was named to the 2016 Thomson Reuters Highly Cited Researchers and Most Influential Scientific Minds for the period 2003-2014. The Highly Cited Researchers list includes researchers that publish the top 1% most cited works in their subject and the given year of publication.

Andres Lozano (the fourth from left) with other 2016 Award Recipients at the CarIU, Toronto

Andres was also named one of the 10 Most Influential Hispanic Canadians of 2016 by Toronto Dominion (TD) Bank. The awards recognize leading individuals from all disciplines across Canada for their outstanding contributions to the community. The list is personally recognized by the Prime Minister. The awards were presented by His Excellency Luis Almagro Lemes, Secretary General of the Organization States at a ceremony in Toronto on December 15, 2016.

Andres Lozano (and Joyce Poon and Roman Genov, U of T Electrical & Computer Engineering) received a 3-year CIHR Collaborative Health Research Project Grant for the project entitled "Wireless Neuroprobes for Massively Parallel Optical and Electrical Interrogation of Neurons".

Andres Lozano received the 2017 Neurobionik Award from the International Neurobionik Foundation.

Andres Lozano received the 30th Khwarizmi International Award (KIA) from the Iranian Research Organization for Science and Technology and the President of Iran, His Excellency Hassan Rouhani.

Todd Mainprize (NeurSurg) has been promoted to Deputy Surgeon-in-Chief at Sunnybrook Hospital. Dr. Mainprize joined the Sunnybrook Health Science Centre in 2008, where his research focuses on neuro-oncology, and he was appointed Division Head of Neurosurgery at Sunnybrook in March 2016.

Ann Mansur (NeurSurg) received this year's Alan R. Hudson Clinical Clerk Achievement Award, which is awarded to a Clinical Clerk in recognition of excellence in achievement during Clinical Clerkship training.

Allan Martin (NeurSurg, PGY4) received a Charles Kuntz Scholar Award for his work entitled "Quantitative Multi-Parametric Spinal Cord MRI Detects Subclinical Tissue Injury in Asymptomatic Cervical Spinal Cord Compression".

Ying Meng (PGY4; NeurSurg) (Supervisor: Andres Lozano) received an Alzheimer Society Research Program (ASRP) research award. Ying's work was ranked third of 223 applications.

Anick Nater (PGY4, NeurSurg) (Supervisor: Dr. Michael Fehlings) won an award of excellence at the CIHR Poster Presentation that was held at the Canadian Student Health Research Forum.

Farshad Nassiri (PGY3 NeurSurg) won first prize of the 2016 William J. Horsey Neurosurgical Resident Prize Competition for his project "A Propensity Score-Matched Study of the Use of Non-steroidal Anti-inflammatory Agents Following Aneurysmal Subarachnoid Hemorrhage".

Farshad also received the Warren Ho Humanitarian Award, which celebrates excellence in clinical care and research, and demonstrated humanitarianism.

Ivan Radovanovic (NeurSurg) received a McLaughlin Centre, University of Toronto - 2017 Accelerator Grants for "Whole Exome Sequencing of Sporadic and Hereditary Hemorrhagic Telangectasia (HHT) Associated Arteriovenous Malformations".



James Rutka receiving the honorary Doctor of Science from Queen's University Left to right: R. Reznick, J. Rutka

James Rutka (NeurSurg) and Annie Huang (Principal Investigator, Pediatrics) received a 5 year CCSRI Impact Grant co-funded with Brain Canada with the financial support of Health Canada for their work "Advancing biology-based therapies for rhabdoid brain tumours".

James Rutka also received the International Recognition Award given by the Saudi Arabian Neurosurgical Society and the Pediatric Arab Neurosurgical Society on an invitation to their recent annual meeting in Riyadh.

James received a 5 year CIHR Project Grant for his project "Molecular Therapeutic Targeting of Malignant Gliomas". James Rutka received an honorary degree, Doctor of Science from Queen's University on May 25, 2017 during Spring Convocation.

James Rutka received Honorary Membership in the Ukrainian Association of Neurosurgeons at their Annual Meeting in Kharkiv, Ukraine.

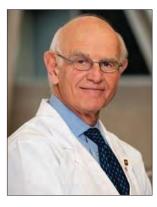
James Rutka was the recipient of the Hudson Faculty Teaching Award, which is awarded to a Neurosurgery Faculty member in recognition of contributions to undergraduate and postgraduate teaching.

Peter Shih-Ping Hung (graduate student, supervisor: Mojgan Hodaie, NeurSurg) was awarded the best poster award-second prize at the 2017 Canadian Pain Society meeting for his poster entitled: "Untangling Trigeminal Neuralgia from neurovascular compression: The role of multimodal magnetic resonance imaging and microstructural diffusivity analysis".

Peter Shih Ping Hung and **Sarasa Tohyama** (supervisor: Mojgan Hodaie, NeurSurg) received 2016-2017 scholarships from the University of Toronto Center for the Study of Pain.

Sarasa Tohyama (graduate student, supervisor: Mojgan Hodaie, NeurSurg) won the graduate student first prize at the 2017 Krembil Research Day for her presentation entitled: "Trigeminal Nerve Microstructure after Radiosurgery predicts long-term treatment response for trigeminal neuralgia"

Sarasa was also awarded the University of Toronto Faculty of Medicine Award of Merit for International Students.



Charles Tator

Charles Tator (Neursurg) has been promoted to Officer of the Order of Canada. He was originally appointed as a Member of the Order of Canada in 2000 for his leadership in the prevention and treatment of brain and spinal cord injury. He has now been made an Officer of the Order in recognition of his tremendous ongoing work in

concussion management and prevention.

Charles has also been inducted into the 2017 Canada Sports Hall of Fame for the profound impact he has had on spinal cord injury research, prevention, and treatment, transforming the world's understanding of concussions. Dr. Tator's advocacy efforts resulted in the creation of new legislation and guidelines to prevent spinal cord injury in hockey and, in 1992, he helped found an organization called Parachute Canada, a national injury prevention agency that educates young people, medical personnel, teachers, coaches, and parents across the country about sport safety.

Charles Tator received a two-year grant from *Wings* for Life for the project entitled "Inhibition Of Repulsive Guidance Molecule A To Promote Axonal Regeneration after Cervical Spinal Cord Injury".

Charles was awarded the first annual University Health Network Surgeon Educator Award in honor of surgical leaders at UHN that have made an impact in Surgical Education. **Michael Taylor** (NeurSurg) received the 2016 Lister prize from the Department of Surgery. The Prize is given in recognition of outstanding and continuing productivity of international stature as evidenced by research publications, grants held, students trained and other evidence of stature of the work produced.

Michael Tymianski (NeurSurg) has been appointed Member of the Order of Canada. Michael is being honoured for his contributions to neuroscience, particularly through his leadership in investigating new mechanisms to protect the brain following a stroke.



Michael Tymianski

Michael Tymianski received

a Heart and Stroke Foundation of Canada: Grant-In-Aid for "Developing the 'EpiPen' of Acute Stroke and Stroke Recovery".

Taufik Valiante (NeurSurg) received a two-year EMHSeed grant for the work entitled "A Clinical Study of Seizure-Aborting Implantable Neuro-stimulation Efficacy in Treating Drug-Resistant Epilepsy" (Co-PI: Roman Genov).

Taufik received a 5-year CIHR grant for the work entitled "Artificially Intelligent Neurostimulators for Drug-Resistant Epilepsy". Dr. Valiante's successful proposal was ranked third of more than 2,800 submissions.

Taufik was also this year's Ross Fleming Teaching Award recipient. This award hounours a neurosurgery faculty member for contributions to undergraduate and junior resident teaching.

Jefferson Wilson (NeurSurg) received a 2017-2018 Young Investigator Award from the Neurosurgery Research and Education Foundation (NREF). Jeff's research interests relate to the epidemiology and clinical epidemiology of spinal trauma and spinal cord injury.

Jefferson Wilson was appointed to the Institute of Health Policy, Management and Evaluation at the University of Toronto.

Chris Witiw (NeurSurg, PGY5) received the Fielding Resident/Fellow Research Award (Second Prize) at the

Cervical Spine Research Society 44th Annual Meeting for his work entitled "A Health Economic and Patient-Centered Analysis On the Value of Surgery for Degenerative Cervical Myelopathy: Strong Support for Surgical Intervention".

Chris Witiw was also presented with the Hudson Resident Teaching Award, which is awarded to a Neurosurgery resident in recognition of contributions to teaching medical students, fellow residents and nurses.

Christopher Witiw was awarded Best Abstract (Clinical Science) at SpineFEST 2017.

Victor Yang (NeurSurg) received FDA and Health Canada approval for his optical topographical imaging technology for spinal navigation created with 7D Surgical. The Machine-vision Image Guided Surgery (MIGSTM) system advances optical neuronavigational technique and is the first of its kind. Congratulations to Victor and his team for developing this technology that will enhance spinal imaging for neurosurgeons across North America.

Victor Yang received a three-year CHRP (CIHR/ NSERC partnered) grant for the work entitled "Comprehensive Image-Guided Planning System for Personalized Treatment."

Victor is also the recipient of the 20 17 George Armstrong Peters Prize from the Department of Surgery. This prize is awarded to a young independent investigator who has exhibited outstanding productivity in research publications, grants awarded and students trained. Since joining our Department in 2013, Dr. Yang's research has focused on high-resolution neurosurgical navigation techniques and minimally invasive therapeutics.

Victor Yang received FDA and Health Canada approval for his optical topographical imaging technology for spinal navigation created with 7D Surgical. The Machine-vision Image Guided Surgery (MIGSTM) system advances optical neuronavigational technique and is the first of its kind. Congratulations to Victor and his team for developing this technology that will enhance spinal imaging for neurosurgeons across North America.

Gelareh Zadeh (NeurSurg) and her team were awarded a \$1.5 million, two year grant from the Children's Tumor Foundation to investigate the genomic landscape of schwannomatosis. This grant supported Gelareh's ini-

tiative to organize the first meeting of the International Consortium on Schwnanomatosis on May 1, 2017. Invited speakers from 10 national and international sites were in attendance.

Gelareh also received a CIHR Operating Grant for the work entitled "Analyses of Existing Canadian Cohorts and Databases Related to Reproductive, Child and Maternal Health and Cancer Control."

Gelareh Zadeh and colleagues are the recipients of a collaborative grant from The Brain Tumor Charity –CR/UK – for 1.5 M pounds (UK) working across multiple institutions on understanding the molecular signature of clinically aggressive meningiomas.

David Backstein (OrthoSurg) assumed the role of Associate Editor for the Journal of Arthroplasty. This is a prestigious position in the top arthroplasty journal and signifies David's significant contributions to the field.

James H. Eubanks (OrthoSurg) received a CIHR Project Grant in the October 2016 Competition for his project "Altered Microtubule Regulation: A Novel Mechanism Underlying Rett Syndrome Pathogenesis?".

Geoff Fernie (OrthoSurg) received the Department of Surgery Lister Prize, the highest honour a member of the Department of Surgery can receive.

Jeremy Hall (OrthoSurg) received the Department of Surgery Bruce Tovee Undergraduate Teaching Award at this year's Gallie Day dinner.



Andrew Howard

Andrew Howard (Ortho Surg) was awarded the prestigious Paediatric Orthopaedic Society of North America's Huene Memorial Award. This is the premier research award in North American children's orthopaedics and recognizes both past contribution plus gives a small grant (\$30k US) for future work. In 26 years of

this award it has come to Sickkids 6 times, with no other institution coming closes. Past winners here include Drs. Cole, Salter, Alman, Wright, and Narayanan. This is a

phenomenal accomplishment for Andrew and for the Division at Sickkids, further cementing their reputation as the leading peadiatric orthopaedic research institute in North America.

Andrew Howard (OrthoSurg) and his team received a 5 year CIHR grant for their project entitled "*The Built Environment and Active Transportation Safety in Children and Youth*".

Mohit Kapoor (OrthoSurg) received a 4 year CIHR Project Grant for his project "ULK1 (most upstream autophagy inducer) as a potential therapeutic target in Osteoarthritis".

Mohit is also the recipient of a 1/5 year(s) + 1-year automatic extension NSERC Grant for his work on "*Role of MicroRNAs in Synovial Fibroblast Biology and Functions*".

Mitch Brown (PlasSurg) was celebrated for completing 10 years as Program Director in the Division of Plastic and Reconstructive Surgery at this year's Gala Graduation Dinner. In appreciation for the huge amount of time and effort that he contributed over the past decade, a small token of appreciation was awarded to him – a metaphor for the combination of unpredictable nature of the post was engraved on a stethoscope:

"With thanks and appreciation"

Mitchell H. Brown, MD, Med, FRCSC, Program Director, Division of Plastic and Reconstructive Surgery, University of Toronto, 2007-2017

"Share your knowledge. It is a way to achieve immortality" - Dalai Lama XIV



THE LAST SUPPER

(back row, left to right) Michael Weinberg, Ron Levine, Steve McCabe, Shar Shahrokhi, Jamil Ahmad, Paul Binhammer, Linda Dvali, Brett Beber, Joel Fish with (sitting) Chris Forrest, Mitch Brown, Kathy Pavlovic and Dimitri Anastakis



Joseph Catapano with Allergan representatives Mary Jo McCarthy and Jocelyn Mang with Gregory Borschel

Joseph Catapano (PlasSurg, SSTP PhD) (Supervisor: Gregory H. Borschel) took the 2nd prize in this year's Gallie-Bateman competition for his work: "Corneal Neurotization: A Novel Surgical Procedure to Restore Sensation and Preserve Vision in Patients with Neurotrophic Keratopathy".

Joseph Catapano received the Best Basic Science Paper Presentation in the Clinical Category award at the Annual Resident Research Day in the Division of Plastic Surgery

Joseph has also won the Clinical Award at the 62nd Annual Meeting of the Plastic Surgery Research Council in Durham, North Carolina May 4-7, 2017.

Marc Jeschke (PlasSurg) received a Catalyst Grant by the Canadian Institutes of Health Research (CIHR) for his work entitled "Glucose control in burned patients: a multi-centre phase III prospective RCT".

Giancarlo McEvenue (PGY-5, PlasSurg) received the Best Presentation in the Clinical Category award at the Annual Resident Research Day in the Division of Plastic Surgery.

Congratulations to **Joan Lipa** (PlasSurg) for her recent appointment as a Director of the Board for The American Board of Plastic Surgery, Inc. for a 6-year term. Joan follows in the footsteps of other notable Canadian graduates such as Don Lalonde, Bruce Williams, Carolyn Kerrigan, and WK Lindsay. This is a very prestigious and important position and we are proud to have our UoT faculty represented on this Board. The Mission of The American Board of Plastic Surgery, Inc. is to promote



Giancarlo McEvenue and Research Director Greg Borschel

safe, ethical, efficacious plastic surgery to the public by maintaining high standards for the education, examination, certification and maintenance of certification of plastic surgeons as specialists and subspecialists.

Nancy McKee (PlasSurg) has been awarded the Canadian Society Lifetime Achievement Award for 2017. This is one of the highest honors that can be bestowed on a member of our Plastic and Reconstructive Surgery community and is highly deserved. Nancy was one of the pioneer microsurgeons of the specialty and was involved in establishing a regional microsurgical service at the University of Toronto for purposes of replantation coverage. As the first woman to receive this award, Nancy was honored at the 71st Annual Meeting of the Canadian Society meeting in Winnipeg in June.

Matt Murphy (PlasSurg) won this year's Department of Surgery D.R. Wilson award rated by undergraduate students for being an outstanding teacher and who demonstrates a positive attitude toward teaching and considered to be a good role model.

Dale J. Podolsky (SSTP, PlasSurg) (Supervisors: James M. Drake, Christopher R. Forrest) received the 3rd prize in this year's Gallie-Bateman competition for his work: "Development and evaluation of a high-fidelity cleft palate simulator for surgical training and for development of a robotic approach to infant cleft palate surgery".



Raieda Sadeg (Simulare) and Dale Podolsky

Dale Podolsky showcased his cleft palate and lip simulators at the Student Showcase organized by the Advancement Office in the Faculty of Medicine. This event was designed to showcase the depth and breadth of talent that exists in the Faculty.

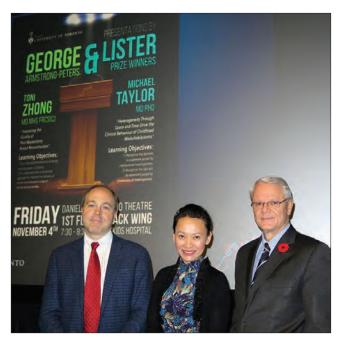
Bheeshma Ravi (OrthoSurg) was selected the 2017 COA North American Travelling Fellow. This is an incredibly prestigious national honour that has previously been bestowed on several of our most accomplished faculty members. What is so impressive is that Bheeshma has been selected for this award in his first year in practice!

Bheeshma also received a Catalyst Grant by the Canadian Institutes of Health Research (CIHR) for his work entitled "A Population-based Assessment of Opioid Use Before and After Total Joint Arthroplasty".

SSTP trainee **Hélène Retrouvey** (PlasSurg) has been awarded Best Oral Presentation award for Issues in Cancer Care at the 2017 Institute of Health Policy, Management and Evaluation (IHPME) Research Day for a project with Heather Baltzer "A Markov Model Of Carpal Tunnel Syndrome Management In Breast Cancer Survivors At Risk For Lymphedema".

Hélène also received the Frederick Banting and Charles Best Canada Graduate Scholarships from the Canadian Institutes of Health Research (CIHR) for her MSc thesis project with Dr. Toni Zhong "Understanding and Reducing Barriers to Postmastectomy Breast Reconstruction in Ontario: Closing the Gap".

Hélène was also presented with the Surgical Alumni Association Award from the Department of Surgery, University of Toronto.



Michael Taylor (Left), Toni Zhong and Chair James Rutka (right)

Toni Zhong (PlasSurg) was the recipient of the George Armstrong-Peters Prize for the past academic year. This award is given to a young investigator who has shown outstanding productivity as an independent researcher.

Michael Taylor (NeurSurg) received the Lister Prize for the past academic year (see announcement on page 40)

SSTP trainee **Natalia Ziolkowski** (PlasSurg) (Supervisor Dr. Joel Fish) received the very competitive Plastic Surgery Foundation 2017 Fellowship award for her work "Validating SCAR-Q: a Patient-Reported Outcome Instrument for Scars".

Michael Dan (Surg) has been appointed Member of the Order of Canada. He is recognized for "his contributions as a philanthropist, notably for his partnerships with Indigenous people". Dan and Amira Dan have donated \$2 million to establish the U of T Brain Tumour Bank, which helps researchers in U of T's health sciences network make more rapid progress towards treating people with brain cancer. They have also donated \$10 million to create the Waakebiness-Bryce Institute for Indigenous Health at U of T's Dalla Lana School of Public Health.

Surgical Skills Centre and Mount Sinai Hospital won the 2017 ASPIRE Award of Excellence in Simulation. Specific areas of excellence included: 1) outstanding faculty; 2) complementary mission statements and shared values and governance structures; 3) along history of scholarship influencing contemporary practices; 4) conduct of evidence-based training and education; 5) producers of high quality simulation-based research with significant impact and an important research network; 6) strong patient safety and patient-centred orientations/ activities to meet their vision; and 7) organizational culture that embraces dynamic healthcare systems and education. It was the reviewers' consensus opinion this is an example of an excellent simulation program against which others can be benchmarked.

Maurice Blitz (ThorSurg) was named the Program Director for Surgical Foundations at the University of Toronto, in recognition for all of his efforts in providing support in the training for surgical residents across the country and the important support that he has provided to the Surgical Foundations Advisory Committee at the Royal College of Physicians and Surgeons of Canada.

Marcelo Cypel (ThorSurg) received an Innovation to Impact Grant from the Canadian Cancer Society for his work "In vivo lung perfusion (IVLP) as an adjuvant treatment for patients undergoing surgical resection of pulmonary metastases of bone and soft tissue sarcomas".

Marcelo also received a 5 year CIHR Project Grant for his project "Lung Transplantation using Hepatitis C Positive Donors to Hepatitis C Negative Recipients: A Safety Trial".

Marcelo was also one of the recipients of the first UHN Innovation Funds in Surgical Oncology (IF-SO), (Collaborative Grant), Division of Thoracic Surgery, UHN for his project "Localized Therapies for Pulmonary Metastases Combining Immunotherapy with Interleukin-12 and Chemotherapy using in vivo Lung Perfusion".

He was also the recipient of the Renewed Canada Research Chair in Lung Transplantation for a 5 year term. Marcelo was also the recipient of the Innovation Funds in Surgical Oncology (IF-SO) - Collaborative Grant for his project "Localized Therapies for Pulmonary Metastases Combining Immunotherapy with Interleukin-12 and Chemotherapy using in vivo Lung Perfusion".

Marc de Perrot (ThorSurg) developed the world's first pulmonary endarterectomy simulator in an effort to decrease the length of time it takes new surgeons to learn the technique.

Martin McKneally (ThorSurg) received the 2017 Arbor Award in recognition of his outstanding volunteer commitment to the University of Toronto for more than 21 years.

Michael Ko (ThorSurg) was the inaugural recipient of the Ernie Spratt award, in recognition of his outstanding teaching, as voted by the residents and fellows who rotate throughout the Toronto East General or St. Joseph's Health Centre.

Walid Farhat (Urol) received the Ivan Silver Innovation Award in recognition for his involvement in the Paediatric Urology Laproscopy Course. The course has demonstrated innovation in a CME-accredited course in multiple ways. The content is innovative in its approach to include skills currently utilized in paediatric urology and robotics in surgery.

Antonio Finelli (Urol) is the recipient of a 1 year CIHR Catalyst Grant Proposal for his work on "Benchmarking the Quality of Urologic Cancer Care in Ontario: A Population-Based Analysis".

Christopher Wallis (PGY-4, Urol) received the "Claire Bombardier PhD Platinum Award" from the University of Toronto Institute of Health Policy, Management & Evaluation, given to "the most promising student in Clinical Epidemiology & Health Care Research".

Mohammed Al-Omran (VascSurg) was the 2017 recipient of the prestigious Charles Tator Surgeon-Scientist Mentoring Award by the University of Toronto Department of Surgery. The announcement was made at the recent Gallie Day Dinner. This is the first time a member of the Division of Vascular Surgery has been given this award since its introduction in 2002. The award recognizes those supervising participants in the Surgeon-Scientist Training Program (SSTP) who emulate Dr. Tator's qualities, namely excellence in research, commitment to SSTP mentoring and dedication to promotion of Surgeon-Scientists. Mohammed was nominated for this award by colleagues and SSTP residents, one of who said, "Dr. Al-Omran's dedication to the promotion of surgeon-scientists is illustrated by his simple philosophy, 'I am here to promote you'. He has provided his trainees many unique opportunities to grow as researchers above and beyond traditional opportunities offered within academic curriculums."

John Byrne (VascSurg) was one of the recipients of the Blair Foundation Vascular Surgery Innovation Fund.

Charles de Mestral (VascSurg) received the Best Presentation by Senior Resident/Fellow award at the 2017 U of T Vascular Surgery Research Day for his project: "Evaluating Quality Metrics and Cost after Discharge: A Population Based Study of Value in Health Care Following Major Vascular Surgery in Ontario" (Supervisors: Mohammed Al-Omran, Graham Roche-Nagle)

Charles also received the Most Outstanding Teacher by a Resident or Fellow (as voted by the residents and fellows) at the same event

Charles de Mestral was also one of the recipients of the Blair Foundation Vascular Surgery Innovation Fund.



Graham Roche Nagle

Graham Roche-Nagle (VascSurg) is the recipient of a 2017 W.T. Aikins Award in the Excellence in individual Teaching Performance, small group, the most prestigious Faculty award for commitment to and excellence in undergraduate medical education at

the University of Toronto. The criteria for the awards are extremely rigorous, and each nomination requires extensive support from peers and students. The award honours Dr. Roche-Nagle's contribution to the Faculty of Medicine's educational mission through his thoughtful preparation of teaching sessions that were organized, clear and interactive, and his mentorship of students in both clinical and research arenas.

Konrad Salata (VascSurg) received the Alumni Award for Best SSTP Presentation at the 2017 U of T Vascular Surgery Research Day for his project: "The Impact Of Statins On Abdominal Aortic Aneurysm Growth, Rupture, And Perioperative Outcomes: A Systematic Review And Meta-Analysis" (Supervisor: Mohammed Al-Omran).



Krishna Singh

Krishna K. Singh (VascSurg) received a 3-year CIHR Project Grant for his project "The Emerging Field of Cardiovascular-Oncology: Role of Tumor Suppressor Breast Cancer Susceptibility Gene 2 (BRCA2) in Endothelial Dysfunction and Atherosclerosis".

Krishna also received a 3 year Heart and Stroke Foundation Grant-in-Aid for his project "Novel Mechanisms in Cardiac Fibrosis and Heart Failure".

Mark Wheatcroft (VascSurg) received the Most Outstanding Faculty Teacher award (as voted by the residents and fellows) the Galla Dinner following the 2017 U of T Vascular Surgery Research Day.

Caleb Zavitz (PGY 2, VascSurg) received the Best Presentation by Junior Resident award at the 2017 U of T Vascular Surgery Research Day for his project: "C-myb Is Pathogenic in Atherosclerosis through an Effect on B2 Cell Responses" (Supervisors: Barry Rubin, Clinton Robbins).

BLAIR EARLY CAREER PROFESSORS IN VASCULAR SURGERY



Blair Early Career Professors in Vascular Surgery

We are pleased to announce the appointments of the inaugural Blair Early Career Professors in Vascular Surgery at Sunnybrook Health Sciences Centre, St. Michael's Hospital and University Health Network. The Blair Foundation has made a commitment of \$2.25 million, over 10 years, to establish three (3) Early Career Professorships, one at each of our academic health sciences centres. Each professorship provides \$75,000 per year of support for a vascular surgeon/researcher within the first 5 years of their career for a five year term. Please join us in congratulating the following recipients:

Dr. Ahmed Kayssi –

Sunnybrook Health Sciences Centre

Dr. Mohammed Qadura – St. Michael's Hospital

Dr. John Byrne -

University Health Network

Thomas Forbes, Chair of the Division of Vascular Surgery

2017 DEPARTMENT OF SURGERY FACULTY PROMOTIONS

ASSISTANT TO ASSOCIATE PROFESSOR

Anand **GHANEKAR** G/S, University Health Network

Anand **GOVINDARAJAN** G/S, Mount Sinai Hospital

Timothy **JACKSON** G/S, University Health Network

Simon **KELLEY** O/S, Hospital for Sick Children

Girish **KULKARNI** U/S, University Health Network

Markku **NOUSIAINEN** O/S, Sunnybrook Health Sciences Centre

Farhad **PIROUZMAND** N/S, Sunnybrook Health Sciences Centre

ASSOCIATE TO FULL PROFESSOR

Najma **AHMED** G/S St. Michael's Hospital

Rob **CARTOTTO** PR/S Sunnybrook Health Sciences Centre

Anna **GAGLIARDI** G/S, University Health Network

Raj **RAMPERSAUD** O/S, University Health Network

Frances **WRIGHT** G/S, Sunnybrook Health Sciences Centre



 $@ \ Roz \ Chast/The \ New Yorker \ Collection/The \ Cartoon \ Bank \\$

SURGICAL SPOTLIGHT

The Deadline for the next Surgery Newsletter is November 30th, 2017. All members and friends of the Department are invited to submit items, articles, pictures, ideas or announcements.

You may reach us by:

voice mail: 416-978-5661 e-mail: alina.gaspar@utoronto.ca.

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

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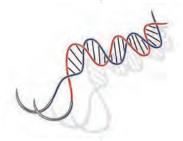
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