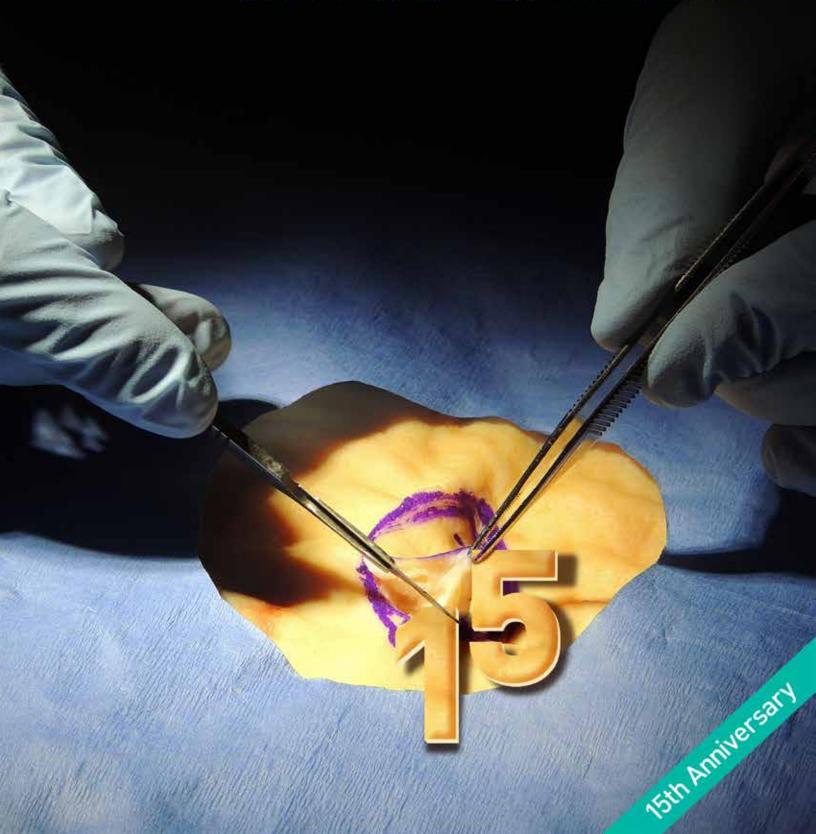
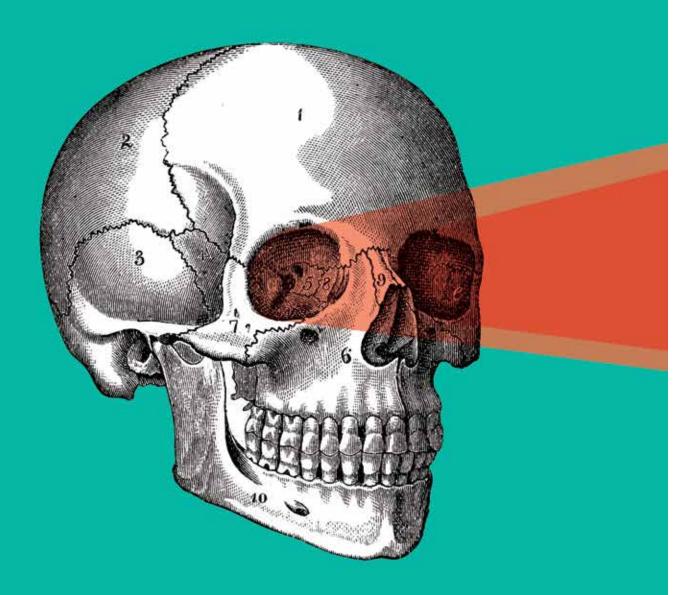


# UNIVERSITY OF TORONTO SURGICAL SKILLS CENTRE AT MOUNT SINAI HOSPITAL

ANNUAL REPORT 2014 http://sites.utoronto.ca/ssc/





## Introduction

The University of Toronto Surgical Skills Centre at Mount Sinai Hospital is pleased to present its Annual Report for 2014. We continue to implement new courses designed to enhance the surgical and medical educational curriculum at the University of Toronto and beyond.

## Our Vision

Traditionally, acquiring surgical skills has been on patients within the operating room. However, given that surgical procedures are becoming increasingly complex and lengthy it is imperative to provide upcoming surgeons with the opportunity to gain surgical skills through didactic teaching and supervised hands-on practice.

The University of Toronto Surgical Skills Centre at Mount Sinai Hospital provides a laboratory setting where basic and complex surgical procedures can be learned and practiced. This will result in surgeons achieving a higher level of expertise more rapidly such that they can perform surgery independently quicker and aid in reducing waiting times for patients. Additionally, there is educational research conducted in skills acquisition and evaluation to ensure that the University of Toronto is constantly implementing the most efficient mode of teaching with our future surgeons.

Our goal is to become recognized internationally as a centre of excellence in surgical education.

## Mission

- To change the way fundamental surgical skills are taught and evaluated.
- To provide a platform for continuing education in surgical skills.
- To provide a laboratory for research in and development of surgical skills innovation.
- To promote and enhance the teaching of surgical skills through the Surgical Skills Centre.

### Accreditation

The University of Toronto Surgical Skills Centre at Mount Sinai Hospital has been a Comprehensive Accredited Education Institute with the American College of Surgeons since 2006. The American College of Surgeons Accredited Education Institutes (ACS-AEI) educate and train practicing surgeons, surgical residents, medical students, and members of the surgical team using simulation-based education

Since the launch of the ACS-AEI program in 2005, standards have been set for how surgical education and training should be offered at Accredited Education Institutes. The goal is to promote patient safety through the use of simulation, to develop new education and technologies, identify best practices, and promote research and collaboration among institutes. Also the impact of education through long-term follow-up of learners and analysis of how to best incorporate aspects of surgical research into surgical education are evaluated.

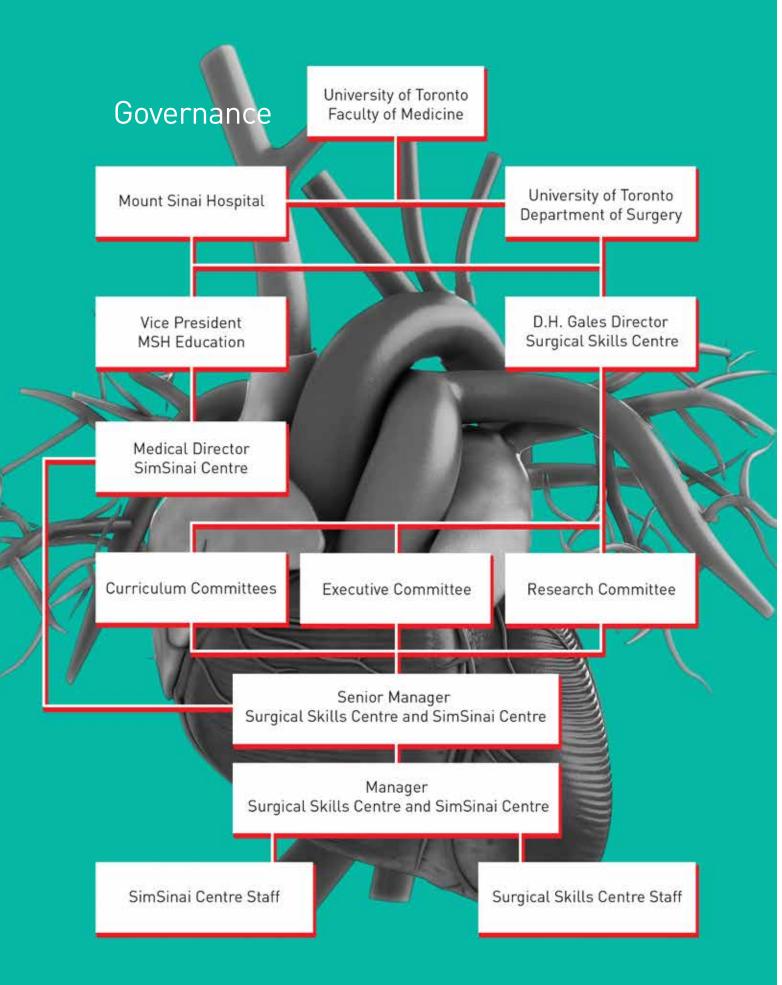
The Consortium is comprised of 65 Comprehensive and 5 Focused ACS-accredited education institutes globally. The SSC was among the first institutes granted Accreditation in 2006.

## Fundamentals of Laparoscopic Surgery

The Fundamentals of Laparoscopic Surgery was designed for surgical residents, fellows and practicing physicians to learn and practice laparoscopic skills and to have the opportunity to measure and document those skills. Since 2008 the Surgical Skills Centre has been an accredited testing site for FLS by the Society of American Gastrointestinal and Endoscopic In the last year official proctors, Senior Manager Lisa Satterthwaite and SSC Technician Jason Faria, have conducted over 60 FLS tests at the SSC

The FLS program content has been endorsed by the American College of Surgeons (ACS) and is a joint educational offering of SAGES and ACS. FLS is also CME accredited.

Our goal is to provide surgical residents, fellows and practicing physicians an opportunity to learn the fundamentals of laparoscopic surgery in a consistent, scientifically accepted format; and to test cognitive, surgical decision-making, and technical skills, all with the goal of improving the quality of patient care.



## Staff Bios:

Something you did not know about our staff....

**Dr. Oleg Safir, D.H. Gales Director:** Has an enormous salt water fish aquarium that he enjoys relaxing in front of as well as maintaining. He spends his leisure time with his family and two children.

**Lisa Satterthwaite, Senior Manager:** Loves to cook and was the winner of the 2010 Mount Sinai Hospital Chef Challenge Team competition under the guidance of Chef Lynn Crawford and event host Gordon Ramsey. Each year she continues to volunteer at the event to help support cancer research.

**Shunne Leung, Manager:** Volunteers his time with Scouts Canada where he functions as the group administrator in Milton and as a leader in the troops section. As a member, he enjoys the opportunity to do activities such as arts and crafts, sing-along's, outdoorsmenship, and camping.

**Dezan Rego, Surgical Technician:** Loves to spend time with her family and four dogs. Also, every year she makes hundreds of jars of her own secret tomato and pesto sauce!

**Marina Romanova, Surgical Technician:** Is a talented artist with a passion for photography and the great outdoors, especially canoeing and camping.

**Jason Faria, Surgical Technician:** Has a keen interest in sports and enjoys both playing and watching them, particularly basketball.

**Dionne Banton, Administrative Assistant:** Enjoys immersing herself within different cultures, doing so through frequent travel.

**Serenity Thomas, Surgical Technician:** She and her husband welcomed their second child, a brother, for their four year old daughter in June, 2014. In her leisure time she enjoys making jewelry with gemstones, sailing and cooking but hates baking.

**Finch Taylor, Simulation/Surgical Technician:** Is a rabid record collector, plays on two softball teams and had his first (and last) child this summer.

Anna Hrynko, Surgical Technician: Recently became a mother and is enjoying parenthood with her husband

## Letter from Dr. Rutka

The old adage of "See one; do one; teach one" is in need of revision. These days, uptake in the operating room of surgical skills amongst surgical trainees is being preceded by periods of hands-on experience in highly controlled, and beneficial environments where simulation of surgical procedures is conducted. Never has this been more true than today in the Surgical Skills Centre (SSC) at Mount Sinai Hospital where medical students, surgical residents, trainees from other Departments, fellows and faculty all benefit from the vast array of offerings in surgical simulation.

This past year was notable for the establishment of the "SSC Prep Camp" in which virtually all PGY1's attended an intense 2 week hands-on course on the fundamentals of surgical procedures and skills. The Prep Camp is being monitored in such a fashion that we can longitudinally track residents' performance and knowledge retention. In this way, the SSC continues to be a very fertile environment for educational research and testing of the value of surgical simulation.

The Surgical Exploration and Discovery (SEAD) course was offered once again to great acclaim amongst first year medical students from the University of Toronto. Thanks to the foresight and hard work of Nada Gawad, founder of the SEAD program, the description and early results of the impact of SEAD were published (Journal of Surgical Education 70: 487, 2013), and a phenocopy of the course was produced at the University of Illinois, and the University of Ottawa.

It has been a great pleasure for me to witness the tremendous progress that continues to be made within the SSC thanks to the tireless efforts of SSC Senior Manager Lisa Satterthwaite, and her staff, and SSC Director, Dr Oleg Safir. Special thanks are also given to Dr Jackie James, Vice President of Education at Mount Sinai Hospital, with whom we have worked to ensure that learners throughout the hospital have access to simulation techniques and expertise.

I have been delighted with the positive feedback we continue to receive from our corporate sponsors regarding the efficiencies and the professionalism that characterizes the SSC in their eyes. And we thank them for their continued support of the SSC in so many ways.

So, rather than "See one; do one; teach one" as a model of educating surgical trainees, it is likely becoming "See one; simulate one hundred; do several; teach one" as our system changes to accommodate the new learning process, and to ensure patient safety and best practices. I can think of no better training ground for all of this than at the SSC at Mt Sinai Hospital.

Sincerely.

James T Rutka, MD, PhD, FRCSC RS McLaughlin Professor and Chair Department of Surgery, University of Toronto

## Letter from Dr. James

As the importance of competency based medicine continues to increase across many disciplines, and new methods of minimally invasive surgery are being introduced at an ever increasing pace, it is imperative that both trainees and experienced clinicians have access to very high quality simulated surgical training to learn everything from the basics to very highly technically challenging skills. The Surgical Skills Centre continues to be at the leading edge of providing both the physical resources and equipment and the educational expertise to enable that learning. In the past year, the Mount Sinai Hospital and the University of Toronto, Department of Surgery renewed their commitment to each other in a memorandum of understanding which acknowledges the SSC as an educational resource centre where learners and faculty have access to state-of-the-art programs, courses and models in procedure-based specialties, across all disciplines and professions with the ultimate goal of providing the safe, effective, patient care. In this agreement we also formally recognized the very important collaboration of SSC with the SimSinai Centre, which has as its mandate, to support the education of learners on clinical placement at the Hospital and to provide interprofessional training for employees and physicians using simulation techniques to improve the quality and safety of patient care.

In September 2014, Dr. Oleg Safir, Director of SCC and Dr. Sev Perelman, Director SimSinai Centre collaborated on presentations in Moscow at the Russian Society of Simulation Education in Medicine and 5th Congress Innovative Educational Technologies in Medicine, bringing their expertise in simulation to that part of the globe and demonstrating the far reaching reputation of simulation leadership that resides at Mount Sinai Hospital.

On its journey moves towards Vision 2017 to be Canada's highest quality academic health science centre, providing the best medicine and best experience, the SSC has a major role to play in the Hospital's educational mission. The Centre's local, national and international impact on health professions education and educational research contributes to Mount Sinai Hospital's unique place among academic hospitals.

I would like to thank and acknowledge Dr. Oleg Safir, Ms. Lisa Satterthwaite, and the entire SCC team for their ongoing hard work and collaborative efforts which have resulted in an outstanding and productive year.

Most sincerely,

Jacqueline James, MD, MEd, FRCPC Vice President Education, Mount Sinai Hospital

## Letter from Dr. Safir

The University of Toronto Surgical Skills Centre (SSC) has seen another eventful year, and we are eager to share the news with our friends.

This year was characterized by a noticeable expansion of simulation training and Comptency-Based Curriculum programs, and the Surgical Skills Centre staff and management are proud to be at the heart of this exciting growth. As the home base for many laboratory-based courses in medical and surgical education, the SSC is also closely engaged in collaboration with other centres in Toronto. For instance, this year an Undergraduate Crash Course in Surgery that typically takes place at the SSC was partly extended to St. Michael's Hospital's new Li-Ka Shing Centre and was delivered there under the guidance of our staff. Reflecting the Department of Surgery Strategic Plan, the Surgical Skills Centre is at the heart of the new initiative to create a University of Toronto Skills Centre Network. While maintaining our ties with Mount Sinai Hospital's SIM-Sinai centre and increasing the number of courses delivered at the SSC, we welcome the opportunity to share our expertise with the city's other laboratories.

Yet another thrilling expansion comes from the Competency-based Curriculum (CBC) that is now a well-established program within the Department of Orthopaedics. It enjoyed such a resounding success since its inception in 2009 that not only has it become mandatory for all Orthopaedic trainees, replacing the traditional residency stream, but the Department of Surgery is now in the process of implementing CBC's core elements for all surgical divisions. The Surgical Skills Centre has long-lasting connection with the CBC program in the form of supporting many of the training sessions, and it will be instrumental in expanding the CBC principles to the entire Department of Surgery.

In 2013, the Surgical Skills Centre has launched its own educational program of unprecedented scale – Surgical Prep Camp – a 2-week intensive course for all incoming PGY 1 residents that is designed to introduce the new trainees to the core concepts and skills in surgery, thus facilitating their later learning. Its first iteration was received exceptionally well, with each surgical division contributing to the teaching, and the results are impressive: the residents not only attain competence in basic surgical tasks, but these skills are maintained well beyond the initial training, as demonstrated by a retention test. Surgical Prep Camp is now a mandatory course that favourably distinguishes University of Toronto from other residency programs, and it earned a prestigious Excellence in Education Award from the Postgraduate Medical Education office.

Such progress could only be achieved by a dedicated, caring, knowledgeable and well-coordinated team. I am delighted to be involved in the Surgical Skills Centre's busy and vibrant life, and to work alongside such great dedicated professionals as the SSC team.

Oleg Safir D.H. Gales Director Surgical Skills Centre

## Core Curriculum: 15th Anniversary

## Surgical Prep Camp Phases I and II

### Department of Surgery PREP Camp Phase I and II 2013-2014 / Prep Camp Schedules

In July 2013 the Surgical Skills Centre saw its first attempt at introducing the Surgical PREP Camp. Following its success, the PREP camp was repeated in July 2014. PREP camp is an intense, two week program for all incoming first year surgical residents at the University of Toronto but has also included residents from the Northern Ontario School of Medicine (NOSM). The concept for PREP camp originally began with the Toronto Orthopedic Boot Camp (TOBC), but fervent interest lead to the development of a program that included a wide variety of surgical procedures. Program Directors were able to outline several core skills that were deemed to be essential for all surgical residents.

The 2 week curriculum is comprised of a wide variety of lecture series, competitions, and corresponding hands-on skills training sessions. The fall curriculum takes place every Tuesday for 2 hours for 10 weeks starting in September and focuses on more specific skills along with a summer exam review. The sessions are mandatory for all residents and include MCQ testing as well as both pre and post Objective Structured Assessment of Technical Skills (OSATS). Our teaching assembly is comprised of faculty, residents as educators, nursing and industry group educators.

### PREP Camp Phase 1 Sessions Daily 0930 - 1430 hrs:

Date	Day	Course
Thursday July 2	1	Department of Surgery Orientation
Friday July 3	2	OSATS Pre Examination
Monday July 7	3	Gown, Glove, Prep & Drape, Specialty Draping
Tuesday July 8	4	Gen Instrument ID, Basic Lap Skills, , Specialty Instruments Power Tools , Instrument Count & Documentation
Wednesday July 9	5	Instrument Handling, Knot Tying, Suturing
Thursday July 10	6	Airway, Chest Tube, Trach and Cric, Local Injections, Ng Tube, Intubation, Conscious Sedation
Friday July 11	7	IV Insertion, Cut Downs, US Techniques, Adv Suturing (Suturing Competition and Abdominal Wound Closure)
Monday July 14	8	Z Plasty, Excisional Biopsy, Casting, Catheterization
Tuesday July 15	9	Open Practice Session
Wednesday July 16	10	Radiology Seminars
Thursday July 17	11	OSATS Post Examination

### PREP Camp Phase 1 Lectures 0830 - 0930 hrs:

Date	Lecture Topic	Speakers
Monday July 7	Introduction to PREP Camp / Safety with Sharps	Dr. Oleg Safir & Dr. Susan Glover Takahashi / Mathew Brown
Tuesday July 8	Electrosurgery & Smoke Evacuation / Infection Control Updates and Review	Covidien, Mark St-Onge / Christine Moore
Wednesday July 9	Anatomy of the Suture / Instrument Handling and Knot Tying	Covidien, Christine Russell / Johnson & Johnson, Faraz Nomani
Thursday July 10	Best Practices / Surgical Airway	Dr. Robin McLeod / Dr. Ian Witterick
Friday July 11	Radiation Safety / Vascular Control	Judy Reid / Luis Figueroa
Monday July 14	Legal; Risk; Privacy / Catheterization	Wendy Lawrence & Kim Parker / Erin Robertson RN & Lisa Satterthwaite RPN
Tuesday July 15	How To Be A Good Resident / Research in Surgery / Internal Med; ICU Review	Dr. Jesse Wolfstadt / Dr. Teodor Grantcharov / Dr. Luke Devine

### PREP Camp Phase 2 Skills Sessions:

Week	Date	Course
1	September 9	Vascular Anastomosis/ Tendon Injury Repair
2	September 16	Casting and Splint Application / Use of All Power Tools
3	September 30	Microsurgery Techniques I / Bowel Anastomosis (Hand Sewn and Stapled)
4	October 7	Ultra Sound Skills for Line Insertion
5	October 14	Airway Olympics / Trach and Chest Tube Review
6	October 28	Assorted Local Flaps and Advanced Wound Closures
7	November 4	General Scoping Skills
8	November 11	Lap Gallbladder/ Micro Surgery II
9	November 18	Open Practice Session/ Lap Skills Competition Review
10	December 2	Lap Skills Competition and Holiday Season Celebration

### Laparoscopic Skills Challenge

Due to a new curriculum schedule there were 2 annual Laparoscopic Skills Challenges in 2014! There were a total of 16 and 12 teams respectively vying for the championship title. The Prep Camp Phase 2 PGY 1 residents attended 3 weeks of intense laparoscopy training, honing in on basic lap skills. Residents paired up and each team member completed three timed tasks: suturing, cobra rope and peg transfer. The 2 teams with the fastest combined times then competed head to head in the championship round.

A congratulation to this year's winning teams! Dr.'s Steven Gu and Shelly Luu, of the team "Glue You" February 2014. Both are from the Division of General Surgery. Dr. Shelly Luu posted the fastest time of the day in the competition. On December 2nd 2014 we congratulate Dr.'s Trevor Wood and Oscar Henao, of the team "To Be or Knot to Be", they are both from the Division of General Surgery. Dr. Oscar Henao also posted the fastest time of the day.



## Department of Surgery

### **Teaching Award**

A large and dedicated faculty from the University of Toronto contributes and teaches during our former Core Curriculum and renewed PREP camp program. Each year residents nominate an exceptional faculty member for the University of Toronto Surgical Skills Centre at Mount Sinai Hospital Education Award. This award acknowledges Outstanding Contributions to Surgical Skills Education.

The Surgical Skills Centre is pleased to announce Dr. George Oreopoulos from the Department of Vascular Surgery as this year's winner.

## Division of Anatomy and Body Donation Program

The Division of Anatomy is an integral part of the SSC training curriculums supporting sessions with cadaveric tissue from the University of Toronto Body Donation Program. This precious gift is an immeasurable opportunity for residents to hone their surgical skills utilizing high fidelity specimens in a safe and secure learning environment.

The Body Donation Program has been generously donating bodies to the Anatomy Division at University of Toronto to help support teaching and research needs at facilities such as the Surgical Skills Centre for over 14 years.

### Division of Cardiac Surgery

This year the University of Toronto Cardiac Surgery Residency Program hosted the Summer Boot Camp at the Surgical Skills Center. The Boot Camp consisted of 6 workshops designed to familiarize junior cardiac surgical residents (PGY1-3) with some fundamental areas of knowledge and technical skill germane to the practice of cardiac surgery. Senior trainees (PGY4 and beyond) were expected to already possess such knowledge and skills and were therefore present to assist junior colleagues in training. The following sessions took place:

Workshop	Date	Focus
1	July 18	Aortic Cannulation
2	July 25	Anastomoses
3	August 1	Open Practice
4	August 8	The Aortic Valve
5	August 15	The Mitral Valve
6	August 22	Basics of CPB (at the Toronto General Hospital)

## Division of General Surgery

The General Surgery Anatomy course prepared for PGY2's reviewed anatomy of the axilla, groin dissection, head and neck, upper abdomen, colon and pelvis. Lectures were held at the SSC Grand Room followed by hands on sessions at the U of T Anatomy lab. General Surgery also endeavored to have all residents trained and tested in the Fundamentals of Laparoscopic Surgery. At total of 21 residents completed and passed the testing at the SSC.

## Division of Neurosurgery

Four divisional sessions were run by Dr. Abhaya Kulkarni, featuring microsurgery, shunt / EVD trouble-shooting, Midas drill training, and cadaver craniotomies.

In addition to the summer boot camp, the Division of Neurosurgery has multiple sessions throughout the year including:

University of Toronto Annual Spine Course / Dr. Eric Massicotte

PGY 1-5 Endoscopic Endonasal Neurosurgery Course / Dr. Osaama H. Khan & Dr. Gelareh Zadeh

PGY 1-6 End ventricular Workshop / Dr. James Drake

PGY 2-5 Peripheral Nerve Dissection Workshop / Dr. Farhad Pirouzmand

PGY 3 Micro dissection Workshop / Dr. Julian Spears

PGY 3-6 Orbital Dissection Workshop / Dr. Farhad Pirouzmand

PGY 5 Brain Dissection Workshop / Dr. Todd Mainprize

### 49th Lougheed Course

This year the post-graduate Lougheed Microsurgical Course, run by Dr. Ivan Radovanovic and Dr. Michael Tymianski was held on October 27-31, 2014. The course was attended by 8 senior residents from across Canada. The Lougheed Microsurgery Course was established years ago and is dedicated to one of the most recognized neurosurgeons at the University of Toronto, Dr. Bill Lougheed. This semi-annual week long endeavor is provided for and attended by all Canadian neurosurgery residents.

## Division of Orthopaedic Surgery

### Toronto Orthopedic Boot Camp

Since 2009 the TOBC has focused on teaching technical skills via competency based training such that learning is tailored to each individual resident. The success and legitimacy of the boot camp was further proven by a recent positive and complementary accreditation review by the Royal College of Physicians and Surgeons. The 2014 module 1 program consisted of a three week focused curriculum.

Date	Technical Skills
Friday, July 18	ATLS - OFF SITE
Saturday, July 19	ATLS - OFF SITE
Monday, July 21	Casting & splint application; Thomas splint; Skin/skeletal traction
Tuesday, July 22	AO principles - small fragment
Wednesday, July 23	AO principles - large fragment, flexor and extensor tendon repairs and revision amputation
Thursday, July 24	Plating - small & large fragment; Power tools; Tension band wire
Friday, July 25	Principles of IM nail; External fixation
Monday, July 28	Upper extremity dissection & plating for fractures; Joint aspiration
Tuesday, July 29	Lower extremity dissection & plating for fractures; Joint aspiration
Wednesday, July 30	Reduction maneuvers for fracture/dislocation; Principles of sedation
Thursday, July 31	Open practice at SSC - lower extremity
Friday, Aug 1	Open practice at SSC - upper extremity
Tuesday, Aug 5	Radiology; Anatomy test; Course evaluations; Additional lectures - Dr. Ferguson; Advanced casting - clinic - OFF SITE
Wednesday, Aug 6	Exit Exam – Wet Lab at the SSC

The Surgical Skills Centre is an integral part of The University of Toronto orthopaedic residency training program supporting many of the 21 modules with hands on training, practice and examination sessions.

"This program is unique in the world. Based on a very successful pilot project that was approved by the Royal College, we have transitioned into a completely competency based curriculum, the first of its kind. This innovative training scheme follows basic principles including: progression through training based on demonstration of competency rather than a time based approach; early development of technical skills; frequent and rigorous assessment and feedback and elimination of non-productive educational time. A key component of this is our Orthopaedic Boot Camp, which has won international Awards for its novel approach to teaching technical skills in the first month of training. This endeavour has proven so successful that it has been adopted by other Divisions

within the Department of Surgery at University of Toronto and other orthopaedic training programs in Canada. Competency based training is the future of Postgraduate Medical Education in Canada and internationally, and our program has been an international leader in this regard. A recent accreditation review by the Royal College of Physicians and Surgeons was very positive and complimentary toward our unique education approach."

Dr. Peter Ferguson, Program Director.

## Division of Plastic and Reconstructive Surgery

The Surgical Skills Centre continues to assist in implementing the PGY2 Summer Boot Camp as well as annual Junior and Senior Resident curriculums. Along with the curriculums, Dr. Gregory Borschel and his colleagues have been utilizing the SSC facilities to focus on practicing facial nerve transplantation to help aid facial nerve paralysis in children.

### PGY2 Surgical Skills Boot camp:

Date	Topics
Friday, January 10th	Finger Amputations
Friday February 7th	Bone Fractures of the Hand
Friday March 28th	Tendon Repair
Friday April 25	Breast Marking
Friday, May 23rd	Micro Repair
Tuesday, June 10th	Introduction to Being a Senior Resident

### Academic Half Day Senior Resident Surgical Skills sessions:

Date	Topics
Monday, October 7	Craniofacial – Part II – Reconstruction
Monday, December 2	Craniofacial Acute Injuries Part I
Monday, January 20	Flaps – Trunk and Face
Monday, March 3	Flaps Upper and Lower Extremity

## Division of Urology

**Junior Residents** 

Intro to Urology: Adult and Pediatric Catheterization, Suprapubic Tube Placement, Cystoscope Assembly and Proper Usage

Microsurgery

LASER safety and usage training

Open Procedures Porcine Lab

Laparoscopic Porcine Lab

#### **Senior Residents**

Microsurgery

Ureterosocpy

LASER techniques

Fellows

Pediatric Urology/Andrology Fellows: Elements of Microsurgery Skills Course

## Division of Vascular Surgery

Introduction to Vascular Instrumentation

Embolectomy

CEA Model

Radiation Safety and Introduction to Residency/ fellowship

Sapheno-femoral Dissection

**EVAR Simulator** 

Vascular Anastomosis

Understanding Basic Vascular Ultrasound

Cook Medical Sizing for EVAR

VAC Demonstration

Endovascular basics and techniques

Harvesting of Veins

IVC Injury Repair

Tibial Bypass

Vessel and Anatomy Dissection

Above and Below Knee Popliteal Artery Exposure

## University of Toronto Departmental Programs

## Department of Ophthalmology and Vision Sciences

Flaps and Grafts

Eyelid Repair

Strabismus Suturing I

Strabismus Suturing II

Toronto Opthomology Resident Introductory Course (TORIC): Toronto and McMaster Ophthalmology resident's week long introductory program

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## Department of Otolaryngology-Head and Neck Surgery, OHNS

Toronto Rhinoplasty Course

Temporal Bone Drilling

Soft Tissue Dissection Workshop

Plastic Surgery Injectables Session

Sinoscopy

Vocal Cord Injection

Multiple temporal bone drilling sessions for junior and senior residents

Fourth Endoscopic Ear Surgery Course

International Paediatric Temporal Bone Course (October 14-15, 2014):

Endoscopic Middle Ear Surgery

Cochlear Implantation

Surgery for Conductive Hearing Loss

Surgery for Paediatric Cholesteatoma

### Department of Anaesthesia

PGY 1 Seminars

Epidural Hands on Workshop

Vascular Access

Spinal Anaesthesia

Sterile Techniques

Airway Workshop

Airway-Simulation Workshop

Surgical Airway Workshop

12th Annual Obstetric Anaesthesia Workshop



## Department of Family and Community Medicine Mount Sinai and Toronto Western Family Medicine Residents OB Skills Day- July 30, 2014

## Department of Obstetrics and Gynecology

Core Curriculum

Knot tying, Suturing and Instruments

Perineal Injury and Repair

Wound Closure and Marsupialization

Operative Delivery: Vacuum and Forceps

Caesarean Section Principles and Assisting

Shoulder Dystocia

B Lynch Sutures and Cho Sutures

**IUD** Insertion

Basic Laparoscopic Principles and Tubal Ligation

Surgical Management of Ectopic Pregnancy

Ovarian Cystectomy

Hysteroscopic Endometrial Resection

Bladder Repairs

Bowel and Vascular Repairs

Review of Operative Delivery

OSATS Exam

## University of Toronto Faculty of Medicine

## Division of Cardiology

Internal Jugular Skills Lab

Periocardiocentisis Skills Lab

Transesophageal Echocardiogram

### Division of Critical Care Medicine

Hands of Airway Course for Critical Care Medicine Fellows Bronchoscopy Course for Critical Care Residents

## Division of Emergency Medicine

ABC's of Emergency Medicine

EM Undergrad Boot Camp

## Division of General Internal Medicine

General Internal Medicine Procedures Course

**PROWESS** 

Line Insertion with Ultrasound

## Division of Nephrology

Nephrology Fellows Ultrasound Guided Line Insertion Nephrology Line Insertion Simulation Training Kidney Transplant Biopsy Program

## Division of Respirology

The Basics of Bronchoscopy: Introductory Course for First Year Respirology Residents in Ontario

Chest Tube Insertion and Usage of Ultrasound Endoscopic Airway Pleural follow up Objective Structured Assessment of Technical Skills Exam (OSATS)

Faculty of Dentistry Department of Oral and Maxilliofacial Surgery Suturing skills Wiring of Teeth

# IBBME (Institute of Biomaterials and Biomedical Engineering) and the Department of Biology

The University of Toronto Biomedical Communications (BMC) graduate program students continue to annually review live orthopaedic surgery with Dr. Oleg Safir at Mount Sinai Hospital. The procedure is displayed live in the SSC classroom which is equipped with a large screen as well as a two-way audio system that permits direct communication with the operating room. The session permits bio-med students to understand the working mechanisms of the operating room as well as practice anatomical drawings of both the surgical anatomy and the technical components of the procedure.

## **Undergraduate Medical Education**

## SEAD Program

The two-week summer Surgical Exploration and Discovery Program (SEAD) provides fist and second year medical students with a multi-faceted exposure to the direct entry surgical specialties at the University of Toronto. The main focus of the endeavor is the 4 E's: exposure to surgical sub-specialties, educational didactic learning, experiencing surgical skills at the SSC and engagement with other medical students from upper years. Courses Included: Vascular Anastomosis

Bone Platting Knee Arthroscopy Aortic Valve Replacement Z Plasty Microsurgery Tendon Repair

## Department of Surgery Undergraduate Crash Course

As part of the Surgical Clerkship all third year medical students are required to attend a one-week surgical skills program called "A Crash Course in Surgery." The rotation offers students the opportunity to introduce and familiarize themselves with fundamental skills relevant to the surgical field. The major procedures taught at the Surgical Skills Centre include casting, chest tube insertion, Foley catheterization, suturing and wound closure techniques. The program is mandatory for students as invaluable basic knowledge is provided.

## Undergraduate Emergency Medicine Program

As part of the emerg rotation 3rd year UG students are given a 2 day introduction to the basics in emerg med techniques in order that they function as part of the team during their 6 week rotation. The course is both lecture and hands on that includes the topics of Chest Pain, Cardiac Dysrhythmias, Splinting and Casting, Wound Management, and Hand Nerve Block Injection. The use of low and high fidelity simulators are an important component of each teaching session.

### COSATS in CHICAGO

This year the SSC staff traveled to Chicago to assist in implementing the Colorectal Objective Structured Assessment of Technical Skill (COSATS). This technical skills exam was developed and evaluated at the SSC with the goal of creating a technical skills exam for graduating colorectal fellows.

The COSATS took place at the Northwestern Simulation Laboratory (NSL) at Northwestern University Chicago. The SSC team and NSL team collaborated to run stations that included virtual colorectal simulation, lap Ileorectal anastomosis, pelvic pouch, sacral bleed, and large bowel anastomosis.

## Continuing Medical Education Courses

In order to qualify as a Continuing Medical Education course specific standards need to be met. This year's CME events included:

Airway Procedure Workshop for MSH Emergency Doctors

Emergency Department Targeted Ultrasound

ISKAKOS -International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine

Fourth Toronto Endoscopic Ear Surgery Course

Meniscal Reconstruction Experts Forum

ProWess (Procedure Workshop for Emergency Surgical Skills)

Tenth Annual Toronto Perioperative Transesophageal Echocardiography Symposium

Royal College of Physicians Simulation Educator Training course (SET)

Structured Operative Obstetrics Instructors Course

The University of Toronto Endoscopic Neurosurgery Skull Base Course 2014

The University of Toronto Temporal Bone and Oto-Surgical Course

The University of Toronto Update in Minimally Invasive Surgery

Toronto Ophthalmology Residency Introductory Course (TORIC)

UHN Emergency Medicine: Venous Access

## SEME- Supplemental Emergency Medical Experience

SEME is an award-winning program: recipient of the 2014 Excellence in Course/Program Development and Coordination Award, Department of Family and Community Medicine, University of Toronto.

SEME is a program funded through the Department of Family and Community Medicine and the Ontario Ministry of Health and Long-Term Care to provide family physicians with a three-month, full time, remunerated fellowship through a comprehensive, practical and hands-on EM experience.

## The University of Toronto Update in Minimally Invasive Surgery

The MIS program welcomed surgeons from around the world. During this two-day interactive course, the latest advances in minimally invasive general surgery procedures were introduced. There were skills stations dedicated to advanced laparoscopic suturing techniques such as intracorporeal anastomosis, incision hernia simulation, transanal polyp excision and endoscopic balloon dilatations. These stations featured updated new techniques and surgical techniques such as graft and stapling. Equipment and surgical materials were provided by multiple companies including Covidien, Ethicon, Gore, Olympus and Southmedic Canada.

Additionally, there were four main topics reviewed with regards to the latest advances and state-of-the-art updates in medicine. Firstly, Dr. David Urbach led the presentation focused on laparoscopic colorectal surgery, including anastigmatic techniques and mobilization of the mesenteries. Secondly, Dr. Allan Okrainec spoke about foregut diseases such as peptic ulcer disease, basic esophageal motility, GERD, and he provided laparoscopic gastrectomy tips and tricks. Thirdly, Dr. Tim Jackson elaborated on hernia repair tools such as mesh and fixation devices. He also went over matching a hernia repair to the patient after a laparoscopic inguinal hernia repair or a parastomal hernia repair. Lastly, after presenting a video on complications of minimally invasive surgery, questions were moderated Dr. John Hagen and an expert panel was available for specific questions. All these presentations were then followed by an opportunity at the SSC for hands-on teaching with reference to the lectures.

### **Industry Courses**

Allergan, Canadian Society of Plastic Surgical Nurses: Cadaver Anatomy Lab Biomet Canada: Cadaver and Didactic Workshop on Upper Extremity Products

Covidien: Gynae Oncology Course

Covidien: Gynecologic Oncology Advanced Surgical Lab

Covidien: Interventional Oncology Master Class Integralife: INVS Foot and Ankle Session

KCI: Bioskills Lab

Life Cell: Breast Reconstruction Bioskills Lab Life Cell: Abdominal Wall Bioskills Lab Tornier: Salto Talaris-Ankle Arthroplasty Wright Medical: Foot and Ankle

Wright Medical: Infinity TAR Demo Session

Zimmer Institute: Ankle Arthroscopy Zimmer Institute: Advancing the Science of Cartilage Repair-DeNovoNT Natural Tissue Graft

Zimmer Institute: Hip and Knee Session

Zimmer Institute: Personalized Technology in Total Knee Arthroplasty

### Outreach Programs

Take Our Kids to Work Day

International Pediatric Emergency Medicine Elective

Live Surgery viewing for Mount Sinai Hospital Volunteers

Pair and Share, an Interprofessional Showcase Mini Med School, Holy Name of Mary College

### Co-Op Students and Volunteers

The Surgical Skills Center has continuously welcomed many co-op students and volunteers since 1998. Throughout the years the centre has provided students interested in the medical field to join the Surgical Skills Centre Team to help with facilitating sessions. For most students the experience solidifies their passion within medicine and they continue their educational path such that they are either in medical school or pursuing a career within the field now.

This year the SSC was grateful for having the following several new students at the facility:

"I couldn't have asked for a more meaningful and enjoyable experience." - Jacqueline W., Vaughan Secondary School Co-op

"Working at the Surgical Skills Center has taught me both workplace and people skills that I will never forget" - Alex S., Vaughan Secondary School Co-op

"I've learned a lot in a short span of time because of you. Once again thank you!" - Arthika P., Vaughan Secondary School Co-op

"You bestowed upon me a great deal of knowledge that I shall retain for the rest of my life." - Andrew T., Volunteer

"I will carry the lessons I learned and the experiences I had with me for a very long time." - Carlie C., Westmount Collegiate Institute Co-op

"It was a great opportunity to learn and practice some hands-on skills" - Julia L., Volunteer

"With the knowledge you have provided, I feel more confident about pursuing and being successful as a medical professional." - Ashley Z., Westmount Collegiate Institute Co-op

### Volunteer Recognition Award

We would like to acknowledge our volunteer Samantha Walsh who received the MSH Volunteer Recognition Award, June 2014. Samantha was very deserving of this recognition as a result of her positive attitude and strong work ethic.

### Research

Research is a vital element for the SSC as it provides new and innovative ideas in the delivery of education.

### Longitudinal Study- The Search for an Optimal Mode of Teaching

Educational practitioners within the University of Toronto always strive to implement changes that will enhance the educational system. This year Dr. Laura Hans coordinated with the Surgical Skills Centre to initiate the Longitudinal Study which focuses on a new residency format. Traditionally, residents are required to undergo rotations within different medical divisions such as urology, cardiac and orthopaedic. Within this form of residency each resident is forced to adapt to a new environment at the onset of each new rotation. The purpose of the longitudinal study is to minimize the confusion and loss of time associated with these rotations.

Within the longitudinal study, eight hand-picked residents underwent a general skills boot camp at the onset of residency in summer. These eight students were taught skills that are useful for most divisions such as suturing and casting. Once they completed the boot camp, each resident was provided with an individual case such that they had to follow a patient throughout different divisions. For example, if a patient requires knee surgery they would undergo pre-operative tasks such as medical imaging, the surgery itself and later on any post-operative tests. This allows a resident to come across many divisions without having to undergo multiple introductory divisional skills sessions

### Research Projects Facilitated by the Surgical Skills Centre

Project Name	Researchers
From Passive to Active: Using Peer Assessment to Improve Vicarious Learning of Surgical Skills	Woods N, Brydges R
Intra-and Inter-Observer Reliability of ICRS Grad- ing in Cadaveric Knees: Correlation with Histological Findings	Theodoropoulos J, Dwyer T
Adapting Aviation Safety to Medicine: Using "Cockpit Resource Management" for Challenging Critical Er- rors by a Superior	Friedman Z
High- Fidelity Simulation to Assess Inter-Professional Teamwork in Obstetric Crisis Management	Balki M, Windrim R, Cooke M, Sharples L, Hoppe D, Monks D
The Influence of Technology in Teaching Millenial Medical Trainees Fundamental Surgical Skills	Knox A, Dubrowski A, Brydges R
The Relationship Between Physiologic and Perceived Stress by Surgeons in the Operating Room	Moulton C-A, Seemann N
Sleep Deprivation & Laparoscopic Skills Study: Impact on Surgical Performance and Evaluation of Ameliorating Strategies	Lee J, Hajiha M, Hoang R
Canadian Urology Trainee Lap Skills Assessment Study	Lee J, Grober E
Virtual Endoscopy as a Training Tool, Randomized Trial	Alobaid A, Okrainec A, Gentili F
The Rotation of the Femoral and Tibial Components in Total Knee Arthroplasty: Variables in Measurements and Correlation with Symptomatology	Naraghi A, Backstein D, Wolfstadt J, Ten L
Non-Technical Performance in Simulated Crisis Scenarios Among a Junior Resident Population	Dedy N, Grantcharov T, Bonrath E
Training Tibial Nail Distal Locking Screw Insertion Skills to Surgical Trainees: Sureshot Technology Versus Conventional Fluoroscopic Technique. (2013 Jul 1 - present)	Nousiainen M, Leroux T, Khosbin A, Safir O

Project Name	Researchers
Does a Competency Based Curriculum Produce Improved Outcomes in Orthopaedic Skills Acquisition, Retention and Performance Compared to the Traditional Teaching Method? (2011 May - present)	Sonnadara R, Safir O
Establishing Indices of Normal Performance in Surgical Trainees. (2011 Feb – present)	Sonnadara R, Safir O
A Novel Way To Evaluate Orthopaedic Surgery Trainees.	Sonnadara R, Nousiainen M, Safir O, Backstein D, Leroux T, Ferguson P
Effectivness of an Internet Mediated, Networked Learning Instrument in Simulationbased Training of Clinical Tasks: Sugical Training Applications. (2009 Jul - 2014 Feb)	Safir O, Dubrowski A, Barry M, Carnahan H, Kapralos B, Backstein D
Determining the Utility, Validity and Reliability of the compMCMD as an Assessment Tool of Intraoperative Performance. (2009 Jul - 2014 Feb)	Backstein D, Dubrowski A, Safir O, Cristancho S, Gross A
Proposal for a biomechanical and finite element analysis of massive acetabular defects in revision hip arthroplasty and after pelvic tumor resection. (2009 Jul - 2014 Feb)	Safir O, Kosashvili Y, Ferguson P, Backstein D, Gross A, Grynpas M, Zalzal P, Papini M



## Dr. Oleg Safir, Distinctions and Research Awards

- Bruce Tovee Award Postgraduate Education, University of Toronto, Toronto, Ontario, Canada.
- Faculty of Medicine Awards for Excellence in Postgraduate Medical Education Development & Innovation, University of Toronto, Toronto, Ontario, Canada. (Distinction). Recognition of Excellence in Education for Surgical Prep Camp. \$1,000 CA

### **Publications**

Raz G, Safir O, Backstein D, Lee P, Gross A. Distal Femoral Fresh Osteochondral Allografts: Follow-up at a Mean of Twenty-two Years. J Bone Joint Surg Am. 2014 Jul 2;96(13):1101-1107.

Kosashvilli Y, Drexler M, Backstein D, Safir O, Lakstein D, Chakravertty R, Dwyer T, Gross A. Dislocation after the First and Multiple Revision Total Hip Arthroplasty: Comparison between Acetabulum only, Femur only and Both Component Revision Hip Arthroplasty. Can J Surg. 2014 Apr;57(2):E15-8.

Drexler M, Dwyer T, Chakravertty R, Backstein D, Gross A, Safir O. The Outcome of Modified Extended Trochanteric Osteotomy in Revision THA for Vancouver B2/B3 Periprosthetic Fractures of the Femur. Journal of Arthroplasty. 2014 Mar 28; [Epub ahead of print].

Abolghasemian M, Sadeghi Naini M, Tangsataporn S, Lee P, Backstein D, Safir O, Kuzyk P, Gross A. Reconstruction of massive uncontained acetabular defects using allograft with cage or ring reinforcement: an assessment of the graft's ability to restore bone stock and its impact on the outcome of re-revision. Bone Joint J. 2014 Mar 1:96-B(3):319-24.

Kuzyk P, Dhotar H, Sternheim A, Gross A, Safir O, Backstein D. Two-stage Revision Arthroplasty for Management of Chronic Periprosthetic Hip and Knee Infection: Techniques, Controversies, and Outcomes. J Am Acad Orthop Surg. 2014 Mar 1;22(3):153-64.

Citak M, Argenson J, Masri B, Kendoff D, Springer B, Alt V, Baldini A, Cui Q, Deirmengian G, Del Sel H, Harrer M, Israelite C, Jahoda D, Jutte PC, Levicoff E, Meani E, Motta F, Pena O, Ranawat A, Safir O, Squire M, Taunton M, Vogely C, Wellman S. Spacers. J Arthroplasty. 2014 Feb 1;29(2 Suppl):93-9.

Abolghasemian M, Tangsaraporn S, Drexler M, Barbuto R, Backstein D, Safir O, Kuzyk P, Gross A. The challenge of pelvic discontinuity: cup-cage reconstruction does better than conventional cages in mid-term. Bone Joint J. 2014 Feb 1;96-B(2):195-200..

Abolghasemian M, Gharanizadeh K, Kuzyk P, Masdari Z, Fakharian M, Safir O. Hips with Synovial chondromatosis may display the features of femoroacetabular impingement. Journal of Bone and Joint Surgery American. 2014 Jan 15;96((2):e11):1-6.

Drexler M, Gross A, Dwyer T, Safir O, Backstein D, Chaudhry H, Goulding A, Kosashvili Y. Distal femoral varus osteotomy combined with tibial plateau fresh osteochondral allograft for post-traumatic osteoarthritis of the knee. Knee Surg Sports Traumatol Arthrosc. 2014 Jan 14.

Sonnadara R, Mui C, McQueen S, Mironova P, Nousiainen M, Safir O, Kraemer W, Ferguson P, Alman B, Reznick R. Reflections on competency-based education and training for surgical residents. J Surg Educ. 2014 Jan 1;71(1):151-8.

Saidi K, Ben-Lulu O, Tsuji M, Safir O, Gross A, Backstein D. Supracondylar Periprosthetic Fractures of the Knee in the Elderly Patients: A Comparison of Treatment Using Allograft-Implant Composites, Standard Revision Components, Distal Femoral Replacement Prosthesis. The Journal of arthroplasty. 2014 Jan;29(1):110-4. Epub 2013 May 13.

Lee P, Lakstein D, Lozano B, Safir O, Backstein D, Gross A. Mid-to-long term results of revision hip arthroplasty

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in patients 50 years and younger. Bone and Joint Journal. 2014. In Press.

Kashigar A, Vincent A, Gunton M, Backstein D, Safir O, Kuzyk P. Predictors of Failure for Cephalomedullary Nailing of Proximal Femoral Fractures. Bone and Joint Journal. 2014. In Press.

Rogers B, Garbedian S, Backstein D, Gross A, Safir O. Cement Augmentation of the Acetabulum for Revision Total Hip Arthroplasty for Infection. The Journal of Arthroplasty. 2014. In Press.

Garbedian S, Backstein D, Gross A, Safir O. Ch 42. Acetabular Bone Loss: Case Presentations. In: Scuderi G, editor(s). Techniques in Revision Hip and Knee Arthroplasty. (United States): Elsevier; 2014. p. 340-344. In Press

Garbedian S, Backstein D, Gross A, Safir O. Ch 43. Acetabular Bone Loss Classification. In: Scuderi G, editor(s). Techniques in Revision Hip and Knee Arthroplasty. (United States): Elsevier; 2014. p. 345-349. In Press.

Garbedian S, Backstein D, Gross A, Safir O. Ch 44. Recommended Acetabular Reconstruction Options. In: Scuderi G, editor(s). Techniques in Revision Hip and Knee Arthroplasty. (United States): Elsevier; 2014. p. 350-355. In Press.

Garbedian S, Backstein D, Gross A, Safir O. Ch 45. Surgical Techniques: Socket Removal. In: Scuderi G, editor(s). Techniques in Revision Hip and Knee Arthroplasty. (United States): Elsevier; 2014. p. 356-359. In Press.

M. Schuetz, C. Perka, T. Ruedi. In: Periprosthetic Fracture Management. 1st. Thieme; 2014.

#### **Presentations**

Surgical Prep Camp: a Novel Educational Program for First-year Residents. AMEE INTERNATIONAL ASSOCIATION FOR MEDICAL EDUCATION. Milan, Italy. 2014 Aug 31. Presenter(s): Mironova P, Satterthwaite L, Glover Takahashi S, Foong C, Sonnadara R, Levine R, Safir O. Poster presentation.

Superior Outcome Of Modified Extended Trochanteric Osteotomy In Revision THA For Vancouver B2/B3 Periprosthetic Fractures Of The Femur. 15th EFORT Congress. London, London, City of, United Kingdom. 2014 Jun 4. Presenter(s): Drexler M, Chakravertty R, Dwyer T, Goulding A, Gross A, Safir O. Podium presentation.

Dealing with Acetabular Defects: From the "Bone Age" to the "tantilenium" - What have we learned? The IS-RAEL Hip and Knee Society. Eilat, Israel. 2014 Apr 24. Presenter(s): Safir O.

Student-led Learning: A Novel Paradigm for Teaching Surgical Skills. Association for Surgical Education. Chicago, Illinois, United States. 2014 Apr 11. Presenter(s): McQueen S, Mironova P, Hoogenes J, Nousiainen M, Safir O, Ferguson P, Kraemer W, Alman B, Reznick R, Sonnadara R. Podium presentation.

Surgical Prep Camp: a Novel Educational Program for Incoming Residents. Association for Surgical Education. Chicago, Illinois, United States. 2014 Apr 11. Presenter(s): Mironova P, Satterthwaite L, Glover Takahashi S, McQueen S, Levine R, Foong C, Sonnadara R, Safir O. Poster presentation.

Surgical Preparatory Camp: a Novel Simulation-based Training Program. 14th International Meeting on Simulation in Healthcare (IMSH). San Francisco, California, United States. 2014 Jan 27. Presenter(s): Mironova P, Satterthwaite L, Glover Takahashi S, McQueen S, Levine R, Foong C, Sonnadara R, Safir O. Moderated poster presentation.

Examining the Effects of a Student-led Learning Paradigm in a Simulation-based Surgical Skills Course. 14th International Meeting on Simulation in Healthcare (IMSH). San Francisco, California, United States. 2014 Jan 27. Presenter(s): McQueen S, Mironova P, Abdelbary H, Drexler M, Hoogenes J, Safir O, Nousiainen M, Kraemer W, Ferguson P, Alman B, Reznick R, Sonnadara R. Moderated poster presentation.

Expedited Training of Orthopedic Residents: The Highway for Resident Training To Surgical Excellence. The ISRAEL Hip and Knee Society. Eilat, Israel. 2014 Apr 24. Presenter(s): Safir O. Keynote lecture.

Difficult primary THA: What would you do? The ISRAEL Hip and Knee Society. Eilat, Israel. 2014 Apr 24. Presenter(s): Safir O. Round table.

Difficult revision THA: What would you do? The ISRAEL Hip and Knee Society. Eilat, Israel. 2014 Apr 24. Presenter(s): Safir O. Round table.

How to Develop an Orthopaedic Boot Camp Surgical Skills Module in your training program. Competency Based Training Program. Toronto, Ontario, Canada. 2014 Apr 25. Presenter(s): Safir O, Sonnadara R.

How to develop Evaluation Tools for an Orthopaedic Boot Camp Surgical Skills Module. Competency Based Training Program. Toronto, Ontario, Canada. 2014 Apr 25. Presenter(s): Safir O, Sonnadara R.

An intelligent instrument for improved leg length and hip offset accuracy in total hip arthroplasty. American Orthopaedic Association/Canadian Orthopaedic Association. Montreal, Quebec, Canada. 2014 Jun 19. Presenter(s): Wolfstadt J, Backstein D, Kuzyk P, Safir O, Bakirtzian A, Gross A. Poster presentation. (Trainee Presentation).

Surgical Preparatory Camp: a Novel Training Program for First-year Residents. Canadian Conference on Medical Education CCME. Ottawa, Ontario, Canada. 2014 Apr 29. Presenter(s): Mironova P, Satterthwaite L, Foong C, Glover Takahashi S, Sonnadara R, Levine R, Safir O. Podium presentation.

Student-led Learning: A Novel Teaching and Learning Paradigm. Canadian Conference on Medical Education CCME. Ottawa, Ontario, Canada. 2014 Apr 26. Presenter(s): McQueen S, Safir O, Mironova P, Nousiainen M, Ferguson P, Kraemer W, Alman B, Reznick R, Sonnadara R. Podium presentation.

Supra-acetabular cemented roof spacer to improve hip stability in 1st stage infected THA – surgical technique and results. University of Toronto Division of Orthopaedics. Toronto, Ontario, Canada. 2014 Apr 11. Presenter(s): Koo K, Drexler M, Rogers B, Kuzyk P, Gross A, Backstein D, Safir O. Best paper award. (Trainee Presentation).

## Lisa Satterthwaite, Senior Manger

#### Posters

Surgical Preparatory Camp: a Novel Simulation-based Training Program. Mironova P., Satterthwaite L., Glover Takahashi S., McQueen, S.A., Levine, R., Foong C., Sonnadara R., Safir O. Sept 1 – 3 2014, Association for Medical Education in Europe (AMEE) Milan, Italy.

Royal College Simulation Summit, Vancouver October 2013. "A Cascade for Interprofessional Surgical and Obstetrical Care in Ethiopia". L. Satterthwatie, Milliard Derbew, Fekade Silassie Henok, Dawit Desalegn, Adam Dubrowski, Katie Dorman, Richard Pittini, Tania Tajirian, Roger Kneebone Fernando Bello, Niall Byrne.

Surgical Preparatory Camp: a Novel Simulation-based Training Program. Mironova P., Satterthwaite L., Glover Takahashi S., McQueen, S.A., Levine, R., Foong C., Sonnadara R., Safir O. 14th annual International Meeting on Simulation in Healthcare (IMSH). January 25-29, 2014. San Francisco, California.

### **Invited Presentations**

Francis LeBouthillier, A. Scott Hamilton Royal College Moderated by | Animé par: Lisa Satterthwaite Making it Real; Special Effects from the Film Industry | D'une vision à la réalité : effets spéciaux de l'industrie cinématographique Simulation Summit, Sept 12th 2014, Toronto ON.

Mironova, S Polina, Safir, Oleg, Satterthwaite, Lisa, Glover Takahashi, Susan, Foong, Curtis, Levine, Ronald University of Toronto, Sonnadara, Ranil McMaster University 2014 16th Ottawa Conference "Surgical Preparatory Camp: a Novel Training Program for First-year Residents" April 25 – 29 2014 Ottawa, ON.

Satterthwaite L. Paige, John, Eibling, David, Deutsch, Ellen, Malloy, Kelly, Debate #772,"Learning from Boot Camps: To Test or Not to Test? International Meeting on Simulation in Healthcare (IMSH), January 27th 2014,

Moscone Center West, San Francisco

#### Workshops

Satterthwaite L., Tabak D., Delaney-Laupcis K., "Awake and Aware" Development of a Simulated/Standardized Patient (SP)-based Integrated Surgical Skills Simulations Supporting the Development of Complex Communication & Technical Skills, Royal College Simulation Summit, Hilton Toronto Downtown, Sept 11th 2014, Toronto ON.

Windrim R., Satterthwaite L. Teaching Competency in Family Medicine Maternity Care: National Forum, University of Toronto Faculty Club, Saturday June 7th 2014.

Satterthwaite L., Tabak D., Simard L., Campbell D., "Adventures en Simulation - A SIMone Collaborative", College La Cite, Ottawa ON, May 27 – 29 2014 (presented in French).

Satterthwaite, L., Boucher B., Reihsen T., Crelinsten L., Braga R., "KiSiS – Keep It Simple In Simulation" American College of Surgeons AEI Administration & Management Committee Workshop, March 21st 2014 Swiss Hotel, Chicago IL.

Satterthwaite L., Tabak D., Delaney-Laupcis K., "Awake and Aware" Development of a Simulated/Standardized Patient (SP)-based Integrated Surgical Skills Simulations Supporting the Development of Complex Communication & Technical Skills, International Meeting on Simulation in Healthcare (IMSH), January 27th 2014, Moscone Center West, San Francisco, CA.

#### Publications:

December 2013: Annals of Surgery. A Novel Approach to Assessing Technical Competence of Colorectal Surgery Residents: The Development and Evaluation of the Colorectal Objective Structured Assessment of Technical Skills (COSATS).de Montbrun, Sandra L.; Roberts, Patricia L.; Lowry, Ann C.; Ault, Glenn T.; Burnstein, Marcus J.; Cataldo, Peter A.; Dozois, Eric J.; Dunn, Gary D.; Fleshman, James; Isenberg, Gerald A.; Mahmoud, Najjia N.; Reznick, Richard K.; Satterthwaite, Lisa; Schoetz, David Jr; Trudel, Judith L.; Weiss, Eric G.; Wexner, Steven D.; MacRae, Helen

#### Award:

Lisa Satterthwaite, 2013 Sim Citizenship Award, SIMone, Toronto, Ontario, December 2013.

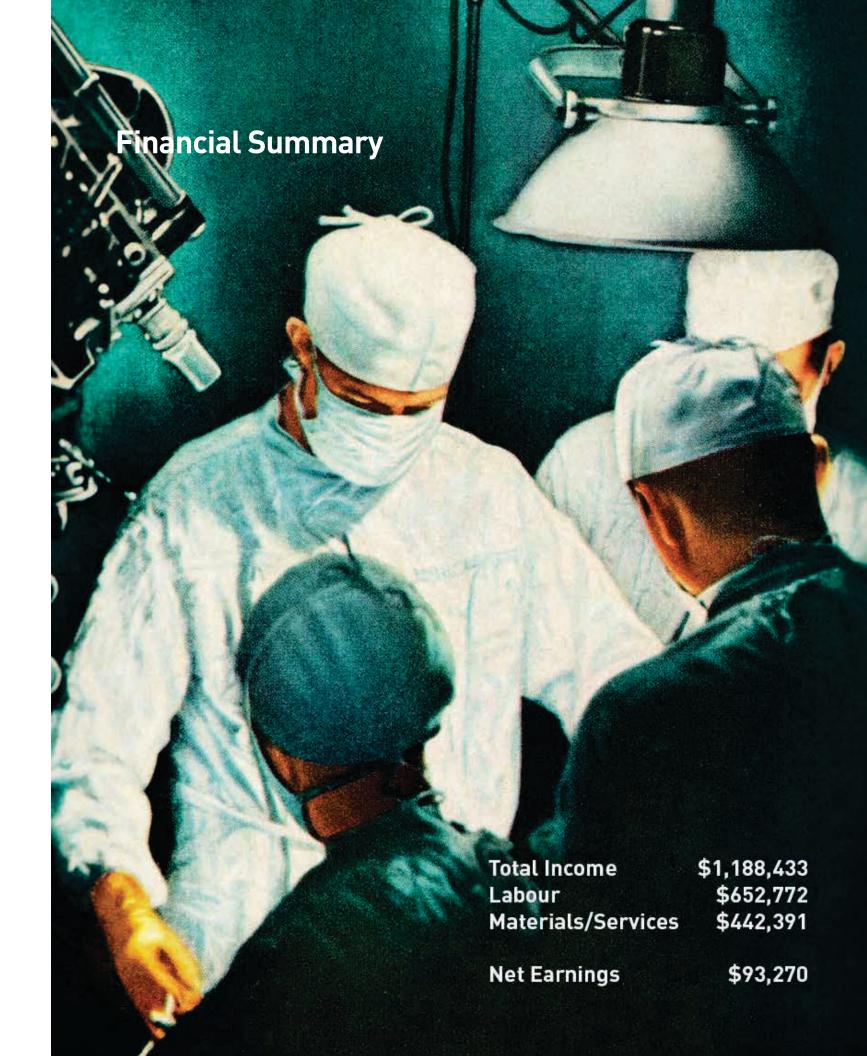
### Memberships:

- 2014 Present: U of T Department of Surgery, Simulation Committee, Member
- 2014 Present: U of T Department of Surgery, International Surgery Committee, Member
- 2014 Present: U of T Department of Surgery, Competency Based Assessment Workshop/Committee, Member
- 2011- Present: Mount Sinai Hospital Education Advisory Council, Member
- 2012 Present: Chair, Nurses in Surgical Education, Association for Surgical Education, American College of Surgeons.

2009 - Present: Co Chair, Administration and Management Committee, American College of Surgeons, Accredited Educational Institutes Consortium, Member

### **Organizing Committees:**

- 2014 U of T PREP camp program for PGY1 Surgical and OHNS residents July 3 17 2014 Toronto, ON.
- 2014 Colorectal Objective Structured Assessment of Technical Skills Exam, Sept 21st 2014, Chicago IL
- 2014 "Pear and Share" An Interprofessional Education Showcase, Mount Sinai Hospital November 12th 2014 Toronto, ON.
- 2013 Royal College 2014 Simulation Summit Meeting September 11 12, 2104 Toronto, ON
- 2013 "Pear and Share" An Interprofessional Education Showcase, Mount Sinai Hospital November 13th 2013 Toronto, ON



# SIMSINAL CENTRE LEDUCATION. RESEARCH & PATIENT-CENTRED INITIATIVES

### Staff

Dr. Sev Perelman, Medical Director Lisa Satterthwaite, Senior Manager Mr. Shunne Leung, Manager Finch Taylor, Simulation Technician Dionne Banton, Administrative Assistant

#### Letter from Dr.Perelman

SimSinai is committed to supporting all simulation-based education programs and events at Mount Sinai Hospital, as well as provide resources and expertise for the University of Toronto and affiliated programs. We work in closest collaboration with the Surgical Skills Centre and share administrative, educational resources and space on a regular basis. Lisa Satterthwaite and her team have been invaluable in making sure SimSinai initiatives and programs are running well. Finch Taylor, our Simulation Technician, has been developing an outstanding expertise in a continuous quest to make every simulation perfect.

We would like to acknowledge the support from MSH administration, office of VP education and Directors of Centers of Excellence at Mount Sinai for financial support which will secure more effective management of SimSinai

As a hospital based simulation program, our foremost commitment is to improve patients' experiences at Mount Sinai. That includes training the staff and teams in delivering safer and more efficient care. As one of these elements, we continue to develop the Mount Sinai Mock Code initiative supporting the Advanced Resuscitation Committee under the leadership of Dr. Michael Christian and spearheaded by Dr. Luke Devine.

We continue to provide training to the senior medicine residents, helping them to become effective and efficient code leaders as well as on-going training of ICU house staff.

SimSinai hosted and participated in team-training exercises for the Emergency Department, NICU training, and a very successful ACLS program.

We have embarked on developing our own cadre of simulation champions. Many of our instructors have received the most prestigious teaching awards and nominations. Our hope is to inspire everyone at Mount Sinai Hospital to seek out opportunities to involve SimSinai in the local educational initiatives and to utilize the wonderful possibilities that medical simulation has to offer.

In parallel to the hospital based, patient-centered initiatives, we are involved in University of Toronto based programs. SimSinai has been instrumental in supporting the Department of Surgery "PREP Camp" for all incoming first year surgical residents introducing a simulation based ACLS refresher with elements of crisis resource management and introduction to procedural sedation.

Overall, this year we have trained 375 practitioners in ACLS, re-certified 166 and had 20 graduate from our instructor course.

Lastly, SimSinai is becoming a hub for research projects. Drs. Zeev Friedman, Rory Windram, Nicholas Dedy and Kristina Khanduja to name a few are generating publications and secured grants to advance simulation-based investigations using opportunities and support from SimSinai.

We hope that those activities and initiatives will grow with years to come.

Sev Perelman, MD, MSc, CCFP(EM), CHSE-A

Staff Emergency Physician, Schwartz/Reisman Emergency Centre, Mount Sinai Hospital, Toronto

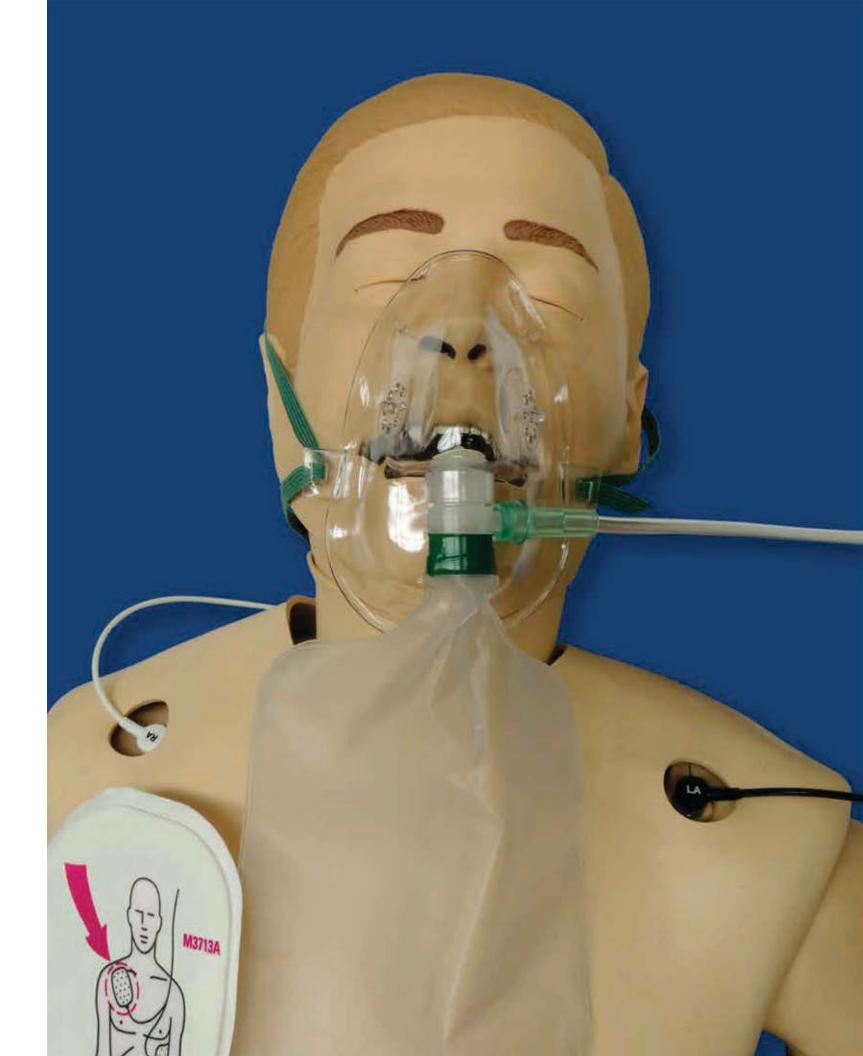
Medical Director, SimSinai, Program for Simulation-based Education and Patient-Centered Initiatives at Mount Sinai Hospital

Medical Director ACLS, Ontario Heart and Stroke Foundation

Assistant Professor, Department of Family and Community Medicine, University of Toronto

Certified Healthcare Simulation Educator

www.simsinaicentre.com



## **Visitors**

14 physicians from Fudan University

The SSC is a unique lab. As a result of the educational platform, research and program services provided, many people travel from around the world to visit our facility. This year the SSC team had the opportunity to meet a large variety of persons from the medical, educational, research and industry platforms.

Name	Title	Location	
Mr. Zaid Awad	Research Fellow-Simulation and assessment in ENT training Imperial College	London, England	
Mr. Bill C. Cutler	Senior Advisor to the President for Clinical Sciences/Associate Vice President of Academic Administration and Graduate Affairs Manipal Education Americas LLC agent for American University of Antigua American International College of Arts and Sciences Kasturba Medical College-International Center		
Mr. Chris Bateman	University of British Colombia Faculty of Medicine Audio Visual Specialist	Vancouver, British Colombia	
Mr. Daniyal Saud	Associate Director of Admissions for Canada, American Uni- versity of Antigua		
Dr. Steven Wexner (Dr. Zane Cohen Lecture Visiting Professor)			
Galina Alekseeva	Deputy Director for Clinical Work Moscow Research Institute of Oncology	Moscow, Russia	
Aleksei Shchegolev	Head of the Department (Anesthesiology and Intensive Care), Chief Anesthetist Ministry of Defense	Moscow, Russia	
Boris Rodivilov	Deputy Director Moscow Clinical Research Center of the Moscow Health Department	Moscow, Russia	
lgor Dudarev	Deputy Chief of Surgery Municipal Budget Healthcare Institu- tion, Hospital No 1	Rostov-on-Don, Russia	
Bogdan Kotiv	Deputy Director Colonel of Military Medicine Russian Military- Medical Academy	Saint Petersburg, Russia	
Valerii Petrov	General Director State Budget Institution of Sakha (Yakutia) "Republican Hospital No 1-National Medical Center"	Sakha (Yakutia), Russia	
Maxim Zabelin	Deputy Director Cancer Center at Moscow Regional Oncology Center	Moscow, Russia	
Shomron Ben-Horin	Director, IBD Service, Gastroenterology Department Sheba Medical Center	Tel HaShomer, Ramat Gan, Israel	
Mike Reed	Consultant Orthopaedic Surgeon. Lead Clinician, National Logbook, Trauma and Orthopaedics. National Curriculum Committee, Trauma and Orthopaedics. Head of Governance, Trauma and Orthopaedics, Northumbria Healthcare. Lead Orthopaedic Surgeon, Wansbeck General Hospital. National Specialist Advisory Committee, Trauma and Orthopaedics. Deputy Programme Director, Trauma and Orthopaedics, Northern Deanery	Newcastle upon Tyne, England	
Austin Jauyo	5th year medical student at Moi University School of Medicine	Kenya	
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## Praise

Team Skills Lab.

Just a quick note to say thank you very much again for yet another amazing round of labs at your facility!

As I mentioned to Jason on Thursday, working with you on these initiatives is truly a pleasure! The professional-ism and attention to detail exhibited by the Mt Sinai team is unmatched in the industry!

Thank you again to everyone for all your hard work and dedication to make these events the success that they were!

I will be in touch!

Regards,

Jason Bower

Director of Marketing

Wright Medical Technology Canada Ltd.

Dear Ms. Satterthwaite and staff at Surgical Skills Centre at Mount Sinai Hospital,

I just wanted to take a moment to thank you for allowing me to partake in the final exam day of Surgical Skills Lab training last Thursday, (July 17, 2014) at Mount Sinai Hospital. After my aunt (Toni Labricciosa) informed me about this event, I was very much looking forward to it. I really appreciated the opportunity to observe and even participate in some of the hands-on skills, and am very thankful that all of the staff I met was so kind, helpful and supportive! I am amazed at how much interesting, new information I was able to obtain, just by observing the different stations multiple times throughout the day. When the exams had ended, I was grateful to have been given the chance to actually attempt some of the skills. I particularly enjoyed the suturing station, and with some assistance, and after a couple of tries, I seemed to have been able to successfully stitch up a wound!

Overall, I had a wonderful experience, and when I returned home, I was eager to tell my family all about my exciting and interesting day! I really hope to participate in similar future events or perhaps volunteer opportunities. Please keep me in mind!

Once again, thank you.

Sincerely,

Julia Labricciosa

(Grade 9, Pelham, Ontario)

### Dear Lisa.

Once again our Division of Facial Plastic and Reconstructive Surgery, and our Department of Otolaryngology - Head and Neck Surgery, had a very successful Injectables Course at the Surgical Skills Laboratory on February 12, 2014.

On the behalf of our Division of Facial Plastic and Reconstructive Surgery, our Department, and of course our residents and fellows who benefited from the OHNS Injectables course, please accept my deepest appreciation and gratitude.

With kindest personal regards,

#### Peter A. Adamson, MD, FRCSC, FACS

Professor and Head Division of Facial Plastic and Reconstructive Surgery Department of Otolaryngology - Head and Neck Surgery University of Toronto

### Dear Lisa,

Once again it is my great pleasure to send you a note of appreciation for all that you and your staff provided for us at the recent Rhinoplasty Workshop.

You and all the members of your staff provide an absolutely first-class experience. These evenings are a great benefit to our residents, and an adjunctive benefit is the time for our faculty to get together in what is always a convivial evening.

Please extend my deepest appreciation to everyone, especially Dezan, who is always "there for us."

With kindest personal regards,

Peter A. Adamson, MD, FRCSC, FACS

Professor and Head Division of Facial Plastic and Reconstructive Surgery Department of Otolaryngology - Head and Neck Surgery University of Toronto

#### Dear Lisa,

On behalf of the group of First-Year Learning Community students who visited the Surgical Skills Centre to watch a hip revision on Monday, January 27, I wish to extend a huge thank-you to you for helping to arrange this. It was such a unique opportunity for us to be involved with. The students couldn't stop talking about it afterward and many asked if they could return to watch another type of surgery.

Also, please pass on my thank-you to Dezan and Marina. They took excellent care of our group and were very friendly and accommodating. The fellow who led our group through the surgery, Jon, was also terrific. He did a great job explaining what was happening and answering our questions. He also handled some of the more basic questions asked by some of our students with grace and humour. He made us all feel welcome.

Many thanks to everyone involved!

Warmest regards in this cold weather,

Adam Doyle
First-Year Initiatives Coordinator
Faculty of Arts & Science
Office of the Dean

#### Hello everyone,

Again, we cannot stress how appreciative we are for all your help and support in this PGY4 Plastic and Reconstructive Surgery project.

Thank you for making this crazy data collection process easy and enjoyable.

### Best Wishes,

-Kinga Eliasz and Aaron Knox

## Supporters

The Surgical Skills Centre is very gracious and humbled by the tremendous support it receives from so many companies, small businesses and organizations. The generosity and support from these sponsors allows us to remain a leader in surgical education. We are able to provide unparallel teaching thanks to the resources provided by our sponsors. Whether it is financial support, donations of extra supplies or the lending of equipment, the Surgical Skills Centre is very appreciative. Special thanks to Mount Sinai's Hospital Operating Room and Departments.

Thank you to all of our supporters!

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