THE SQUARE KNOT

DEPARTMENT OF SURGERY
NEWSLETTER
McGILL UNIVERSITY
SUMMER/FALL 2018

Summer marks the end of another academic year and the time to welcome a new cohort of graduating medical students starting their odyssey in surgical training. Although times continue to change, our responsibility remains to train the next generation to become skilled and compassionate surgeons, and to advance our field further through original research.

McGill Looks Into the Future
Words from the Chair

Dr. Gerald M. Fried

By Gerald M. Fried, MD,

FRASER GURD DAY 2018: Our end-of-year academic event, Fraser Gurd Day was a chance for us all to hear of the breadth and quality of scientific inquiry done in our department. Residents and students from each surgical division presented absolutely outstanding work that would earn a place on the program of any major international scientific meeting. Our graduating residents and fellows were recognized that evening at our Graduation Banquet at the Ritz. It was striking to see the diversity of our trainees' backgrounds and the first-class positions they will take this summer. Our 46 graduates came to us from 19 universities in 10 countries and from 7 different Canadian medical schools. After leaving McGill they will disperse around the world as our ambassadors. Ten will stay at McGill for additional fellowship training and 4 will go into practice in Quebec. Nine each will go to Ontario and the US, 3 to Saudi Arabia, 2 to Calgary and one each to Switzerland, Kuwait, the U.K. and B.C. We are proud of our grads and wish them success in their future.

Our Fraser Gurd Visiting Professor this year was **Dr. Alberto Ferreres**. Dr. Ferreres is Professor of Surgery at the University of Buenos Aires and Chair of the Department of General Surgery at the Dr. Carlos A Bocalandro Hospital. In addition to his clinical training in general surgery and surgical oncology, Dr. Ferreres received his Doctor of Jurisprudence law degree, a Master's of Public Health, and a Master's in Health Administration, all in Buenos Aires. His talk at Grand Rounds on "Ethics in Surgical Mentorship" was excellent. He and the Chief of Medical Ethics here at the McGill University Health Centre, **Dr. Eugene Bereza**, participated in a great interactive symposium on Ethical Issues in Surgery. Dr. Bereza spoke of an ethical framework to allocate resources in a constrained environment - a really practical and thoughtful ▶

(See continuation on page 5)

Inside

Letters to The Editor

Dear Editor,

I recently crowned my metamorphism to the least invasive cardiovascular and thoracic surgery by becoming a totally endovascular surgeon utilizing catheter based technology for 85% of his procedures. From head to toe I now perform all interventions from carotid stenting all the way to peripheral vascular limb salvage with arterial atherectomies and drug eluding balloon angioplasties, while at the same time I continue to enjoy performing standard video assisted lung and open heart surgeries.

I have recently celebrated yet another milestone by becoming the first cardiovascular surgeon to open an office based cath. lab. (OBL), an evolutionary health economics and quality care game changer where patients with cardiovascular disease undergo interventions in the office setting and are discharged home within 2 hours of their surgeries.

Staff, residents and students from McGill are more than welcome to visit and experience a futuristic version of endovascular cardiovascular surgery anytime by contacting the office at (480) 722-7589
hanishennib@gmail.com

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Endovascular, Cardiovascular & Thoracic Surgeon
Clinical Professor, Department of Surgery
University of Arizona, College of Medicine, Phoenix
Resident in surgery, cardiovascular, thoracic surgery 1980-1987
Staff and professor, Montreal General Hospital 1988-2005
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Dear Editor,

It was 24 years ago when I founded the Canadian Connective Tissue Conference (CCTC). It was first held at McGill in the Institute of Neurology. In subsequent years it moved from city to city in Canada.

The idea was to bring together each year many Canadian scientists who were working on connective tissues. These tissues are characterized by an extensive extracellular matrix and include cartilage, bone, intervertebral discs, tendons, ligaments, blood vessels and skin. In fact all the tissues in the body contain varying amounts of connective tissue which share many common structures and properties.

Prior to this we met in a very ad hoc fashion, usually at meetings in the USA. We also wanted to create a meeting targeted to trainees: a forum where they could present and discuss their work and also be exposed to presentations from leaders in their fields. By pursuing the connective tissue theme we crossed many disciplines that would normally meet separately in their own specialized meetings. With this theme a cross-fertilization of methods and ideas was promoted along with the creation of new collaborations and future more wide-reaching research opportunities for trainees.

It proved to be a recipe for success in that from May 23-25, 2018 we celebrated our 24th anniversary with the usual strong attendance of trainees (in the 100-150 range), their supervisors and distinguished invited speakers.

In recent years the annual conference became part of a society of the same name, serving the many interests and needs of trainees in connective tissue research. This year it was a special honour to be recognized, along with **Dr. Jeff Dixon** of the University of Western Ontario, with a lifetime achievement award for my work, most of which was conducted at the Shriners Hospital, Department of Surgery where I directed the Joint Diseases Laboratory from 1977 until 2005. The Society also created a named lectureship in my honour for which I am most appreciative.

It was especially gratifying to see how McGill graduate students **Daniel Bisson** and **Heena Kumra** received special travel awards in recognition of their research at this year's meeting and the overall very high quality of the research presented at the meeting by the many trainees, including the usual strong contingent from this department.

I was blessed to have worked in such a supportive research environment with my clinical and basic science colleagues, thanks to **Dick Cruess** for offering me the opportunity to create and lead the Joint Diseases Laboratory (JDL) at McGill and for his support for our work over the years.

The principle investigators in JDL, that included Peter Roughley, John Mor**t** and **Anneliese Recklies**, helped train many young scientists. These included department of surgery members **Professors Lisbet Haglund, Fackson Mwale** and **John Antonio** who are now continuing the tradition.

Robin Poole, PhD, DSc.,
Professor Emeritus,
Department of Surgery,
Co- Founder and Scientific Director Emeritus,
Canadian Arthritis Network, National Centre of Excellence
(1998-2012)

Editor's Note

By Harvey Sigman, CD, MSc, MDCM, FRCSC, FACS

I have experienced many challenges over the past number of years as editor of the Square Knot. These include editing, deciding on the placement of articles, creating appropriate headings. I have been assisted in this endeavor by two excellent professional and creative individuals who have made my task much easier. One of these is Katia Lebedeva, and the other is Ildiko Horvath. I am also appreciative of the proof reading skills of Michael Leitman, who has conscientiously volunteered his skills to the professional appearance of the Square Knot.

I normally place the Acknowledgment at the end of my editorial but today I decided to begin with these acknowledgments for a particular reason. One of the other challenges is to fill in blank spaces so that articles can begin at the top of the page. This is why you will see advertisements and quotations interspersed with some of the articles. These are normally chosen and placed by Ildiko. In doing the final editing with Katia, we looked at the quotation by Evarts Graham, where he muses about the morality of the artists (surgeon) reaping the rewards, instead of the composers (surgical innovators and mentors).

I felt that this quotation was fitting, in that two articles, in this issue, related to mentoring (**Dr. Ferreres** – Fraser Gurd Visiting Professor and **Dr. Meakins**, Honorary Doctorate, Western University). I would like to spend a little time describing **Dr. Graham** (1883-1957), who is little, if at all known, by most of our readers. He is probably one of the most important figures in world surgery in the past century. He was Chairman of Surgery at Washington University School of Medicine and Chief of Surgery at Barnes Hospital in St. Louis. After many years of research on the lung, he was the first to carry out a one stage total pneumonectomy for lung cancer (1933). He was a long time heavy smoker and came to the realization that there was a link between smoking and lung cancer. "*He was a crusader for the elimination of such abuses as fee splitting and 'ghost surgery'*" (Memorium – Radiology, 68:747-8,1957).

I was fortunate to see a movie, several years ago, which has remained clear in my mind. It showed a very humble Dr. Graham and his pneumonectomy patient, **Dr. James Gilmore,** an obstetrician-gynecologist, discussing the 'informed consent'. Dr. Gilmore was asked what was his reaction to being the first patient to undergo a total pneumonectomy, never previously performed. He said that he went home to explain to his wife the operation and the risks that Dr. Graham had described.

Dr. Harvey Sigman

He said that he and his wife decided that he should go through with it. He said that they went to the cemetery to choose a burial plot, and then reported back to Dr. Graham that he was ready for the surgery.

It is ironic that Dr. Gilmore outlived his surgeon. Dr. Graham died of lung cancer in 1957. Dr. Graham was a hero amongst surgeons who was a mentor to many of his proteges, but one must also pay homage to the patients who may also be heroes.

If I may continue in this vein, I wish to acknowledge the outstanding contributions of our Chair, **Dr. Gerald Fried**, to the Department of Surgery, the Faculty of Medicine, McGill University and to world surgery who was recently honoured by the MUHC Foundation, by the establishment of the **Gerald M. Fried Chair in Surgical Innovation.** ◆

"In many respects surgery is like music which has its great artists and its great composers. The great musical artists are like the great practical surgeons. They perform frequently before large audiences with a high degree of skill, and they make large incomes. But what they render is the work of the composers, the thoughtful men who have made it possible for them to perform and who too often have received but little financial reward. At the present time surgery needs more men of the composer type."

—Evarts A. Graham (1883–1957)
Southern Medical Journal
18: 864, 1925

Dr. Gerald M. Fried Chair in Surgical Innovation

By Liane Feldman, MD, FRCS(C), FACS

The Division of General Surgery is working with the MUHC and MGH foundations to raise $4 Million to establish a **Gerald M. Fried Chair in Surgical Innovation**. Gerry is recognized internationally for his leadership and innovation in surgical education, an "early adopter", who established minimally invasive surgery as a clinical and academic program at McGill.

There is no doubt that the minimization of the invasiveness of surgical procedures is a revolutionary advance that has changed surgery. It is now hard to imagine a world without laparoscopic surgery; it is so ingrained into our every day practice. McGill has been on the forefront of this revolution. When the first descriptions of laparoscopic cholecystectomy were presented in North America in 1989, this was greeted with a mixture of excitement and horror. Gerry was immediately attracted to the new approach and its potential to significantly improve patient care. His training in surgical endoscopy and laboratory research positioned him perfectly to adopt and evaluate the new technique. He and **Dr. Hinchey** went to Germany to observe the procedure, and when they returned, performed one of the first, possibly the first, laparoscopic gallbladder removal operations in Canada in May 1990. He also began performing more advanced laparoscopic operations including esophageal and colon surgery and established a fellowship to train other surgeons in these new procedures *(disclosure: I was his first clinical fellow)*.

Fondation du Centre universitaire de santé McGill

McGill University Health Centre Foundation

New procedures and techniques are described all the time, and if they are worthwhile, may help individual patients lucky enough to be treated by individual innovators. But in order for innovations to change our communities, to really have an impact, to revolutionize care, they have to be scalable. Transitioning from standard "open" surgery to laparoscopic surgery required that a generation of surgeons in practice not only had to learn the technique safely themselves, but teach it to their residents.

Gerry recognized that the answer required a revolution in surgical training as well as in surgical techniques. Using simulation, he invented a series of simple tasks to train surgeons in the skills needed for laparoscopic surgery and developed scoring metrics to help surgeons know when they were ready. He worked with leading surgical societies internationally to standardize this new training paradigm. His model was incorporated into the Fundamentals of Laparoscopic Surgery Program that has certified over 16 000 surgeons.

This is why a chair in surgical innovation is so important. Creating something new is the first step but it isn't enough - it has to be rigorously evaluated and safely introduced. We need to protect this legacy of being at the forefront of new innovations in surgery, be they new techniques, new ways to train, new ways to make surgery safer or new ways to use data.

And it is fitting to name this chair after Gerry who has made innovation into an academic discipline to the great benefit of patients, residents and students and that's reason enough. In addition, Gerry is the consummate role model and McGill ambassador As importantly, he has mentored and developed the careers of hundreds of residents, fellows and faculty, who have gone on to academic careers of their own. He tirelessly promotes the careers of his students and given them opportunities to shine. He attracted philanthropic and industry funding to establish a Centre of Excellence for Minimally Invasive Surgery and Innovation to support research and training. He recruited surgeons to further develop minimally invasive surgery at McGill in multiple disciplines and we have internationally renown programs in minimally invasive and endoscopic esophageal, colorectal, gastric and hernia surgery, among others. His leadership in surgical societies paved the way for the next generations of McGill surgeons to take up leadership roles of their own. He also recently realized a long-term goal in establishing a graduate program in surgical innovation, where surgeons, engineers and business students collaborate in creating new solutions to real problems.

This **Gerald Fried Chair in Surgical Innovation** will support these critical qualities and contributions, making sure that we can attract and keep the next generational leader in surgical innovation, wherever she or he may be, and maintain McGill's legacy as transformational surgical innovators. ◆

For more information: https://www.muhcfoundation.com/current-projects/chair-surgical-innovation/

From the Chair

Continued from page 1

▶ discussion. Dr. Ferreres presented a number of ethical case studies around surgical care that also stimulated productive discussion. Our scientific program included 4 sessions, each led off by a presentation by a surgeon-scientists in the area. These included basic science (**Dr. Peter Metrakos**), surgical education (**Dr. Carmen Mueller**), Surgical Outcomes (**Dr. Lawrence Lee**) and Surgical Innovation/ Interventions (**Professor Steve Arless**). Attendance throughout the academic session was excellent. Kudos to all the presenters for the excellence of their work and their poise in presenting their work and answering questions.

SURGICAL INNOVATION UPDATE: Our Surgical Innovation Program continues to flourish under the leadership of **Professor Jake Barralet** and **Dr. Kevin Lachapelle**. Our model has attracted other clinical departments to participate and has been embraced by **Dean Eidelman** at the Faculty of Medicine. This year, thanks to the generosity of **Dr. Ray Hakim**, a McGill alumnus who has been a successful entrepreneur, the faculty of medicine held the inaugural CLIC awards. Read more about the McGill Clinical Innovation Competition at https://www.mcgill.ca/medicine/channels/news/clinical-innovation-takes-centre-stage-inaugural-mcgill-clic-and-hakim-family-prize-event-287325

We are proud of the work of **Dr. Michael Tanzer** from the Division of Orthopedic Surgery whose work in partnership with **Sajad Arabnejad, Burnett Johnston**, and **Damiano Pasini** on a novel 3D Printed Porous Hip Stem earned a CLIC award. For more information on this exciting new project see the video at https://www.youtube.com/watch?v=gOnqYxALJ-k&t=0s&list=PLfMfJihLOASW8roVmK3rsnLX68VCCaXFN&index=2

GLOBAL SURGERY: Under the leadership of **Drs. Tarek Razek** and **Dan Deckelbaum**, the McGill Program in Global Surgery continues to play an important leadership role nationally and internationally http://www.cglobalsurgery.com. On May 27th, the Canadian Association of Surgical Chairs held a retreat to develop a national strategy on Global Surgery. At the retreat, Drs. Razek and Deckelbaum reported on the Concentration in Global Surgery they have developed as part of our Master's degree program in Experimental Surgery https://www.mcgill.ca/experimentalsurgery/prospective-students/programs/master-programs/msc-global-surgery-concentration. They have developed a framework to prepare practicing surgeons and trainees for global surgery. They have emphasized three different aspects, one is the academic and research component, which is knowledge acquisition and translation. In each region where they work, they start by defining the burden of disease and, from this, they can develop a specific needs assessment. Fundamental to this is the establishment of a database that is easily put into place. Their initial emphasis was around trauma care. They are now expanding their work to OR utilization, geographic distribution of surgical care and, more recently, access to cancer care. Their second focus is on education and training. They limit their efforts to engaging only with a host country or institution where they are specifically invited and have local champions. It is essential to adapt the educational material to fit the local construct. Their goal is to develop a multidisciplinary program to train the trainers that will result in a durable and sustainable impact. Their third focus is on health policy. Using data generated locally through the help of a database they generate with local champions, they can generate policy recommendations to improve access and quality.

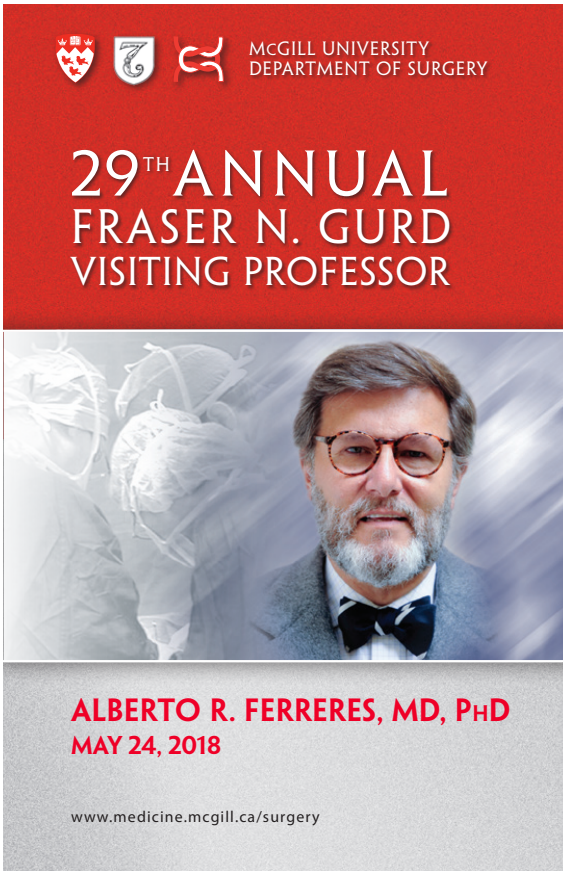
Finally, they have been sought out by the International Red Cross and the United Nations to develop a training program for a humanitarian workforce and for peacekeeping forces respectively. ◆

"Courage is often necessary to maintain equanimity or to exercise complete intellectual honesty, but as a separate entity it has characteristics of it own. It is the quality that enables the surgeon to assume responsibility for the remote chance of helping the desperately ill patient no matter what the risk. It is the quality that refuses to consider mortality rates or public reaction. It is fearlessness of any consequence except harm to the patient."

—Edwin P. Lehman (1888–1954)
Annals of Surgery
129:545, 1949

28th Fraser Gurd Day

May 24, 2018



The 2018 Fraser Gurd Visiting professor Dr. Alberto Ferreres with Dr. Gerald Fried

Dr. Nicoló Pecorelli with Drs. Feldman and Vassiliou

Please see the rest of the photos in our online Flickr album https://bit.ly/2Ia5Dar

Dr. Valerie Gauvin receiving the Vascular Surgery Outstanding fellow teacher award from Dr. Jason Bayne

Drs. Gerald Fried and Melina Vassiliou

Dr. Emilie Bougie-Richardson with Drs. Lucie Lessard and Mirko Gilardino

Drs. Gerald Fried and Jeremy Grushka

General surgery graduating residents and fellows with Dr. Jeremy Grushka

Please see the rest of the photos in our online Flickr album https://bit.ly/2Ia5Dar

Visiting Professors

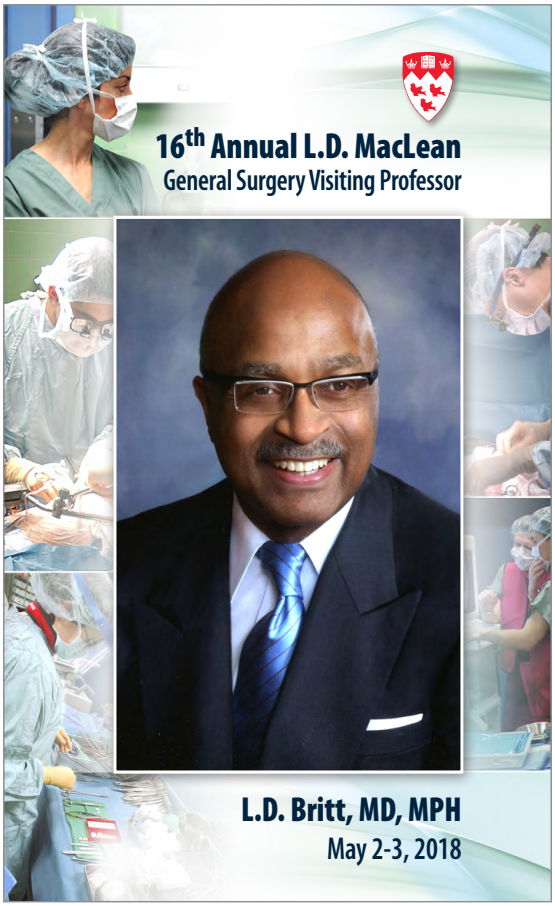
16th Annual L.D. MacLean General Surgery Visiting Professor

The McGill Division of General Surgery celebrated the **16th Annual LD MacLean Visiting Professorship** on May 2nd and 3rd 2018. We welcomed **Dr. L.D. Britt**, Brickhouse Professor and Chairman of the Department of Surgery at Eastern Virginia Medical School. Dr. Britt is credited with coining the term "Acute Care Surgery" and is one of the principal architects of this emerging specialty combing Trauma, Emergency General Surgery and Critical Care. Dr. Britt is a past President of the American College of Surgeons, the American Association for the Surgery of Trauma and the American Surgical Association as well as many other prestigious associations.

We were fortunate that Dr. Britt was able to come early enough to attend MGH Trauma Rounds chaired by **Dr. Razek**. This was a Morbidity and Mortality conference and we were able to see Dr. Britt in action as he commented on all the cases. The presenting residents more than held their own. That evening, Dr.Britt enjoyed dinner with the General Surgery Executive Committee at Beatrice.

Drs. Feldman, Fried, Britt, Wexler and Turnbull

The next day, Dr. Britt and **Dr. Feldman** toured the Osler Library. After a casual lunch with the residents and staff, Dr. Britt spoke Wednesday afternoon on Penetrating Trauma: *What are the State-of-the-Art Management Paradigms?* This was followed by 13 research presentations (5 longer presentations and 8 quick shots presentations) chosen from 26 abstract submissions by a committee chaired by **Dr. Steve Paraskevas**. This included



work representing 9 different supervisors in the Division, including new supervisors **Drs. Lawrence Lee** and **Julio Fiore**.

The PGY4 debates were another highlight of the day. For the second year, we used the Poll Everywhere software to "score" the debates. For the warm-up question, *What should Bergevin do with his first round pick in the entry draft*, 21% answered

Drs. Fleiszer, Britt and Razek

"keep it", 33% answered "trade it" and a surprisingly high 46% answered "what sport", demonstrating their intense focus on surgical issues. In the first debate, **Dr. Phil** ▶

Please see the rest of the photos in our online Flickr album https://bit.ly/2xJ9I0E

▶ **Vourtzoumis** (pro) faced **Dr. Mohsen AlHashemi** (con) arguing the resolution "In Canada, an acute care surgery model improves outcomes for emergency general surgery patients". While 80% of the audience agreed with the resolution at the outset, this decreased to 28% after the presentations. The second debate, "Be it resolved that uncomplicated acute appendicitis should be treated non-operatively" featured **Dr. Yaseen Alawati** (pro) facing **Dr. Phil Paci** (con). While 89% of the audience supported surgery for appendicitis at the beginning, this dropped a bit to 72% after the debate.

The festivities then moved to the Hotel Sofitel Golden Mile for our annual banquet attended by 100 faculty and residents from the McGill teaching hospitals as well as our 7 graduating chief residents.

Dr. Feldman welcomed everybody and moderated the evening's festivities. In her remarks she congratulated the graduates on their significant achievement of completing General Surgery residency, noting that no matter what they do next, they will always have that link to McGill, their co-residents and their teachers and mentors. She welcomed two new recruits to the division, Drs. Lawrence Lee and **Sinziana Dumitra**, who proudly return to McGill after fellowship and research training. She congratulated **Dr. Goffredo Arena** on his promotion to Associate Professor. Dr. Feldman then welcomed the incoming residents for next year, represented by **Raphael Hamad** who was in attendance.

RESEARCH PRESENTATION AWARDS

BEST LABORATORY SCIENCE PRESENTATION
YIFAN WANG (supervisor **Dr. George Zogopoulos**)
Genomic Fidelity and Clinical Correlates of Pancreatic Cancer Patient-Derived Xenografts

BEST CLINICAL SCIENCE PRESENTATION
RICHARD GARFINKLE (supervisor **Dr. Marylise Boutros**)
Does Time to Closure of Loop Ileostomy Increase the Risk of Postoperative Ileus? A large, Single-Institution Review

PEOPLE'S CHOICE AWARD
ETIENNE ST-LOUIS (Supervisor **Dr. Tarek Razek**)
Can the Pediatric Resuscitation and Trauma outcomes (PRESTO) be used to Predict In-Hospital Mortality in Injured Rwandese Children?

The evening then continued with the research presentation awards, presented by Dr. Paraskevas:

We also marked the passing of two members of the Division. **Dr. Fleiszer** gave a beautiful speech in memory of **Dr. Ken Aiken,** who died unexpectedly in March. He recalled Dr. Aiken as an incredible athlete and an important role-model during residency, who decided to pursue the rigours of rural surgery at the Barrie Memorial Hospital. He mentored many McGill residents during their rural rotation and always attended LD MacLean and other Division events. **Dr. Vasilevsky** then spoke movingly about her life-long mentor, **Dr. Phil Gordon**, who died only a few weeks before. A pioneer of colorectal surgery in Canada, he established an international reputation for colorectal surgery at McGill through his teaching, writing and leadership. The strength of the colorectal group at McGill is one of his important legacies. ▶

Dr. Juan Mata, President of the McGill General Surgery Residency Committee, presented the following teaching awards, as voted by the residents:

TEACHING AWARDS BY THE RESIDENTS

Outstanding General Surgery Teacher Award
Dr. Steven Paraskevas

Roger Tabah Resident Teacher Award
Dr. Amin Madani

CAGS Resident Teacher Award
Dr. Yaseen Al Lawati and **Dr. Phil Vourtzoumis**

Outstanding Fellow Teacher Award
Dr. Husain Al-Mahmeed

CAGS Excellence in Teaching - Dr. Phil Vourtzoumis

CAGS Excellence in Teaching - Dr. Yaseen Alawati

Excellence in Teaching Award - Dr. Steve Paraskevas

Julius Gordon Award - Dr. Teodora Dumitra - with Dr. Neal Gordon

DR. MARVIN WEXLER AWARD

Dr. Feldman introduced a new award, recognizing clinical excellence. This is named for **Dr. Marvin Wexler**, who retired in 2015 after 33 years of practice at the Royal Victoria Hospital. Dr. Wexler, who was present at the banquet, worked tirelessly to provide innovative patient care. The selection of the awardee is based on a person "you would want taking care of our family" and will recognize one faculty and one resident each year. The inaugural recipients were:

Faculty Marvin Wexler Clinical Excellence Award
Dr. Francine Tremblay

Resident Marvin Wexler Clinical Excellence Award
Dr. Stephanie Wong

DR. DAVID OWEN UNDERGRADUATE TEACHER AWARD

Dr. Simon Bergman, Director of Undergraduate Education, presented the **David Owen Undergraduate Teacher Award** to **Dr. Harvey Sigman**.

OUTSTANDING RESIDENT UNDERGRADUATE TEACHER AWARD

Dr. Simon Bergman, Director of Undergraduate Education, presented the **Outstanding Resident Undergraduate Teacher Award** to **Dr. Mohsen Al Hashemi.**

DR. JULIUS GORDON AWARD

Dr. Steve Paraskevas and **Dr. Neal Gordon** presented this year's **Julius Gordon Award** to **Dr. Teodora Dumitra** who will travel to the University of Oregon in support of her research in understanding the relationship between patient engagement and outcomes. **Dr. Yifan Wang**, last year's Julius Gordon Award winner, presented her research in the role of personalized genomics in pancreas cancer.

RESIDENT LEADERSHIP AWARD

Dr. Jeremy Grushka recognized **Dr. Maria Abou Khalil** as the winner of the Resident Leadership Award.

Dr. Grushka then presented the 7 graduating chiefs, **Drs. Ali Aboalsaud, Lamees AlMutlaq, Tanya Castelino, Amin Madani, Ipshita Prakash, Mehdi Tahiri-Hassani** and **Stephanie Wong.** He summarized their backgrounds, interests, accomplishments, families and future plans, including plans for next year. This included bariatric surgery fellowship at McGill for **Drs. Ali Aboalsaud** and **Lamees AlMutlaq**, MIS fellowship at McMaster for **Dr. Tanya Castelino**, Endosrine Surgery fellowship at Columbia for **Dr. Amin Madani**, Global Surgery research followed by breast fellowship for **Dr. Ipshita Prakash**, Thoracic surgery residency in Toronto for **Dr. Mehdi Tahiri,** and Breast Fellowship at Dana Farber for **Dr. Stepahnie Wong.** Dr. Grushka then presented each with a beautiful commemorative plaque with a scalpel and a quote from **Dr. Albert Schweitzer:** "I don't know what your destiny will be but one thing I know: the only ones among you who will be really happy are those who have sought to serve and found how to serve."

The McGill General Surgery Residency Committee presented a hilarious and loving video tribute to the graduating colleagues including humorous anecdotes and good wishes from many of the staff and skits that gently roasted some of the unique lifestyle and fashion choices of the chiefs.

Dr. Feldman concluded the event thanking the faculty and residents for all their work. She presented Dr. Britt with a few tokens of the visit, including a McGill Department of Surgery tie, a biography of Sir William Osler and a plaque.

▶ The following morning, Dr. Britt presented at Grand Rounds on *Acute Care Surgery: The Evolution of a New Specialty and Current Challenges/Controversies*.

The Division thanks **Domenica Cunzo** for all her work organizing the event, and **Rita Piccioni**, **Jessica McCaffrey** and **Bruna Salhany** for help and photography. We also appreciate the support of the sponsors, including The Division of General Surgery Academic Fund (Gold), ConMed and Pfizer (Silver), and Merck, Karl Storz and Medtronic (Bronze). ◆

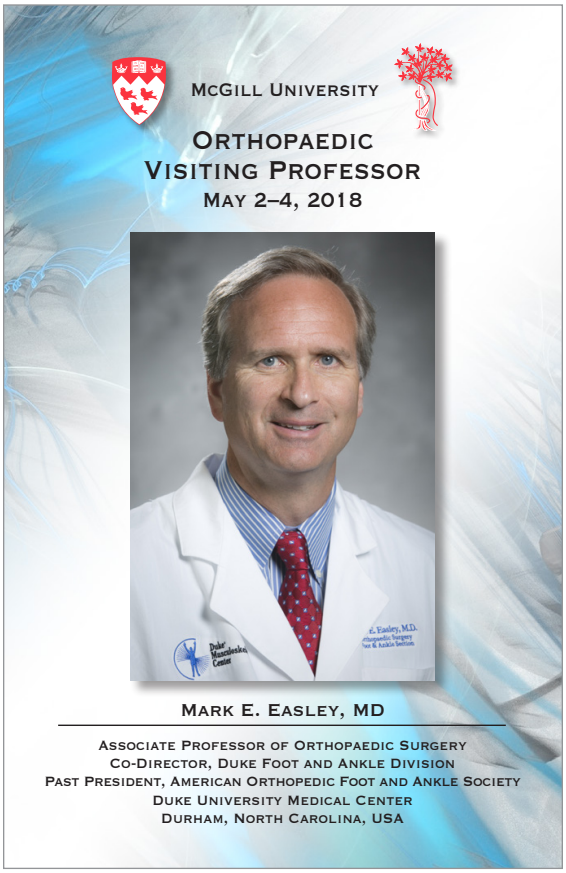
General Surgery Group

Orthopaedic Visiting Professor May 2-4, 2018

On May 2 to 4, 2018, the McGill Orthopaedic Department was pleased to host **Dr. Mark E. Easley** as its Annual Visiting Professor.

Dr. Easley is an Associate Professor of Orthopaedic Foot and Ankle Surgery at Duke University Medical Center, Durham, North Carolina, USA. He serves as one of the Directors of the Duke Foot and Ankle Fellowship Program. As a past president and longtime member of the American Orthopaedic Foot & Ankle Society (AOFAS), Dr. Easley has been Program Chair and Faculty for AOFAS meetings, has served on AOFAS committees, and continues to present his research at AOFAS meetings. He has been recognized by the American Orthopaedic Association as an American-British-Canadian Traveling Fellow and has served as guest lecturer for numerous national and international orthopaedic foot and ankle conferences.

Soon after arriving in Montreal, Dr. Easley had dinner with some of the residents and attending staff. ▶



▶ He was introduced to the Orthopaedic Residency Program at McGill University, in addition to the Foot and Ankle Surgery fellowship.

On the following day, Dr. Easley started the day by presenting his talk entitled "Total Ankle Arthroplasty: Current State of the Art" at McGill Orthopaedic Grand Rounds. This was followed by case-based discussions with the residents, and another lecture by Dr. Easley entitled "Surgical Management of Osteochondral Lesions of the Talus" to end the morning session. In the afternoon, the Resident Research Competition happened, and our residents presented a total of 19 research projects involving clinical and basic science studies.

The day was then concluded with the division's annual dinner at the St-James Club. Multiple prizes and awards were presented, including best research presentations, best resident/attending teacher, and most compassionate towards patients.

Dr. Easley with the Orthopaedic Foot and Ankle Attending Staff. From left to right: Dr. Ruth Chaytor (JGH), Dr. Monika Volesky (JGH), Dr. Mark Easley (Visiting Professor), Dr. Gregory Berry (MGH).

At this year's annual banquet in May, **Dr. Reggie Hamdy** was awarded the inaugural **Richard L. Cruess Award** for Academic Achievement in the Division of Orthopaedic Surgery, McGill University, Faculty of Medicine. The award recognizes the outstanding contributions made by **Dr. Cruess,** former Dean of the Faculty of Medicine, who was a leader in the field of orthopaedic surgery prior to his appointment as Dean, and became (along with his wife Dr. Sylvia Cruess) a recognized expert in the field of professionalism in medicine following his retirement as Dean.

Dr. Hamdy is a worthy recipient of this award, with achievements in all domains of academic medicine, including an innovative and productive research program, awards for teaching, and significant contributions in administration at the hospital, divisional and faculty levels. We applaud Dr. Hamdy for his accomplishments and wish him continued success in the future.

Dr. Thierry Benaroch, Associate Professor of the Department of Pediatric Surgery, Division of Orthopaedic Surgery, was named the inaugural recipient of the **McGill Program Director Leadership Award** of 2017, from the Faculty of Medicine, Office of Postgraduate Medical Education. The Residency Program has achieved new heights under his guidance and he is most deserving of this award. We appreciate all the time, energy and creativity he has invested in his work.

On the third day of Dr. Easley's visit, the activities started more case-based discussions with the residents, including a variety of Foot and Ankle conditions. Dr. Easley then concluded his visit with a lecture entitled "Surgical Management of Navicular Pathology". The entire team of the Division of Orthopaedic Surgery enjoyed having Dr. Easley as our Visiting Professor. ◆

Left to Right: Dr. Richard L. Cruess, Dr. Reggie Hamdy, Dr. Greg Berry, Mr. Jerry Gantt

Left to Right: Dr. Regina Husa, Dr. Thierry Benaroch, Dr. Armand Aalamian

Dr. Easley with a group of Orthopaedic Residents and Fellows.
From left to right: Dr. Thamer Alraiyes (PGY-4), Dr. Hamzah Alhamzah (PGY-5), Dr. Ahmed Aoude (PGY-5), Dr. Sultan Aldebeyan (PGY-5), Dr. Mark Easley (Visiting Professor), Dr. Christopher Pedneault (PGY-4), Dr. Ahmed Alshammari (Arthroplasty Fellow), Dr. Hani Serhan (Orthopaedic Trauma Fellow), Dr. Jens Böttcher (Sports Medicine & Arthroscopy Fellow).

Upcoming Events

TEACHING WITH STANDARDIZED PATIENTS

Feedback and debriefing in simulation-based education: From principles to practice

15 Oct. 2018, 08:00 to 12:00

Free course offered to McGill University faculty members, residents and fellows.

Target audience: Novice instructors or those with limited simulation-based training using standardized patients.
Read more - https://bit.ly/2NhSe1h

MEDICAL EDUCATION ROUNDS

Improving learning environments in the health professions: What do we know and how can we do it?

25 Oct. 2018, 16:00 to 17:30

McIntyre Medical Building Meakins Amphitheatre, 5th Floor (521), 3655 promenade Sir William Osler Montreal, QC, H3G 1Y6, CA

LEARNING OBJECTIVES:
Identify the key components of the learning environment Describe strategies used to improve the learning environment. Articulate a vision for an optimal learning environment.
Read more - https://bit.ly/2P63nnx

Upcoming Events

McGill

STEINBERG CENTRE FOR SIMULATION AND INTERACTIVE LEARNING
CENTRE DE SIMULATION ET D'APPRENTISSAGE INTERACTIF STEINBERG

14TH FLANDERS FAMILY VISITING PROFESSOR IN MEDICAL SIMULATION

"Simulation and Systems at the Cutting Edge... What Next?"

Vinay M. NADKARNI M.D.

Vinay Nadkarni is a Professor and Endowed Chair at the Children's Hospital of Philadelphia, Departments of Anesthesiology, Critical Care and Pediatrics, University of Pennsylvania Perelman School of Medicine. He founded and directs the CHOP Center for Simulation, Advanced Education and Innovation.

An established leader in the practice of CPR, resuscitation science and critical care, Dr. Nadkarni has authored more than 400 peer-reviewed manuscripts and 35 book chapters, and has mentored over 100 postdotoral fellows and physician scientists.

He will be joined by Dr. Ellen Duetsch, a surgical colleague and spouse.

Combined Surgical and Anesthesia Grand Rounds
"Simulation and Systems at the Cutting Edge... What Next?"
Thursday, October 18, 2018
7:30 am to 8:30 am

Montreal General Hospital
1650 Cedar Avenue, Sir William Osler Amphitheatre

Videoconferencing sites:
MUHC Glen site (RI Auditorium E S1.1129), Jewish General Hospital (Room B.106)
St-Mary's Hospital (Room 1501E), Lachine Hospital (Room J05), Barrie Memorial Hospital (Room 3)

Special Lecture
"Resuscitation: Past, Present and Future"
Thursday, October 18, 2018
12:00 noon to 1:00 pm

McGill University Health Centre, Glen site
1001 Decarie Boulevard, RI Auditorium E S1.1129

For more information, please contact: Lucy.vicenzo@mcgill.ca | 514-398-1523

Divisional News

General Surgery

The division of general surgery is very thrilled to welcome back two of our previous residents after fellowship

Dr. Lawrence Lee has joined the colorectal surgery group at the MUHC. Dr. Lee completed general surgery residency with us, during which time he excelled clinically and academically, obtaining both a MSc in Epidemiology and PhD in Health Economics. He then completed a clinical fellowship under the mentorship of **Dr. John Monson** in Orlando, FL, developing expertise in minimally invasive colorectal surgery, including Trans Anal Total Mesorectal Excision (TA-TME). Dr. Lee also completed a research postdoc in Toronto under **Dr. David Urbach** in phase 2 of the FRQS "Bourse de formation pour les médecins residents visant une carrier en recherche". He then pursued further training in Japan in advanced endoscopic and laparoscopic procedures, including colonic endoscopic submucosal dissection and complete mesocolic excision. These skills will further our ability to serve patients with complex colorectal pathology, especially rectal cancer. As a clinician-scientist, Dr. Lee will continue his work at the Steinberg-Bernstein Centre for Minimally Invasive Surgery developing a research program in surgical outcomes, quality improvement and health economics.

Dr. Sinziana Dumitra has joined the division as a surgical oncologist at the JGH and MUHC. Dr. Dumitra completed medical school at the Université de Montréal and General Surgery Residency at McGill during which time she also completed a Master's of Science in Epidemiology. She excelled during two years of fellowship training in surgical oncology at City of Hope Hospital in Los Angeles under **Dr. Yuman Fong**. She also completed a Visiting Sarcoma Fellowship at the Istituto Nazionale dei Tumori in Milan, Italy under **Dr. Alessandro Gronchi**, supported by the Dr. Henry R. Shibata Fellowship from the Cedars Cancer Foundation. Dr. Dumitra is a passionate clinician and teacher. Dr. Dumitra is very busy working at both the JGH and MUHC, caring for patients with breast cancer and melanoma at the JGH and working with the MUHC surgical oncology group to further our retroperitoneal sarcoma program. She is developing a research program in quality and outcomes in retroperitoneal sarcoma. ◆

Pediatric Surgery

On June 20 and 21, the Division hosted the annual **Frank M. Guttman Visiting Professor**. **Dr. Todd Ponsky**, Associated Professor of Surgery, University of Cincinnati and Staff Surgeon at Cincinnati Children Hospital spoke at pediatric grand rounds, surgical grand rounds, and neonatal rounds. Dr. Ponsky is an international leader in the use of social media and artificial intelligence in surgery. His talks were some of the most memorable of the academic year at the Children's. Despite the recent loss of his spouse of 65 years, Dr. Guttman participated actively in the entire program.

Hôpital de Montréal pour enfants
Centre universitaire de santé McGill

Montreal Children's Hospital
McGill University Health Centre

Dr. Robin Petroze completed her fellowship on July 31, and will join the pediatric surgical faculty at the University of Florida, Gainsville. Dr. Petroze had been awarded the Pfizer Humanitarian award by the American College of Surgeon as a trainee for her work in Rwanda. She will continue in an academic global surgical career.

Dr. Etienne St-Louis became the second resident to complete the Jean-Martin Laberge fellowship in pediatric global surgery in July. Dr. St-Louis was extremely successful during his fellowship, publishing more than a dozen manuscripts and presenting at multiple venues. He has reinvigorated the Rwandan trauma registry as part of his Ph.D. work. He will be continuing his work towards his Ph.D. as he returns to clinical duties.

As part of the Jean-Martin Laberge fellowship experience, Dr. Etienne St-Louis also joined **Dr. Sherif Emil** during a three week pediatric surgical mission to the Africa Mercy in Douala, Cameroon. Dr. Emil's work on the Africa Mercy was the lead article in the March edition of Dialogue, the Royal College newsletter (http://www.royalcollege.ca/rcsite/publications/dialogue/dialogue-march-2018-e). They both also blogged on the Royal College facebook page and on the MCH website during their trip (https://www.thechildren.com/ ▶

▶ news-and-events/latest-news/dispatches-africa-mercy-iii-1-if-you-want-go-far).

Dr. Pramod Puligandla has enjoyed tremendous academic success during the first half of 2018. He was promoted to the rank of full professor. He also was the lead author of a landmark article in CMAJ (http://www.cmaj.ca/content/190/4/E103) that represented a culmination of a national effort to streamline care of babies with congenital diaphragmatic hernia. Finally, Dr. Puligandla was elected to the Pediatric Surgery Board of the American Board of Surgery, the first Canadian to be so honored.

In April, **Dr. Sherif Emil** received the EP Taylor Award from the McGill Almuni Association. The award is presented to an alumnus/alumna to recognize their outstanding voluntary fundraising efforts in support of McGill. Dr. Emil chaired and hosted the 25th reunion of his medical school class and, with the reunion committee, raised a record amount of more than $200,000 on that occasion. In July, Dr. Emil received the **Haile T. Debas Prize** from the Faculty of Medicine.

In June, **Dr. Ken Shaw** and **Dr. Dan Poenaru** hosted the Trauma Resuscitation in Kids (TRIK) course at the Steinberg simulation center in collaboration with the Royal College and the Trauma Department of the Montreal Children's Hospital.

Dr. Luc Malemo is the first international surgeons selected for the McGill University Jean-Martin Laberge Fellowship in Global Pediatric Surgery, offered at the Montreal Children's Hospital in conjunction with the MUHC Centre for Global Surgery. He is working towards a PhD in Experimental Surgery at McGill. As a doctoral student, Malemo is collecting data about access to surgical care for mothers and children at hospitals across his home region of North Kivu. Please read more about his background and current work in the McGill Medicine Focus 2018/2018 review - https://www.mcgill.ca/medicine/files/medicine/focus_2018-2019.pdf ◆

Orthopedic Surgery Makes Global Health Contribution

By M. AlAqeel, MD, E. Lenczner, MD, and P. Jarzem, MD

In the summer of 2018, the Montreal division of Team Broken Earth Organization landed in Haiti, fulfilling a desire to take up the challenge of trauma care in developing countries. This was our third one week mission. An estimate of more than 5.8 Million lives lost each year as a result of trauma, accounting for 30% more losses than Malaria, Tuberculosis and HIV/AIDS, combined(1,2).

Unpaved street

Haiti is a nation of 11 million population; it is considered the most impoverished country in the western hemisphere. Before the earthquake in 2010, there were 25 doctors per 100,000 of the population, and 49 hospitals covering an estimated 60% of the population(3). After the earthquake, 30 out of the 49 hospitals collapsed, leaving the public health system in complete paralysis(4). Despite the 8 years since the earthquake, Trauma and injuries continue to rise at an alarming level, specifically, Road traffic accidents. The minister of health in Haiti estimates that there are 600,000 motorcycle accidents per year. The scarcity of infrastructure, the absence of road safety enforcement and deficiency of adequate pre and in-hospital trauma care, all compound the difficulties of trauma care in this country.

THE IMPACT OF TRAUMA IN LOW-INCOME COUNTRIES

Trauma is considered among the top causes of death and disability in low-income countries (LIC). Despite the considerable burden of trauma, in (LIC) the resource allocation to road traffic injuries does not exceed 1% if the GDP(5). ▶

THE SOCIOECONOMIC BURDEN OF TRAUMA IN HAITI

A recent epidemiological study done in a level 2 trauma center in Haiti showed that the cumulative direct costs over a period of 2 months, reached almost 100,000$ for 404 patients, with an average of 242$ per patient. However, when the indirect cost added to the equation, the total cost reached as high as 500,000$ for those 404 patients with an average cost of 1224$/person. This is equal to approximately 210 days of work at the Haitian minimum wage (6).

Helmet Wear

The mean age of the overall study was 30 years, with almost 80% of the injured population younger than 41 years of age. Those traumas add a significant impact on the families involved. Similar studies in (LIC), showed around 60% of the total number of disability-adjusted life years (DALYs) lost as a result of a road traffic accident, and 73% of these injuries occur in young adults males(7). These young adults are often the main supporter for their families, and their loss drives many families into poverty.

THE NEEDS FOR HEALTHCARE RESOURCES ALLOCATION

The Burden of injury is inversely proportional to the average national income, and traumatic mortality increases concomitant with the decrease of the economic wealth of the country(8). Unfortunately, there is clear evidence that the disparity in healthcare resource allocation directly influences the road traffic trauma mortality figures. For example, the mortality rate for severely injured adults in the high-income country is around 35%, increasing to 55% in middle-income setting and is as high as 65% in the low-income countries(8). In another study looked at the in-hospital mortality for a moderately injured patient, the mortality rate in the high-income country was 6%, compared to 36% in low-income country(9).

Overcrowded vehicle

Intra-Op 1

Intra op training - local health providers

CHALLENGES AND POSSIBLE SOLUTIONS

To decrease the burden of trauma, it requires a multifaceted approach these include but are not limited to:

1. Health Care Resource allocation and effective political advocacy. The government of Haiti should make some investments in this field.

2. Training and educating the local providers. Local providers should be taught modern trauma care techniques.

3. Involvement and collaboration between international organizations. Many different NGO's are making investments in Haiti at present. UNOPS is building several hospitals for different NGO's in Haiti as we speak. These NGO's should consider investing in trauma care in Haiti.

There is an apparent disparity in regards to resource allocation, for instance, Africa and South East Asia, account for the ▶

▶ most significant share of the global burden of road trauma, However, only 2.5% of the global health resources are spent in this region(10). Despite the significant socioeconomic impact of trauma, there is insufficient investment in preventing road traffic injury. Simple measures such as requiring motorcycle helmets can have a huge impact (Figure 2 Helmet wear). Global health issues like malaria and HIV receive far more substantial funding in prevention and eradication and these investments have had a direct influence on reducing the impact of these diseases.

Multiple orthopedic organizations approaches the problem differently. Orthopaedic oversees and Surgical Implant Generation Network (SIGN) send volunteer orthopedic surgeons to train and educate local health providers. Also, SIGN has been innovative by developing and distributing orthopedic trauma implants designed for LIC countries with limited operating room. World Orthopedic and Institute for Global Orthopaedics and Traumatology (IGOT) provide education, Training and research funding.

Course-based -learning, is an effective strategy, for example, the American College of Surgeons, provides the Advanced Trauma Life Support (ATLS) course which, offers a basic foundation in the principles and practice of trauma care. The institution with ATLS training in Trinidad was associated with a decrease in mortality from 67% to 34% for severely injured patients(11). A similar example of a course-based learning strategy for the low-income countries in need of surgical training is the Orthopedic Trauma Symposium (OTS). Trauma Evaluation And Management (TEAM) is another course that provides a Low-Cost Alternative to ATLS for Low-income countries.

Orthopedic surgeons can participate and have a direct role in reducing the burden of trauma by either volunteering, organizing paired partnerships and by lobbying the multinational orthopedic companies and organizations. These efforts will need to be echoed by a Global anesthesia outreach, and by a similar outreach by Trauma surgeons in order to train and equip the local providers with the necessary resources to combat the significant burden of trauma in developing countries.

To conclude, the challenge of trauma in low-income countries is vast and includes orthopedic surgeons, trauma surgeons, anesthesia services; pre-hospital systems; and physical, human and organizational resource availability. Casting the light on the existing disparities, as well as stakeholder involvement in the areas of policy and advocacy is essential to improving the current situation. We must work together across disciplines and borders, and across organizations if we want to make a change. Our patients deserve no less. ◆

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"From the time of Hippocrates surgery has ever been the salvation of inner medicine. In inner medicine physicians have dwelt too much on dogmas, opinions and speculations; and too often their errors passed undiscovered to the grave. The surgeon, for his good, has had a sharper training on facts; his errors hit him promptly in the face."

—Sir Clifford Allbutt (1836–1925) Lancet

Orthopedic Surgery Wellness Class

By Dr. Magdalena Tarchala
PGY-4 Resident, McGill Orthopedic Surgery

Thanks to an initiative set up by the McGill Orthopaedic Residency Program, Orthopaedic Residents start off their Thursday mornings before their Academic Half-Day with an intensive full body workout at the Shriners Hospital Gym led by a personal trainer. These workouts not only provide the residents with wellness and an endorphin rush, but are also great for team building and has significantly improved collegiality amongst the already strong program. Many thanks to Rania Iliyan and Dr. Thierry Benaroch for making this happen! ◆

"The conditions necessary for the surgeon are four: first, he should be learned: second, he should be expert: third, he must be ingenious, and fourth, he should be able to adapt himself..."

—Guy de Chauliac (1300–1370) Arts Chirurgica

Orthopedic Surgery Revises Summer Anatomy Curriculum

By Dr. Christopher Pedneault
PGY-5 Chief Resident, McGill Orthopedic Surgery

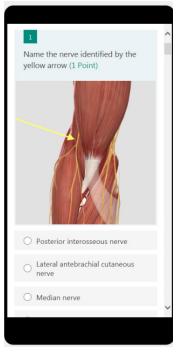
This academic year, the McGill Orthopaedic Surgery Department has completely revamped its summer anatomy curriculum. It consists of 8 consecutive 3-hour weekly academic half days at the Shriners Hospital Simulation Center. This new curriculum is led by **Dr. Stephane Bergeron** from the Jewish General Hospital and the Orthopaedic Chief Resident, **Dr. Christopher Pedneault**. While McGill Orthopaedics has been offering its residents these mandatory sessions in the past, they were previously held at the Strathcona Medical Building under the guidance of the University's Anatomy Department.

Now, each session is attended by all residents as well as various Orthopaedic Staff Members whose subspecialties are particularly relevant to the anatomic region covered that day. In the past, the sessions relied solely on Senior Residents to guide the more Junior Residents through various approaches. Instead, with multiple Staff members attending each session, they provide valued information and much appreciated guidance for Residents of all levels. This is an excellent opportunity to explore the more complicated approaches and less utilized

dissection planes in a safe environment. This year, 14 different Orthopaedic Staff Members from all McGill affiliated hospitals have volunteered for these sessions.

Also, the cadaveric sessions have been moved to the new Simulation Center at the Shriners Hospital which offers a modern high-tech operating room experience with state-of-the art operating room equipment and audiovisual support. The operating room environment is equipped with surgical lights, overhead cameras and surgical dissection tools. The use of floppy cadavers has also greatly enhanced the surgical experience by better simulating human tissues.

Furthermore, we have incorporated weekly quizzes utilizing Microsoft Forms prior to each session which cover the relevant anatomy of that particular session. This encourages residents to study their anatomy and approaches beforehand. The quizzes can be done on laptops, tablets or smartphones and the results are provided to the resident immediately after the test. These results are automatically tabulated in an Excel spreadsheet which is monitored by the Program Director who can track residents' improvement over time. The didactic portion of the curriculum has also been removed which gives the residents more hands-on time in the lab.



Thus far, the new curriculum has received much praise from all the residents who have given excellent feedback in response to the significant improvements in the summer anatomy curriculum. We look to nurture this enthusiasm for surgical education and hope that it motivates other residents to continuously improve the teaching curriculum for the years to come by using technology and interactive interfaces to promote learning.

We would like to extend our utmost gratitude to the Shriners Hospital organization, **Sharon Delisle** and **Omar Arfa** for helping us organize these sessions and allowing us to utilize their invaluable resources. We would also like to thank **Rania Iliyan** for coordinating each session and organizing the master schedule and special thanks to **Drs. Jean Ouellet** and **Thierry Benaroch** who helped procure the cadavers. Lastly, we are extremely grateful towards the staff who have participated in this new curriculum and helped make this an invaluable learning experience for all the residents. ◆

Orthopaedic R5 Graduates 2018

Dr. Abdulrahman Alaseem obtained his Bachelor of Medicine and Surgery (MBBS) from King Saud University in Saudi Arabia in 2009 then he joined McGill University to pursue a Master of Science (MSc) in Experimental Surgery in 2012. In July 2013, he joined the Orthopedic Residency Training Program at McGill University and completed his residency training in June 2018 and obtained the Royal College of Surgeons and Physician of Canada Board Certification (FRCSC) in Orthopedic Surgery. He will begin his Fellowship training in Orthopedic Oncology and Adult Reconstruction at McGill University in July 2018. He will be working back in Saudi Arabia as an academic Orthopedic Surgeon at King Saud University upon completion of his fellowship training.

Dr. Sultan Aldebeyan earned his Medical Degree from King Saud University, Riyadh, Saudi Arabia. He then joined McGill University where he obtained a Master of Science in Experimental Surgery followed by completing his Residency Training in Orthopaedic Surgery. Throughout his training, Sultan managed to publish multiple manuscripts and presented at multiple National and International meetings, with research focused on spine surgery. During his last year of training, Sultan was blessed with the birth of his baby girl, Lana.

Sultan will be pursuing his Fellowship Training in Calgary, Alberta at the University of Calgary in Adult Spine Surgery. After that he will be moving to Vancouver to pursue another fellowship in Pediatric Spine Surgery at the University of British Columbia. After successfully completing his training, Sultan will return to Riyadh, Saudi Arabia as a faculty member at the National Neuroscience Institute, King Fahad Medical City. Sultan owes all his success to his supportive wife, Basmah, and his family.

Dr. Hamzah Ali Alhamzah is a graduate of King Saud University – College of Medicine. Hamzah Alhamzah earned a master's degree in Public Health from the University of Miami prior to pursuing a career in Orthopaedic Surgery at McGill University. He will be doing two fellowships; first in Trauma Orthopaedics at the University of Calgary and the second fellowship in Sports Medicine and Soft Tissue Trauma at the University of Toronto.

Originally from Kuwait, Dr. Naser Alnusif graduated from the Arabian Gulf University Medical School program in Bahrain. He came to Canada in 2013 to join the McGill Orthopedic Residency Program. During his time at McGill, he earned a strong reputation as being a hardworking individual with very good technical skills in the operating room which earned him a prestigious Upper Extremity Fellowship in London, Ontario and later a Sports Fellowship at New England Baptist Hospital in Boston. Naser's leadership among the residents and kindness towards his patients earned him the Julie Laurin award for his commitment to patient care. He will be dearly missed at McGill as he pursues what is likely to be a prosperous and successful academic orthopedic practice. Naser eagerly awaits the next academic year, but in the meantime he will reunite with his two beautiful children and wife while enjoying his favourite sport Karate. We wish him nothing but the best in his future endeavours.

Originally from Kuwait, **Dr. Naser Alnusif** graduated from the Arabian Gulf University Medical School program in Bahrain. He came to Canada in 2013 to join the McGill Orthopedic Residency Program. During his time at McGill, he earned a strong reputation as being a hardworking individual with very good technical skills in the operating room which earned him a prestigious Upper Extremity Fellowship in London, Ontario and later a Sports Fellowship at New England Baptist Hospital in Boston. Naser's leadership among the residents and kindness towards his patients earned him the Julie Laurin award for his commitment to patient care. He will be dearly missed at McGill as he pursues what is likely to be a prosperous and successful academic orthopedic practice. Naser eagerly awaits the next academic year, but in the meantime he will reunite with his two beautiful children and wife while enjoying his favourite sport Karate. We wish him nothing but the best in his future endeavours.

Dr. Ahmed Aoude completed his Undergraduate Studies in Honours Electrical Engineering at McGill University. He then completed a Master`s in Biomedical Engineering at McGill University. Afterwards, Dr. Aoude was a project manager at Zimmer CAS where he developed orthopedic computer assisted surgery tools and equipment. During his early career, Dr. Aoude developed a passion for surgery and orthopedics and motivated him to complete his medical degree at University of Montreal. He recently completed his Orthopedic Surgery training at McGill University. ▶

▶ Ahmed has obtained many awards during residency including the Bone and Phones award for humanitarian missions with McGill Orthopedics in Haiti from the Canadian Orthopedic Association. He has been Chief and Assistant-Chief Resident for McGill Orthopaedics and has completed numerous orthopedic publications during his residency. Ahmed is also an inventor with 6 medical patents. He will be pursuing training in spine surgery at University of Calgary and will return to work in Montreal thereafter.

Dr. Daniel Castano completed his Medical School training at McGill University before joining the Orthopedic Surgery Residency Program. He was awarded the Resident Teacher of the Year Award during his last year of residency. Dr. Castano will be pursuing a fellowship in Hip and Knee reconstruction at the University of Ottawa. Dr. Castano owes all of his success to his supportive wife Elisabeth and his family.

Dr. Drew Crapser completed his Bachelors with Honors in Physics at Dartmouth College, Masters in Biochemistry at Johns Hopkins University, and MD at Dartmouth Medical School. During this time, he conducted research in ALS neuropathology, arthroplasty clinical outcomes, and biomedical engineering to explain the oxidation pathway in polyethylene. He is the cofounder of a start-up company that develops/commercializes IP of medical devices.

During residency at McGill, Drew received the Julie Prize for kindness and respect towards patients, colleagues, and nurses. He contributed to several projects under the exceptional mentorship of Dr. Larry Coughlin and Dr. Paul Martineau, including a mathematical model demonstrating a morphologic risk factor for ACL injuries. Drew will be pursuing a Sports Medicine Fellowship in Cincinnati after graduation.

Drew is grateful to his parents and fiancée Gabrielle for their unconditional support. He also owes his utmost gratitude to those McGill Staff whose dedication to teaching, mentorship and support throughout training have been invaluable.

Dr. Justin Drager joined McGill University from Geneva, Switzerland to start his undergraduate studies in biochemistry. During this time he joined a bone tissue-engineering lab that set him on his path to Medical School and Orthopedic Surgery training at McGill.

During his residency, Justin completed a Masters of Experimental Surgery examining the use of hypoxia mimicking agents for bone tissue-engineering. He also helped pilot the curriculum for the new surgical innovation course at McGill. His research accomplishments have been highlighted by being awarded the Kathy Cramer Young Clinician Memorial Award from the Orthopaedic Trauma Association and being selected for the AAOS Clinical Scientist Career Development Program.

Following graduation, Justin will pursue a Fellowship in Orthopedic Trauma at the University of Missouri followed by a Fellowship in Sports Medicine at Rush University Medical Center in Chicago. Justin is proud to have trained at McGill and hopes to represent his mentors and colleagues well in his next steps.

Dr. Jan Cornelis (Jay) Kruijt completed his bachelor's degree in Microbiology and Immunology and Medical School at McGill University prior to starting as an Orthopaedic Resident at McGill. Post Residency Jay will join the Orthopaedic Team at Hôpital du Suroît in Valleyfield in general community practice.

Dr. Mina Wahba Morcos completed his Undergraduate Degree in Physical Therapy at McGill University. He then completed his Medical Degree at Laval University and then joined the Orthopaedic Surgery Training Program at McGill University July 2012.

During his residency, Dr. Mina Wahba Morcos completed a Masters in Experimental Surgery under the supervision of Dr. Reggie Hamdy. In addition, he managed to publish multiple manuscripts and present at multiple national and international meetings, with research concentrating on adult reconstruction. Moreover, Dr. Mina Wahba Morcos received several awards for my research including the 'Young Investor Award', given by the American Society of Bone and Mineralization Research for his research in bone regeneration in Seattle Washington, and the 'GREAT Award', given by the Department of Surgery at McGill for achievement in research.

During his residency, Dr. Mina Wahba Morcos got the chance to go on an orthopedic mission to Honduras with Dr. Fassier where a lot of underserved children and adults were treated. This experience has been life changing for Dr. Mina Wahba Morcos and opened his eyes to many vulnerable communities. He is looking forward to participating in similar missions in the future.

Dr. Mina Wahba Morcos will be pursuing Fellowship Training in Western University, London, Ontario in Adult Reconstructive Surgery. He owes all his success to the tremendous support of his wife, Marina, and his family. ◆

McGill Urology Research
28th Annual McGill Urology Research Day

Since 1990, the Division has hosted an annual research gathering allowing graduate students, residents, post-doctoral fellows, research associates and assistants to present their research endeavors. **Dr. Simon Tanguay**, Professor and Head, McGill Division of Urology and **Dr. Simone Chevalier**, Professor and McGill Director of Urology Research were pleased to host the **28th ANNUAL MCGILL UROLOGY RESEARCH DAY** on Wednesday April 11th, 2018 at the Drs. Richard & Sylvia Cruess Amphitheatre Glen site of McGill University Health Centre Research Institute. The central theme was "Kidney Cancer" under the direction of Dr. Simon Tanguay. We were delighted to welcome our visiting professor, **Dr. Antonio Finelli**, from Princess Margaret Cancer Centre University of Toronto. It was a privilege to hear Dr. Finelli who gave a state of the art presentation entitled, "Renal Cell Carcinoma - A Journey Towards Personalized Care of Small Renal Masses and Quality Improvement". This was followed by the 19 scientific presentations, moderated by **Dr. Cristian O'Flaherty**, Associate Professor, McGill Department of Surgery. With over 125 people in attendance, the research day gave a glimpse of the quality and breadth of research being done on various themes related to urological disorders. The research day was continued by a cocktail and a congratulatory dinner held at the Glen Atrium where awards were presented for the best presentations to Post-Doctoral Fellow **Dr. Michel Wissing (Dr. Armen Aprikian)**, Post-Doctoral Fellow **Dr. Claire Nash (Dr. Axel Thomson)**, and MSc student **Ms. Surashri Shinde-Jadhav (Dr. Wassim Kassouf)**. The jury was composed of Dr. Finelli, **Dr. Maurice Anidjar** (McGill Assistant Professor, Department of Urology at the Jewish General Hospital), **Dr. Peter Chan** (McGill Professor and Director of Male Reproductive Medicine), **Dr. Teruko Taketo** (Professor of Urology). Dr. Tanguay presented Dr. Finelli a gift on behalf of an appreciative McGill Division of Urology. The evening concluded with closing words by Dr. Tanguay, congratulating everyone who participated by thanking the organizers Drs. O'Flaherty and Chevalier, to Pharmaceutical partners for their continuous and generous support, and particularly **Ms. Chrysoula Makris** whose indispensable contribution throughout the years has made the McGill Urology Research Day a successful and memorable event. ◆

Left to right: Dr. S. Chevalier, Dr. M. Wissing, Dr. M. Anidjar, Ms. S. Shind-Jadhav, Dr. C. O'Flaherty, Dr. C. Nash, Dr. W. Kassouf, Dr. S. Tanguay, Dr. A. Finelli and Dr. T. Taketo

Invited Guest speaker Dr.Finelli presenting

Left to right: Drs. M. Anidjar, S. Chevalier, A. Finelli, S. Tanguay and Dr. C. O`Flaherty

Urology Research News

Congratulations to **Dr. David Labbe** for obtaining the Research Scholar - Junior 1 - Fonds de recherche du Québec –Santé (FRQS). He also received the Simone & Morris Fast Award for Oncology and the Klaassen-Hawthorne Memorial Fellowship.

Congratulations to both **Ms. Aurélie Le Page** (supervisor Dr. David Labbe) for obtaining the Fonds de recherche du Québec - Santé (FRQS) Post-doctorate award and to **Mr. Waleed Ebrahimizadeh** (supervisor Dr. Jacques Lapointe) for Doctoral Training award.

Congratulations to all the McGill Urology Research winners who participated at the **Cancer Research Program (CRP) Research Day** held May 22, 2018. This event was an opportunity to showcase our quality research and progress made by Urology research members. During the day over 40 posters were presented, 8 student oral presentations, two CRP PI's presentations and over 125 participants.

Kudos to:

Mr. Karl-Philippe Guérard (Dr. Jacques Lapointe) for best Poster Presentations (Research staff)

Ms. Surashri Shinde (Dr. Wassim Kassouf) for 1st prize for best MSc Oral presentation

Ms. Seta Derderian (Dr. Simone Chevalier) 2nd prize for best MSc Oral presentation.

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Congratulations to **Dr. Claire Nash** (postdoc in **Dr. Thomson's** lab) received an award for the best basic science presentation at theAnnual Fraser Gurd day held May 25, 2018. ◆

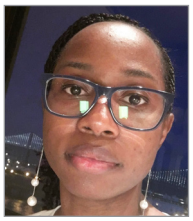
"The only weapon with which the unconscious patient can immediately retaliate upon the incompetent surgeon is hemorrhage."

—William Stewart Halsted (1852–1922) Bulletin of the Johns Hopkins Hospital 23:191, 1912

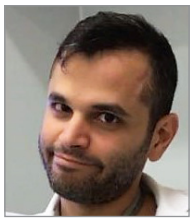
Welcome to the New Urology Chief Residents 2018–2019

DIVISION OF UROLOGY
PROGRAM DIRECTOR: **DR. MOHAMED EL-SHERBINY**

Dr. Emilie Baillargeon completed her medical education at McGill University before joining the urology residency program. Throughout those five years of hard work as a resident, she made good friends within the program. She strongly believes in the importance of surgical education and hands-on training. After graduating, she plans on practicing general urology in the community. Outside of work, she spends her time doing outdoors activities, such as playing tennis, surfing, telemark skiing, and she particularly enjoys playing the Catan board game with her family.



Born and raised in Cameroon, **Dr. Suzy Melody Djuimo** moved to Canada in 2004 at the age of 17. Three years later, she graduated from the University of Montreal with a bachelor in Computer Sciences. She then completed one year of Nursing at the University of Montreal before starting medical school at the University of Montreal, Trois-Rivieres campus in 2009. She graduated from medical school in 2014 and began her urology residency in Sherbrooke the same year. For the last 2 years of her residency, she joined the McGill urology program. She is interested in endourology and kidney stones and will pursue a fellowship at the University of Toronto in 2019



Dr. Nicholas Haddad completed his undergraduate medical studies at McGill University. During his residency he performed research in infertility and prostate cancer. Next year he will be moving to Mississauga, Ontario where he will do a fellowship focusing in Endourology, Laparoscopy, and Pediatric Urology through the University of Toronto. ◆

Welcome to the New Plastics Chief Residents 2018–2019

DIVISION OF PLASTIC SURGERY
PROGRAM DIRECTOR: **DR. MIRKO GILARDINO**

Dr. Nayif Alnaif completed his MD degree at King Saud University before joining the Plastic and Reconstructive Surgery residency program at McGill. During residency he published numerous papers in the field of Craniofacial and breast reconstruction. He is thankful for the support of his friends, family, teachers and colleagues during residency. Dr. Alnaif is looking forward to his Chief year and wishes his friends and colleagues in all specialties a successful academic year.

Dr. Emilie Bougie received her medical degree from Sherbrooke University in 2014 where she completed two years of Surgical Foundations training. She transferred to McGill University to pursue her Plastic & Reconstructive Surgery residency as part of the Sherbrooke-McGill pathway. She had the opportunity to participate in several research projects throughout her residency of which some have been presented at national and international meetings. She is involved in multiple educational activities and was voted by her peers to receive the annual Resident Teacher Award during her term as Academic Chief. Emilie is passionate about pediatric plastic surgery, particularly congenital hand surgery. Upon finishing her residency, she will be completing a congenital hand and upper extremity fellowship at Birmingham Children's Hospital in England. Following 2 years of subspecialty training, she will return home to begin her practice. ◆

"Five things are proper to the duty of a Chirurgian; to take away that which is superfluous; to restore to their places such things as are displaced; to separate those things which are joined together; to join those that are separated; and to supply the defects of nature."

—Ambroise Paré (1517–1590)
Works, Bk. 1, Ch. 2
(tr. by T.H. Johnson)

Dr. Jonathan Meakins
Honored by Western University

By Harvey Sigman, CD, MSc, MDCM, FRCSC, FACS

Dr. Jonathan Meakins, former Chief of Surgery at the MUHC, Archibald Professor of Surgery and Nuffield Professor of Surgery at Oxford University, has recently received an Honorary Doctor of Science from Western University, for which we congratulate him. The convocation address was structured around how, when leaders and followers are all working towards a Common Good, their unit, Division, Department, Faculty and University all benefit. He explained in an interview with me that this idea of the Common Good has its origins in Aristotelian philosophy and can easily be linked to professionalism. He could see a link between these two concepts to the way in which a beehive and colony reproduces. The address can be found at: https://news.westernu.ca/2018/06/meakins-strive-common-good/

He reflected on his own personal experiences of learning from mentors when he was a resident at RVH. He omitted the following narrative from his convocation address, as he explained below, but, I felt that our readers will appreciate the anecdote and will recall similar events in their own training, that may have helped shape their careers. They may want to share some of these for inclusion in future publications of the Square Knot.

Reflections on Mentoring
by Dr. Jonathan Meakins

Dr. Jonathan Meakins

An integral component of the success of an academic department is a culture of mentoring. This implies a close and continuing relationship between mentor and mentee, is often enduring, and having implications in the development of clinical and research careers. As we progress, we come into contact with a variety of individuals who are role models but not necessarily mentors. Their impact may be through a single riveting episode or a pattern of model comportment which we would like to emulate or occasionally avoid. Role models are for the most part positive and are an example of how individuals contribute to the common good within a unit by the way they function and comport themselves in a broad range of situations.

The following anecdote was deleted from my convocation address as being about the speaker and not about those graduating. As a CVT chief resident in 1973, I was assisting Normand Poirier splitting a stenosed mitral valve. Memory suggests that the operation was uneventful until it came to closing the atrium, which proved to be difficult. With a thumb in the defect, it was calm. After a couple of attempts, Normand said, "We need help, please call Dr. Dobell.". A few minutes later, we could see Dr. Dobell coming up the OR corridor at his characteristic leisurely pace, almost an amble. Entering Theatre 9, "Hey Normand, what's up?" as if an anomaly or unusual pathology had been found.

Normand explained the situation; Dr. Dobell had a look and said, "I understand……Could I please have some 2-0 linen?" Dr. Dobell closed the atrium around Normand's thumb. The calm throughout was palpable. When completed, after a quiet look around, he asked Normand if he could go.

I remember this event in the movie of my mind after 45 years because of the role modeling observed.

Role modeling comes in many forms; one is the way individuals function and comport themselves in tough moments.

From Normand, one can see:

- know your limits,
- recognize them,
- ask for help in time **(it is always too early before it is too late),**
- think and be calm.

From Dr. Dobell, diffusion of tension and:

- projection of calm and quiet,
- projection of 'more hurry, less speed',
- the benign question: "What's up?"
- working with Normand to close the hole,
- no apparent interest in why he was needed, therefore nonjudgmental.

That this event should remain in the movie of my mind exemplifies the power of a specific event in outlining the required comportment to solve a problem. Here was a generic issue, that is the recognition that one needs help and the way in which that help is provided. The success of our educational programs in surgery, undergraduate and graduate (residency and fellowship) is anchored in the role models we provide and the mentoring relationships that are cultivated. ◆

KUDOS !!

Dr. Serge Carrier has been elected, last May 2018, at the American Urological Association meeting in San Francisco, as the President-elect of the Sexual Medicine Society of North America, the most important association of sexual medicine in America. Dr. Carrier is the first Quebecer, and the second Canadian to be elected to this prestigious position in the history of this association.

The MIS Lab had the annual Suturing Competition on Wednesday June 6th. Congrats to both **Etienne St. Louis** and **Hussam Alamri** on their success at the suture competition. Congratulations to Hussam on his win and Etienne on runner-up position.

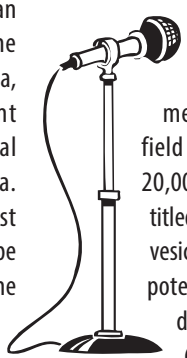
Drs. Armen Aprikian and **Franck Bladou** were recipients of the 2018 honorary fellowships of the Israeli Cancer Research Fund.

Dr. Armen Aprikian was awarded the Outstanding Contribution award from Prostate Cancer Canada Support Group.

Dr. Armen Aprikian was elected Vice President of the Canadian Urology Association at their annual general meeting in Halifax in June.

John Antoniou MD, PhD, FRCSC (Medical class of 1991), is a tenured professor of surgery at McGill in the division orthopaedic surgery at the Jewish General Hospital and Chercheur National of the Fonds de recherche en santé du Québec (FRSQ) has just been elected President of the Canadian Orthopaedic Association. He has also served as the president of the Canadian Orthopaedic Research society and he chairs the international Committee of the Orthopaedic research society. He is widely known as a leader in the field Orthopaedic surgery and research.

Dr. Steven Paraskevas was extremely honoured to be an invited speaker at the 78th Scientific Sessions of the American Diabetes Association, in Orlando, June 22, 2018. The ADA is the largest meeting in the world in the field of diabetes, attended by 20,000 delegates. His talk was titled "Islet derived extracellular vesicles and their immunological potential" and highlights work done in his lab over the last 6 years, supported by the Canadian National Transplant Research Program.



Jonathan Spicer, MD PhD, Assistant Professor of Surgery received a Cancer Research Society Grant.

Dr. Michael Tanzer received the 2018 Journal of Orthopaedic Surgery's Excellence in Translational Science Award for his publication: *Fully porous 3D printed titanium femoral stem to reduce stress-shielding following total hip arthroplasty*. His co-authors are **Drs. Sajad Arabnejad, Burnett Johnston** and **Damiano Pasini**. In addition, this research was awarded the McGill University Faculty of Engineering Innovation Fellowship and finished in 3rd place in the McGill Clinical Innovation Competition Hakim Prize for Clinical Innovation in Health Care. Dr. Tanzer has been appointed as a member of the CIHR College of Reviewers.

Dr. Frank Guttman has published his fourth book in history: *The History of the Sir M.B Davis Jewish General Hospital* Queens McGill University Press. He outlines the progress of the hospital from a community hospital to a major McGill medical school teaching unit as well as a major Canadian research institution. A launch is planned for October 10.

Dr. Julio Fiore Jr., a research scientist and Assistant Professor in the Division of General Surgery, obtained a FRQS Chercheurs-boursiers Junior 1 award for his project to develop a patient-reported outcome measure of surgical recovery.

Dr. Teodora Dumitra, PGY 3 in General Surgery, received the Best International Paper Award at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) for her podium presentation titled *Is there a gender bias in advancement to SAGES leadership?*

Dr. Paola Fata was appointed president elect at the Canadian Association of General Surgeons, and will begin her term as president in September 2018.

Dr. Fackson Mwale has been appointed to a new tenure track position in the Department of Surgery made available by McGill in support of our Surgical Innovation program. Dr. Mwale is a Professor in the Department of Surgery at McGill University and a senior investigator at the Lady Davis Institute of the Sir B. Mortimer Davis Jewish General Hospital. He is an accomplished basic scientist with an international reputation for his innovative research. Currently, Dr. Mwale is past President of the Canadian Orthopaedic Research Society (CORS). He is co-founder of Trepso Therapeutics, a novel technology developed to repair diseased intervertebral discs. He has made contributions to the fields of extracellular matrix biology, osteoarthritis, spine biology and tissue engineering. His innovative contributions to these areas have earned him international recognition and acclaim.

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▶ He was one of the invited scientists to NIAMS in Washington to a round table with other experts in the field to discuss the future of spine research. Dr. Mwale was recognized with the honorary status of Fellow of International Orthopaedic Research (FIOR) of the ICORS International College of Fellows. His other honors include the ORS young investigator award, the Berton Rahn Prize Award, the Hansjörg Wyss Award, the North American Spine Society Award, the Founders medal and the North American Spine Society (NASS) Award, which was featured in the NASS daily news. Dr. Mwale co-chaired the Canadian Connective Tissue Society twice in 2005 and 2011 and became the president. He started the Research Interest Group at the Orthopedics Research Society in 2011 in Long Beach, California and founded the Spine Research Community, a group comprising of more than 800 clinicians, basic scientists and fellows. In 2010, he co-organized the Stem and Regenerative Workshop in Ottawa and the Spine Workshop in Kyoto, Japan. Dr Mwale recently developed Prime Growth Media system for the long-term culture of whole discs with vertebrae, which is now sold by Wisent Bioproducts. He is the current program chair of the Canadian Orthopedic Research Society and Co-organizer of the 2019 Combined Meeting of Orthopaedic Research Societies in Montreal, Canada.
Read more here - https://bit.ly/2MzWAp1

Prof. Dr. John Hsu was acknowledged with the certificate for his long lasting and ongoing engagement in German-American-Cooperation on behalf of the Initiative'93 Technische Orthopädie (German Association for Orthopedic Surgeons) on April 28th, 2018. ◆

Dr. John Hsu

"To intrude an unskilled hand into such a piece of Divine mechanism as the human body is indeed a fearful responsibility."

—Joseph, Lord Lister (1827–1912)
Lister and the Lister Ward
in the Royal Infirmary of Glasgow, Ch.1

Support the McGill Department of Surgery !

The McGill Department of Surgery is recognized nationally and inter-nationally for its excellence in surgical education, research and innovation, and high quality patient care. Graduates of our surgical training programs have become our ambassadors around the world; many have risen to prominent leadership positions in their institutions.

The future of The McGill Department of Surgery as a truly great department depends more than ever on gifts from private sources. Such donations can be made ONLINE by credit card via The Montreal General Hospital Foundation at : https://www.mghfoundation.com/donate/make-donationonline-form/

Enter your donation amount and check the box "Other", and type in McGill Department of Surgery Alumni Fund. Fill in the "Donor information" as appropriate. Charitable receipts for Canadian tax purposes will be issued by the MGH Foundation. ◆

Gerald M. Fried, MD
Chairman, McGill Department of Surgery

Obituaries

DR. KENNETH AIKIN
(1949-2018)

Kenneth Aikin passed away peacefully, surrounded by family, on March 21st 2018 in Naples, Florida, at the age of 69. Born in Montreal to Lillian and Archie Aikin, Ken grew up in Deep River, Ontario, along with his three siblings John, Brian, and Colleen. University brought Ken back to Montreal, where he completed his undergrad degree in Honors Biochemistry, his medical degree (MDCM), and specialization in General Surgery at McGill University. It was during these university years that he married his high school sweetheart Kristine.

Dr. Kenneth Aikin

As a versatile, autonomous, and highly skilled surgeon, Ken was perfectly suited to the demands of rural medicine. After training in St Anthony, Newfoundland, he eventually settled south of Montreal in the community of Ormstown, Quebec. As a general surgeon in a rural hospital, his broad surgical skillset included procedures in oncology, orthopedics, obstetrics, and emergency medicine. His peers described Ken as a true "surgeon's surgeon". He practiced at the Barrie Memorial Hospital for more than 35 years and his impact on the region was tremendous and far-reaching – a tireless hero to countless individuals and families.

Ken was a gifted and fiercely competitive athlete. Having excelled in high school sports, he played four seasons as running back for the McGill Redmen football team. In 1969, he was part of the team that won the Yates Cup, the Atlantic Bowl, and reached the Vanier Cup final. He was co-captain of the team in 1971, when he won the team's Fred Wigle Memorial trophy as most sportsmanlike player. His speed, determination, and Superman-like looks earned him the nickname of "Clark Kent". With time, he applied the same determination to golf – which proved to be a peaceful break from the rigors of surgery while providing suitable means to channel his competitive spirit.

Ken is survived by his loving wife Kristine, and his four children – Kyle (Kelly), Reid (Jane), Ross (Laura) and Laura (Nick). He was a kind, empathetic, genuine, generous and devoted father who saw all his children marry and provide him with eight grandchildren: Kali, Cole, Luke, Violet, Lexi, Taylor, Kara, and Jayden. Ken will be sorely missed as a great husband, father, grandfather, physician, teammate and friend to many. ◆

Republished from The Montreal Gazette dated March 21, 2018

DR. PHILIP GORDON
(1943-2018)

It is with heartfelt sadness that we report the untimely passing of our former teacher, mentor, friend & colleague, **Dr. Philip Gordon** who passed away on April 11 at the age of 75 after a valiant one and a half year battle against advanced pancreatic cancer.

Dr. Philip Gordon

Dr. Gordon was born in Saskatoon, Saskatchewan. He received his MD from the University of Saskatchewan in 1966. He completed his surgical residency at the Jewish General Hospital in Montreal and became one of the first fellows in Colorectal Surgery at the University of Minnesota in 1973. He became an honorary assistant in surgery at St Mark's Hospital in London and subsequently returned to the Jewish General Hospital to begin his illustrious career in Colorectal Surgery.

Dr. Gordon was instrumental in beginning Colorectal Surgery at McGill University and actively promoted the specialty in Canada by helping to establish the Canadian Society of Colorectal Surgery which he served as its founding President from 1982-1986. He was the only non-American to have been elected as President of the American Society of Colon and Rectal Surgeons from 1994-1995. He co-authored several textbooks on Colorectal Surgery which have served as established references in the field. He served on numerous editorial boards of peer-reviewed journals and co-authored innumerable articles in colorectal textbooks and peer-reviewed journals. To honour his life-long devotion and contributions to the field of Colorectal Surgery, an annual lectureship was established both at the Canadian Society meeting and at McGill. He received the first Lifetime Achievement award from the McGill University department of Oncology which recognized his outstanding contributions to research, teaching and patient care.

Dr. Gordon is survived by his beloved wife Rosalie and his loving children Laurel and Elliot. ◆

Jewish General Hospital
Reflections on the 3rd ITCSP Workshop

By Barbara Reney, M. Educational Technologist

The 2018 workshop on the **Impact of Technological Change on the Surgical Profession (ITCSP)** series on technology in medicine looked specifically at the sources, or the origins of, scientific innovation. The force behind any technological innovation is a creative spirit and an identified need. What allows an innovation to be introduced into common usage and experienced by many is a combination of timing, creative initiative and financial support as well as willingness to adopt or use of those who will benefit most from the innovation be they specialists operators or the general population.

This workshop (please see its website with full details here - https://www.innovation-technology-medicine.com/) provided an environment wherein an interesting group of established international researchers, historians, medical practitioners, scientists, financial management experts as well as an artist were able to come together over two days to discuss their experiences and findings on the different sources of medical innovation. Within this group was the actual inventor behind a form of medical technology that revolutionized a particular diagnostic process that had long been controlled by the established medical community. As with all medical innovation there were hurdles to jump in order to make the technology accessible to those who needed it the most but in so doing and given the era and geographical location, this device shifted the balance of power, with regard to this particular procedure, in women's health worldwide.

In spite of resistance from the traditional scientific medical community in the 1960s, this model of creative intelligence that emerged from the margins and was introduced to society, as well as other examples presented that had been drawn from the peripheries, from the non-scientific research centers, have contributed significantly to the enhancement of the quality and efficiency of healthcare and have aided in leading it towards state-of-the-art level medical services which society benefits from today.

Barbara Reney
M. Educational Technologist
Jewish General Hospital

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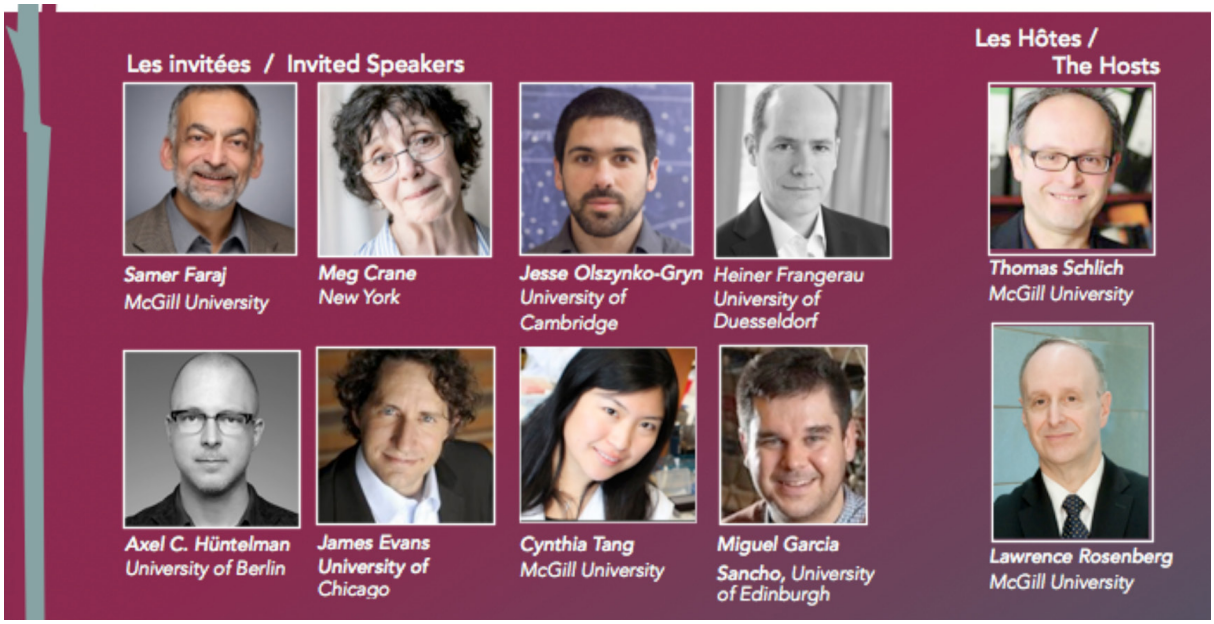
The third workshop on the Impact of Technological Change on the Surgical Profession (organized by **Thomas Schlich**, Department of Social Studies of Medicine, **Lawrence Rosenberg**, Jewish General Hospital and **Barbara Reney**, Jewish General Hospital) was devoted to the question where innovation in medicine comes from. Do new ideas and techniques originate only in big centers or also on the margins of the medical research landscape? Often, innovation is expected to come primarily from large, well-endowed medical research centers. However, many of the inventions that have shaped medicine have also emerged from its periphery - small hospitals, workshops, marginal ▶



▶ companies and individual inventors, often in an unplanned and spontaneous way. This happened for example in the cases of osteosynthesis, the artificial hip, or Minimally Invasive Surgery.

The workshop explored the contexts of medical innovation with particular attention to the centrality and marginality of institutions and geography. As it turned out in the discussions, centrality and marginality are not absolute terms. They depend on how they are defined, among other things, by geographical location, by institution (for example, academic vs. non-academic), discipline, or access to funding. Some areas of research and innovation even elude the categories of center and margins. Thus, various biotechnological innovations in genomic research have originated in networks following a collaborative pattern with no central structure, as **Miguel Garcia Sancho Sanchez** (University of Edinburgh, UK) showed. Another important aspect is change over time. We can see the existence of dynamic networks in which centers and margins are subject to constant change, often in unplanned ways, as **Axel Hüntelmann** (Charité University, Berlin, Germany) demonstrated in historical analysis of bacteriological and immunological research. **Cynthia Tang** (McGill University) discussed a case of rapid innovation in Minimally Invasive Surgery. Her example drew attention to the active establishment of centers (the act of "centering") by historical actors in relationship to their power over definitions but also through flows of funding. **Jesse Olszynko-Gryn** (University of Cambridge, UK and **Meg Crane** (Inventor, Graphic Designer, New York, USA) discussed the introduction of home pregnancy tests as an innovation at the edges of the medical establishment and the influence of social and moral norms on market access. It was particularly interesting to hear about Meg Crane's perspective on this historical episode since she invented and introduced a home pregnancy test in the 1960s. The test is also an example of the importance of the agency of consumer patients independent of the medical establishment. The consumer as agents of innovation was also considered in **Heiner Fangerau's** (University of Duesseldorf, Germany) talk about blood-pressure home measurement diabetes self-monitoring measurement, technologies that cut out the doctor from the medical encounter (disintermediation). **Samer Faraj's** (McGill University) presentation on several examples of open innovation in health care deepened the discussion on the involvement of users, such as patients, in medical innovation. **James Evans** (University of Chicago, USA) used novel methods of citation analysis to show that large research groups are often engaged in further developing already existing technologies and knowledge, whereas more radical innovation tends to come from small groups.

The workshop provided a valuable opportunity for conversations between participants from different backgrounds and helped broadening our perspective on medical innovation. This kind of discussions can help policy makers realize the potential of distributed, decentralized expertise and creativity and make full use of various sources of new knowledge and technologies for the future.

Thomas Schlich
James McGill Professor in the History of Medicine, Department of Social Studies of Medicine, McGill University

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It was an honor to be presenting with Jesse Olszynko-Gryn at the conference on April 18th and 19th. Jesse is certainly the expert in the field of pregnancy testing, and it's been a pleasure to add any contribution I could to his studies.

The conference topic was very interesting to me, coming as I am from the "margins". The fact that so many new devices and "at home diagnostics" are more and more available to the layperson, the effect on the established medical community must be quite profound. While simple diagnostics are available over-the-counter, doctors can send patient samples to high-end laboratories for in-depth diagnosis. Does this lessen the expected role of the doctor, or enhance his or her ability to aid the patient? Will new technologies cause even fewer doctors to enter general practice, but instead, to acquire a specialty?

There were a number of references at the conference on the availability of medical information through the internet. This must certainly be a cause of consternation in the medical communities. But in some cases, isn't it possible that hearing of new medicines or procedures will cause consumer pressures on the established medical communities as it seemed to have happened in the case of laparoscopic cholecystectomies?

The discussions on the effects of networking, in and out of the centers —and of future advances in personal care for diabetes and heart disease—were very informative. Since medical innovation may rightly come from the established institutions, it should also be useful if workers in the medical communities— nurses, doctors, social workers, even patients — become the source of new products, since they are the closest to the actual patient needs.

It's my hope that increasing attention will be paid to this community though they may indeed be on the "margins". Thank you again, Barbara, the conference was a very thought-provoking experience!

Meg Crane
Inventor and Freelance Graphic Designer, New York

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▶ This was an excellent event. It was well organized and ran smoothly and on time. The friendly and respectful atmosphere was one of intellectual curiosity and exchange. The presentations and discussions were all very stimulating and of high quality. From my own perspective as a UK-based historian, it was a rare occasion to learn from Canadian MDs and German historians of medicine. It was an especially useful event for learning about what is around the corner in medicine and what leading medical practitioners are currently preoccupied with, for instance, the rise of AI and 'disintermediation'.

The mix of MDs, historians, a PhD student, and a graphic designer was highly productive and led to some real insights that would probably have been missed in a less interdisciplinary setting. From an intellectual perspective, it was especially useful for me meet Heiner Fangerau for the first time. I was not previously aware of his research and it is very relevant to my own project which like his is concerned with innovation in diagnostic technology. On a more personal note, the conference also provided a welcome opportunity to catch up with old friends such as Thomas, Axel and Meg.

My only criticism is that not more women were invited. History of medicine is not particularly dominated by men (at least not outside of Germany) and it should have been possible to find leading female experts in the field. Considering the theme of the workshop and that women have historically toiled at the margins of medicine, it would have been interesting to hear also from female MDs about their past experiences.

Jesse Olszynko-Gryn
Director of Studies for HPS at St. John's College
University of Cambridge, UK

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I found the workshop extremely valuable and interesting, a great opportunity to think about medical innovation from an interdisciplinary perspective. The most exciting aspect for me was the interaction with medical practitioners (I'm a historian of biology, so I don't know the clinical side of things that well) and the insights from management and innovation studies. It is very interesting how scholars dealing with management and innovation in clinical settings are getting increasingly closer to historical and social studies of medicine.

Miguel Garcia Sancho Sanchez
Chancellor's Fellow-Senior Lecturer in Science Technology and Innovation, University of Edinburgh, UK

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I really enjoyed the workshop very much which I did not only enjoy - the feedback of my paper and the discussions, in general, I found very helpful.

Especially the setting of the group was great - often historians of medicine only write and talk about physicians but only rarely we have the opportunity to discuss our scientific findings with physicians, and esp. with life scientists as distinguished as Lawrence Rosenberg, Abe Fuks, or Phil Gold and others.

Further on I appreciated the interdisciplinarity of the group and especially the discussions of topics linked to economy and health. That was very interesting for my current research on accounting and bookkeeping in medicine and I had very interesting discussions during the coffee breaks with Samer Faraj and Karl Moore. Overall, I found it helpful that the discussion was in a very friendly atmosphere and in a small group. Finally, as I am dealing with history in the early 20th century I had the impression that for colleagues presenting contemporary history I had the impression that the commentaries were very helpful for the researcher.

Axel Huntelmann, PhD
Institute for the History of Medicine at the Charité University Medicine Berlin

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Thank you for facilitating such a wonderful meeting in Montreal between the Jewish Hospital and McGill University. I found the experience extremely stimulating, especially the hospital administration and physician doctor's responses to my work and the work of historians, sociologists and other scholar's work on innovation in biomedical context. I received several useful comments, and hope that my work contributed to the discussion. Please let me know if and how I can contribute to future meetings/efforts.

James, Evans, PhD
Director of the Knowledge Lab, Professor of Sociology, University of Chicago

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There is no denying that government and special agencies fund research innovation in academic institutions yet not all innovations originate from those highly financed environments, sometimes they spring from individual or small group creative capital, they may be driven by necessity or simple curiosity. However they make their way into common practice, for the most part, they liberate us from antiquated methods, mentalities, and even from debilitating control systems; they serve ▶

▶ humanity by improving our quality of life and ability to achieve our dreams and goals.

THE PRESENTATIONS ARE AVAILABLE AT THE LINKS BELOW

1. **Dr. Lawrence Rosenberg**, McGill University, Montreal, Canada. Presentation at the JGH, April 18th, 2018 : *The idea Factory* https://youtu.be/ujLPCFTVk0U
2. **Dr. Miguel Garcia Sancho Sanchez**, University of Edinburgh, UK. Presentation at the JGH, April 18th, 2018: *Sequencing, Biblometrics and History: a 'From Below' Approach to Innovation in genomic Research* https://youtu.be/uncHWyTp60U
3. **Dr. Axel C. Hüntelman**, Charité University Medicine, Berlin, Germany. Presentation at the JGH, April 18th, 2018: *Interconnecting Centres and Margins: Networks, Technologies and Other Infrastructures in Bacteriological and Immunological Research 1870s to 1930s* https://youtu.be/Ks83Mi149WM
4. **Dr. Jesse Olszynko-Gryn**, University of Cambridge, UK & Meg Crane, Inventor & Graphic Artist, New York Presentation at the JGH, April 18th, 2018: *The Invisible Designer: Meg Crane and the Invention of the Home Pregnancy Test 'Predictor' in the Late 1960s* https://www.youtube.com/watch?v=9NrA0j-nxpU&t=1s
5. **Dr. Heiner Fangerau**, Université de Duesseldorf, Germany Presentation: *The "Technicalization" of Medicine: Users as Agents of Innovation in an age of Medicalization* https://youtu.be/2a4hlU_i8-8
6. **Dr. Samer Faraj**, University of McGill, Montreal, Canada Presentation at the JGH, April 19th, 2018: *Open Innovation in Healthcare.* https://youtu.be/SUMX1Ud2VB8
7. **Dr. James Evans**, University of Chicago, US Presentation at the JGH, April 19th, 2018: *Large Teams have developed biomedical science and technology; Small teams have disrupted it* https://youtu.be/MTUEE-4n9_M
8. **Dr. Thomas Schlich**, McGill University, Montreal, Canada Discussion and Conclusion of the 2018 Workshop on the Contexts of Technological Change in Medicine https://youtu.be/F-Lp2ciPU_A ◆

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"The science and art of medicine is of necessity so little understood by the laity that they are obliged to entrust their lives and their welfare to the physician rather upon faith in his character and reputation than upon actual experience of his abilities. Thus, conscience becomes one of the most important elements in the character of the physician. Especially is this true as regards the surgeon, for his activities are carried on largely in the seclusion of the operating room and often only his colleagues and his assistants are in a position to judge intelligently whether his ministrations to the sick and injured are as efficient as the existing state of surgical knowledge and resources will permit. It is this fact that seems to justify a review of some of the features of the practice of surgery, which require a keen conscience on the part of the surgeon and a definite sense of responsibility to his patient, to his hospital, to his colleagues, and to the whole community."

—Robert B. Greenough (1871–1937)
Surgery, Gynecology & Obstetrics
62:390, 1936

2018 Surgical Robotics Conference of the Montreal Jewish General Hospital

An opportunity for experts to measure the impact of technology in the operating room

By Barbara Reney, M. Educational Technologist

In June **Dr. Rosenberg** hosted the first **Surgical Robotics Conference** (see event brochure) at the Jewish General Hospital and it was a tremendous success with well over 100 participants, some on-site in the Block Amphitheater, others tuned in via teleconference and Webex from other healthcare and academic institutions across Quebec and the rest of Canada.

Participants were from academia and healthcare, communications, technology, from industries working with the latest surgical and healthcare technology along with various agencies working with patients to ensure optimal quality of life pre and post surgery. It is thanks to the exceptional expertise of its' world class surgeons, such as Drs. Gotlieb, Bladou, Ma, Moss, Lau, Salvador, Vanounou, Hier and Mlynarek, to name but a few, in conjunction with all the surgical staff managing the robotic and support equipment, those assisting in performing the delicate procedures and overseeing the patient outcomes, that make the Jewish General Hospital a national leader in robotic surgical procedures in spite of limited financial and equipment resources.

Links to all the presentations and the concluding audience-expert question period, a series of videos with other JGH practicing experts such as Drs. Shannon Salvador, Emmanuel Moss, Michael Hier, Alex Mylnarek and Walter Gotlieb are listed below.

There is no doubt that the state-of-the-art of surgery is headed in a direction that not only significantly impacts the lives of patients through improved surgical procedures requiring much less recovery time, the physical strain on surgeons to perform extended surgeries is greatly reduced. The rate of technological innovation and development has definite implications for the next generations of medical practitioners.

1. **Dr. Tania Stafinski**, PhD & Dr. Devidas Menon, MHSA, PhD, University of Alberta, Presentation title: *How did RAS Lead us to Re-Think What We Do*. https://www.youtube.com/watch?v=lJ-1aLZ4Jo4
2. **Dr. Walter Gotlie**. Presentation Title: Surgeon Experience and Clinical Evidence. The benefit of Robotics to the patient, system, hospital, surgeon and the future of Robotics in Canada. https://www.youtube.com/watch?v=AkvPYi_M-QE
3. **Dr. Franck Bladou**. Presentation Title: *Surgeon Experience and Clinical Evidence. The benefit of Robotics to the patient, system, hospital, surgeon and the future of Robotics in Canada*. https://www.youtube.com/watch?v=wxEhpqUU4Vg
4. **Dr. Randy Fagen**, Vice President of Orthopedics and Surgical Robotics at Health Corporation of America. Presentation Title: *Efficiency and Cost-effectiveness of Surgical Robotics. The value of Data Analytics and Scale.* https://www.youtube.com/watch?v=7PKmQtaMHTg
5. **Mr. Michael Flinker**. Presentation Title: *The Patient Experience* https://www.youtube.com/watch?v=BNCyvyVYnu4
6. **Mr. Jean-Luc Trahan**. Presentation Title: *Patient Experience presentation* https://www.youtube.com/watch?v=EXEZXXKwfeQ&t=5s
7. **Dr. Lawrence Rosenberg** Question and comments period and conclusion https://www.youtube.com/watch?v=QGLIRyjtuOk&feature=youtu.be ◆

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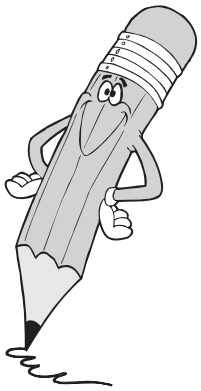

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