

PGY I & PGY II Research Orientation AND SSTP Meet & Greet

**PGCRL – 686 Bay Street (Bay
& Elm) CRL GALLERY– 2ND
FLOOR**

**WEDNESDAY, SEPTEMBER 7, 2022
5:00 - 7:00 PM**

Overview of Research

PGY I & PGY II and Surgeon Scientist Training Program (SSTP)

- Michael Fehlings, Vice Chair Research
- Carol Swallow, Chair
- Andras Kapus, Associate Vice Chair

Research IMS Overview ► Sunit Das

Basic Science Research ► Kathryn Howe

Clinician Investigator Program (CIP) Overview ► Nicola Jones, Director of the

Integrated Physician Scientist Training Program

BME (Institute of Biomedical Engineering) Overview ► Paul Yoo, Associate Director, BME

Clinical Epidemiology Research ► Bobby Yanagawa

Surgical Education ► Amin Madani

IHPME Overview ► Audrey Laporte Bioengineering

Research ► João Rezende-Neto Recent SSTP

Graduate

- Douglas Cheung – Urology
- Matthew Guttman – General Surgery

Current SSTP Research Committee Reps

- Laureen Hachem – Neurosurgery
- Malak Elbatarny – Cardiac Surgery

BREAK OUT GROUP SESSION

Wrap-Up

PGY 1 & 2 RESIDENTS RESEARCH ORIENTATION AND SSTP MEET & GREET
Wednesday September 7, 2022 ► 5 – 7 pm
PGCRL Gallery – 2nd Floor – 686 Bay Street



Dr. Michael Fehlings welcomed the residents and invited speakers to the first in-person Resident Orientation meeting since October 2019. Dr. Fehlings started with a blast from the past. Last year we celebrated 100 Year Anniversary of the Discovery of Insulin by Frederick Banting MD – the Consummate Surgeon Scientist at Toronto General Hospital and University of Toronto. Several years later, **Bernard Langer** created the SSTP when he was Chair of the Department from 1982 -1992. He appointed Steve Strasberg as the first coordinator and had a small group of people who helped him design the program, including Steve Strasberg, Charles Tator, Rudy Falk and Bryce Taylor. Dr. Langer developed the strategy of leveraging available departmental and university funds to get commitments from divisions and hospitals for fund matching. He also created the Surgical Alumni Association to develop another funding stream to support the SSTP. He asked a group of people dedicated to research to develop standards for a research training program that we could integrate into our clinical training program and that became the Surgeon-Scientist Program.

Since 1983 there have been 472 residents in the SSTP. For the past 5 years 44 – 54 residents have been in the Program. There are 41 residents in the SSP this academic year. The purpose of the SSTP is to provide excellent research training for surgical residents who wish to pursue a career in **academic surgery**. Candidates will be eligible if they have been accepted into the University of Toronto Postgraduate Training Program in Surgery in a **THESIS-BASED graduate program**. Department of Surgery **salary support** for SSTP Residents is limited to **2 years** for those in a Master's program and **4 years** for those pursuing a PhD. All trainees accepted to the SSTP must apply to the School of Graduate Studies, University of Toronto, and be accepted into a program leading to a **MASc, MEd, MSc or PhD degree**. All supervisors for the SSTP trainee must hold an **appointment with the School of Graduate Studies (SGS)** of the University of Toronto. A total of over \$3M is earmarked for the SSTP, which is pooled with external salary support, internal University grants, supervisor support and departmental support. Potential candidates must meet with **Vice Chair of Research or Associate Vice Chair of Research before April 15**, and have:

1. *the go ahead from their Division Chair and Program Director to proceed with the SSTP application*
2. *identified a supervisor and have salary support in place*
3. *identified a project*
4. *identified a graduate department and be very clear that the SSTP is limited to thesis-based research*

Application submissions are due in the Research Office by May 15.

Dr. Fehlings concluded that the Research Office organizes several SSTP education and research endeavours such as: SSTP Career Night, SSTP Meet and Greet, SSTP Grant Writing Workshop, PGY I and PGY II Research Orientation, and the shining star, Gallie Day.

Training in surgical research adds greatly to the training of surgeons. The Surgeon Scientist Training Program in the Department of Surgery provides an excellent opportunity for residents to enhance their knowledge and training.



Dr. Carol Swallow is the new R.S. McLaughlin Professor and Chair of Surgery as of July 1, 2022, as well as the Bernard and Ryna Langer Chair, Division of General Surgery. She gave a brief overview of her training as a SSTP trainee in General Surgery. She remembers meeting with Dr. Bryce Taylor, the General Surgery Division Chair at that time, and he told her she should go work in the lab with a young hot shot named Ori Rotstein. She relayed, jokingly, that at that time, that is all she needed to know. She received her PhD in cell biology under the mentorship of Dr. Rotstein in 1993. When she started in the lab, she had no previous basic science research experience, or really any kind of research experience. She stressed that there are many highs and lows as you are pursuing your degree through the SSTP. The highs outnumber the lows and you develop collaborative support that you didn't realize could exist. You also develop independence, curiosity, and a sense of self-direction that is essential to discovery.



Dr. Andras Kapus is Associate Vice Chair Research in the Department of Surgery, University of Toronto. Dr. Kapus is a senior scientist at St. Michael's Hospital. He stated that the SSTP started as a concept by Dr. Bernard Langer in 1983 and grew to be the staple SSTP it is today. The focus is on excellent research training, not on a specific discipline or project or specific course work. What do you need to become a Surgeon Scientist Trainee?

Dr. Kapus stressed you need “fire in your belly” – true interest in research. A research topic and the right supervisor are essential. A large variety of topics encompassing basic research (e.g., cellular and molecular biology/pathology, pathophysiology, neuroscience, bioengineering, material sciences, etc), clinical research, clinical epidemiology, medical education, medical bioethics, or health services research. The SSTP is a unique opportunity to do in-depth research without distraction and being scattered by millions of tasks, as well as prepare yourself for a lasting academic career. Acceptance to the SSTP and a thesis-based graduate program is a perfect steppingstone to an intense academic career. The 'psychology' of being a successful SSTP trainee calls attention to challenges of the transition from a very structured to a predominantly self-motivated and organized lifestyle, and the most effective strategies that minimize the stress and sense of incompetence, and maximize the creativity and productivity of the trainees. He spoke about the unmatched opportunities that the SSTP offers both in researchable topics and the availability of potential supervisors in the Department of Surgery. We are a wonderfully hetero-genius group with a total research cohort over 230 scientists and clinician scientists which includes over 50 research scientists. Surgery researchers currently pursue a rudimentary list of 34 disciplines, from anatomy to brain imaging, to cell transplantation, and stem cell biology. In recent years there is a decrease in trainees pursuing biomedical research. Surgery has several exceptional scientists, who have been successful in obtaining grants and have very top-quality labs. A few to mention are Karen Davis, Mohit Kapoor, Ren-Ke Li, Cindi Morshead, Katalin Szaszi and Cari Whyne. Of course, Dr. Kapus' personal “prides” are the basic science SSTP residents who were sharing lab space during his time at TGH-UHN with Dr. Ori Rotstein: Drs. Alice Wei, Ian McGilvray, Sandro Rizzoli, Avery Nathens, Julia Jones. Dr. Gelareh Zadeh is also one of our shining stars doing basic science research who was in the SSTP. Dr. Kapus encouraged future SSTP residents to consider and capitalize on working with one of more than 50 basic scientists at the Department of Surgery.



INSTITUTE OF MEDICAL SCIENCE (IMS) OVERVIEW – Dr. Sunit Das is Chair of the Equity, Diversity and Inclusion Committee and Professor in the Department of Surgery, University of Toronto. He is also Surgeon-Scientist and neurosurgery staff members at St. Michael's Hospital, Unity Health Toronto. Dr. Das took us through the historical timeline of IMS since 1968. IMS was established in 1968 to serve as the graduate unit for the clinical departments in the Faculty of Medicine at the University of Toronto. In 2018 IMS celebrated their 50th year with over 500 students, over 670 faculty members, 520 Faculty in 11 clinical

departments, 120 Faculty are CIP alumni and 47% Faculty are Full Professors. Our Faculty members are from Anaesthesia, Ophthalmology, Family & Community Medicine, Obstetrics & Gynaecology, Otolaryngology, Medicine, Surgery, Psychiatry, Paediatrics, Radiation Oncology, and Medical Imaging. IMS is the largest graduate unit in the Faculty of Medicine and offers a wide range of stimulating, research-intensive Master of Science and Doctor of Philosophy programs in basic sciences, clinical sciences, and population health research. We specialize in translational research with a strong emphasis on bench-to-bedside clinical applications. IMS is an institution “without walls”. Students and faculty are widely dispersed across the U of T and affiliated hospital research institutes. Under the mentorship of one of our faculty members, you will receive specialized training and exposure to Toronto's finest cutting-edge multidisciplinary research. Our graduates have been appointed to instrumental positions as academics and health care professionals in universities, government and industry. We have Faculty members doing research under many umbrellas: Cancer, Cardiovascular/Respiratory/Musculoskeletal, Endocrine/Gastroenterology, Infection/Immunology, Neuroscience/Brain Health, Population Health/Education, Regenerative Medicine/Development). Research funding sources has reached over 285 Million per year for several years. U of T Faculty of Medicine research publications are en par with Harvard University and Johns Hopkins University. Number of times research publications at U of T Faculty of Medicine have been cited over 400,000 times and IMS Faculty have been cited close to 400,000 times.



BASIC SCIENCE RESEARCH – Kathryn Howe is a Vascular Surgery Assistant Professor in the Division of Vascular Surgery at Toronto General Hospital, University Health Network. She enlightened us on the great benefits of wet lab basic research. Dr. Howe went to medical school at the University of Toronto and completed a Post-Doctoral fellowship at Sick Kids. She completed her PhD bench research training at McMaster University in the Molecular Immunology, Virology and Inflammation program. As part of her Vascular Surgery residency (McMaster), Dr. Howe completed a clinical and research

fellowship at Stanford University and established her own bench research program investigating the role of endothelial microRNA in vascular disease. She received a Global Health Education Institute Certificate from UofT. She took us through a very realistic pathway to becoming a surgeon-scientist. Her personal perspective is that there is NO SINGLE PATH. There are several pathways and timelines. Take on research opportunities that excite you and those you know you can see through to completion. This will help you expand your skill set. Networking is easier than you think and very important. Dr. Howe has been in vascular surgery practice for 4 years. Her research focus is on MicroRNA communication in carotid atherosclerotic disease. She had an upfront plan with preliminary data. She was fortunate to have start-up funds to support her work from the division, hospital and then obtained funding from external granting agencies such as CIHR, Heart and Stroke, and the Wylie Scholar Award. She was assigned a formal mentor from TGHRI including lab space and scientific support to build her own lab. Some of the unique needs for surgeon-scientists who do basic wet lab research are funding, manpower (technicians, research assistants, trainees and scientific associates), timelines which can be longer than other disciplines, and establishing protected time. Basic science as a surgeon-scientist is special because you are uniquely positioned to discover new biology, new therapeutic targets and new interventions. You are uniquely positioned to translate the work, innovate, and transform the field. Her summary recommendations for the SSTP journey were to keep all bridges and connections alive. You never know when paths, research and networks will be crossed. Recognize those that will champion you and foster those high-yield relationships. Try to keep research alive while in latter years of clinical training - you will have plenty of means to do so. Life is short. Be curious. Ask questions. Stay inspired. Serendipity can be key, persistence pays off. Basic science is a collective experience. It is rewarding to train others and see them thrive. Make sure you celebrate the importance of non-academic pursuits such as family. It comes full circle.



CLINICIAN INVESTIGATOR PROGRAM (CIP) OVERVIEW – Dr. Nicola Jones is Director of the Integrated Physician Scientist Training Program at the University of Toronto. The Clinician Investigator Program (CIP) is a RCPSC accredited program intended to provide trainees with knowledge, skills, and attitudes for a career in health research. It is the largest program in Canada with ~120 trainees enrolled in graduate and postdoctoral fellowship programs. CIP provides novel e-learning and seminar/workshop-

based multi-faceted curriculum. There are fourteen fully accredited programs located at major Canadian universities. Residents enrolled in a specialty/subspecialty training program accredited by the Royal College of Physicians and Surgeons of Canada are eligible to enroll in the CIP. The U of T Faculty of Medicine website includes a list of all specialty and subspecialty programs. All CIP trainees commence their research training while registered as a postgraduate (PGY) trainee at the Faculty of Medicine, Postgraduate Medical Education office. The CIP gives residents the opportunity to integrate research and clinical training and provide the skills and knowledge fundamental to a career as a clinician investigator. U of T CIP residents engage in research in fields spanning the disciplines of biomedical research, clinical research, population health, health economics and policy, and social determinants of health. Funding for the research portion of the CIP is available from a wide variety of external and internal sources. Participants should discuss funding alternatives with their Program Director, Graduate Coordinator, and Research Supervisor. Participants should also contact their graduate unit about award opportunities and the deadlines for these awards. Most graduate unit websites will provide information on awards such as the eligibility requirements and application deadlines.

The CIP is designed to educate a new generation of physician investigators. Residents who complete the CIP will have engaged in a curriculum that features the knowledge, skills, and attitudes fundamental to embarking on a career in health research. Approximately 70% of the CIP graduates across Canada are engaged in investigative careers as a faculty member.

Advantages of the CIP:

- Residents in a specialty/subspecialty program have an opportunity to train as clinician investigators in an accredited and audited Royal College research training program and concomitantly pursue a Master of Science or Doctor of Philosophy degree, or a Postdoctoral Fellowship.
- CIP provides dedicated research time within the context of a rigorous training milieu.
- CIP trainees have the opportunity to participate in seminars specifically designed for the clinician scientist trainee.
- CIP trainees at the University of Toronto share their education with a large group of fellow trainees with whom they can share experiences, discuss relevant issues, and mold their training environment.
- CIP graduates obtain a certificate of completion from the RCPSC, attesting to the completion of the research and clinical components of the program.
- CIP graduates are positioned for success as independent investigators because they have research training credentials and practical research experience.

CIP application deadlines are:

January 10 for Ministry of Health-CIP funding (competition application for July 1 enrolment)

May 1 for July 1 enrolment

November 1 for January 1 enrolment.



INSTITUTE OF BIOMEDICAL ENGINEERING (BME) OVERVIEW – Dr. Paul Yoo is Associate Professor and Associate Director of Professional Programs. The name of our department was recently changed from the Institute of Biomaterials and Biomedical Engineering (IBBME) to the Institute of Biomedical Engineering. (BME), but we still maintain administrative ties with the faculties of applied science and engineering, medicine (Temerity FOM), and dentistry. **Our** research is focused on applying

engineering approaches and principles to address the most pressing health-care challenges in the world. In 2021, we had over \$12M in research funding and \$6M in student funding. Students in BME come from different education backgrounds (engineering, biology, physical science, medicine, dentistry) and work closely with our world-class researchers (36 core faculty, 26 budgetary faculty and 64 cross-appointments) in a broad range of disciplines. There are approximately 350 graduate students registered in BME, where the majority of students are working towards a thesis-based degree (MAsc and PhD). BME also offers a MEng degree, which is a 1-year non-thesis professional program. It is noted that we also offer this program to MD students and graduates (**MD + MEng**).

We are a University division and not a Hospital division. And we are the largest, oldest, and most well-known BME program in Canada.

The three research themes are:

1. Molecular Engineering – building molecules for medical applications: **Prof. Warren Chan** – Developing nanotechnology to find, target and treat cancer; **Prof. Hai-Ling Margaret Cheng** – Developing MRI technology and probes to detect and monitor diseases.
2. Cell and Tissue Engineering – building cells and tissue medical use: **Prof. Paul Santerre** – Developing polymers for breast tissue reconstruction; **Prof. Milica Radisic** – Growing heart and liver tissues for drug testing.
3. Clinical Engineering – building devices for patients: **Prof. Jan Andrysek** – Engineering artificial devices for patients with physical disabilities; **Prof. Elaine Biddiss** – Designing video games for children rehabilitation.

Many of our PIs and students have started companies to translate their technology development. Teams are built and research is integrated with clinicians for patient testing and translation. Large programs with hospital partnerships have also been established. **1. Translational Biology and Engineering Program (TBEP), led by Dr. Craig Simmons**, applying engineering principles for addressing cardiovascular health. **2. Medicine by Design (Mbd), led by Dr. Michael Sefton**, applying engineering principles to regenerate tissues. Over \$100 million has been earmarked for research in these areas of biomedical engineering research. The value of Institute BME – brings new connection to clinicians/surgeon through interaction with engineering; discover and develop technologies that benefit society; publish well in top journals; programs and guidance in starting companies; part of large network of biology, medicine, and engineering (BME) researchers (largest in Canada); support for education and development; work on really cool and latest science and technology.

There have been a few surgery residents who have gone through BME and are on staff. The most recent one is Dr. Kim Tsoi. She recently became an orthopaedic surgeon on staff at Mount Sinai Hospital and is an Assistant Professor in the Dept of Surgery, University of Toronto. <http://discover.bme.utoronto.ca;> [http://bme.utoronto.ca;](http://bme.utoronto.ca) **Question:** warren.chan@utoronto.ca



CLINICAL EPIDEMIOLOGY RESEARCH – Dr. Bobby Yanagawa is Division Head and Program Director, Division of Cardiac Surgery at the University of Toronto. Dr. Yanagawa gave an excellent summary of his journey from resident to where he is now. In his early surgical career, he wanted to make an academic contribution to cardiac surgery but funding was hard to come by, and he was busy clinically.

He reviewed his options.

- Systematic review and meta-analysis
- Critically-appraised topics
- Critically-appraised individual articles
- Randomized controlled trials (RCT)
- Cohort studies
- Case-controlled/Case series/Reports
- Background info/Expert opinion

Dr. Yanagawa presented an interesting analogy. We largely exist in “**Red Oceans**” full of predators – **Competing in existing markets. We should strive to find “Blue Oceans” – New market opportunities without any predators/competitors.** Next came the issue of doing Meta-Analysis. Find your local experts. The Flywheel of Success are achieved by accumulation of small successes, gaining new energy from positive results and building momentum. Meta-analyses have helped him to combine his clinical and research interests in infective endocarditis. Dr. Yanagawa is very fortunate to be surrounded by friends, mentors, collaborators who are national leaders such as Mohammed Al-Omran, Rakesh Arora, Davy Cheng, Jan Friedrich, David Mazer, Maral Ouzounian, and Subodh Verma.



SURGICAL EDUCATION – Dr. Amin Madani is an Endocrine and Acute Care surgeon at the University Health Network and Assistant Professor of Surgery the University of Toronto. He specializes in the surgical management of thyroid, parathyroid and adrenal diseases. He is also the Director of the Surgical Artificial Intelligence Research Academy, where he leads a multidisciplinary team of clinicians, data scientists, engineers and game developers. Dr. Madani’s research focus is in surgical expertise and using next generation computer vision for augmentation and automation of surgery. He serves as

the Chair of the Global Surgical Artificial Intelligence Collaborative – an academic-led consortium with a mission to democratize surgical care and disseminate surgical expertise to operating rooms around the world. His strategic focus stems around intra-operative performance augmentation. Artificial intelligence, machine learning, deep learning and technology-enhanced learning environment are essential.

Mission Statement: To improve intraoperative performance and surgical outcomes using advances in computer science and machine learning.

- Surgical Artificial Intelligence Research Academy
 - Computer vision and intra-operative navigation – GPS for surgery – Suggested areas of dissection based on prior & real-time data – Deep learning for automated assessment – analyze images/video streams as quantifiable features to identify statistically meaningful events – Deep neural networks extract features that assist in recognition of anatomy and surgical steps based on expert annotation – Intra-operative decision support – performance assessment – motion tracking analysis – video-based assessment – 3D Computer Vision – Next generation VR simulation
 - Simulation-based surgical training –
 - **Procedural-based simulation:** Tissue rendering VR, technical skills training, web-based interactive perform; “think like a surgeon”. Using web-based interactive platform – deliberate practice of advanced intra-operative cognitive skills. Metrics: Visual concordance test – Objective, reproducible, feedback. Areas of investigation: developing next generation immersive surgical simulation – develop user-interface with tactile feedback – correlating VCT assessment with surgical outcomes.
 - **Non-Procedural simulation training** – Gaming/interactivity: Simulate multiplayer interactivity remotely – trauma and non-trauma resuscitations – multiple scenes simultaneously – mass-casualty traumas – multiple roles (e.g., team leader, MD, nurse, respiratory therapist, anesthesiologist) - Gaming, first person shooter vs strategy game.

- Surgical coaching: Using sports telestration platforms to enhance surgical education for residents and surgeons; Develop a centralized program for sending videos and obtaining expert feedback on performance; Using better metrics than traditional performance assessments.
 - Understanding surgical expertise: Qualitative research – interviews, focus groups, observations; understanding cognitive behaviours and thought patterns that define surgical expertise; Develop expert mental models; Areas of investigation: mastering technical skills, optimization of exposure; Parathyroidectomy cognitive task analysis; Potential collaboration: Wilson Centre TGH/UHN
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INSTITUTE OF HEALTH POLICY, MANAGEMENT AND EVALUATION (IHPME)

OVERVIEW – Dr. Audrey Laporte is a Professor of Health Economics and the Director of the Institute of Health Policy, Management and Evaluation (IHPME), Dalla Lana School of Public Health, University of Toronto. Professor Laporte is President of the International Health Economics Association and Director of the Canadian Centre for Health Economics. Dr. Laporte beautifully explained to us about IHPME and the pluses associated with choosing this path for your degree. More than 200 Faculty members

hold IHPME appointments, representing disciplines including health policy, organizational management, economics, law, clinical epidemiology, innovation, e-health and technology, sociology and political science. At least 130 senior health care executives serve as Adjunct Faculty. Strong in local, national and international expertise, our Faculty merges collaborative relationships that bridge academics, decision-makers and providers in the healthcare arena.

The MSc and PhD (Health Services Research concentration) are highly interdisciplinary thesis degree programs, designed to expose students to the full breadth and depth of health services research. Emphases include: Health Economics, Health Informatics Research, Health Policy, Health Services Organization and Management Studies, Health Services Outcomes and Evaluation, Health Technology Assessment. The MSc program in HSR consists of a minimum of 6 half-year courses and completion of a research thesis of acceptable quality and its oral defense. Thesis research must be supervised by a faculty member who has an appointment (either primary or cross-appointment) in IHPME. On average, student complete the MSc program within 18 months, although degree requirements can be completed within one year of full-time studies.

The PhD program in HSR consists of a minimum of 10 half-year courses, oral defense of a dissertation proposal, and completion of a dissertation and its oral defense. This research programs must be supervised by a faculty member who has an appointment in IHPME. On average, students complete the PhD program within 3 to 5 years.

The Health Services Research program offers a thesis and a non-thesis MSc degree in Quality Improvement and Patient Safety. The non-thesis option involves ten half courses and is completed in one year. The thesis option involves 6 half-course credits and completion of a research thesis of acceptable quality and its oral defense. The thesis option usually requires 18 months or two years.

The Health Services Research program offers a non-thesis MSc degree in System Leadership and Innovation. The program involves 4 half-credits for core courses, two half credits for core practicums and 4 half credits that are a mix of elective courses or practicums. Residents typically finish the program in one-year full time or two years part time. In the future there will be a thesis option for this program.



BIOENGINEERING RESEARCH – Dr. João Rezende-Neto is a Trauma and Acute Care General Surgeon at St. Michael's Hospital in Toronto. He is Full Professor in the Department of Surgery. His research focuses on development of medical devices. He holds 11 patents and has obtained Health Canada and FDA approval for his new technologies. He is the President and Co-Founder of Inventorr MD Inc., the Chief Medical Officer of NERv. Technology Inc., and Lead for Device

Development and Entrepreneurship at St. Michael's Hospital. There are numerous opportunities to be involved in bioengineering and innovation within the Department of Surgery at U of T. In fact, the Department of Surgery has recently formally created an academic job description which is called "Surgeon-Entrepreneur". This recognizes the efforts that surgeons at U of T have been dedicating to innovation, from device development to new surgical techniques, not just devices in themselves. That really puts things into perspective that innovation is gaining traction as a research field within the U of T. There are ample opportunities to work with other surgeons who have spearheaded innovations at U of T. Few samples: Dr. Vito Forte, Dr. Ori Rotstein, Dr. Teodor Grantcharov, Dr. Marcelo Cypel, and Dr. Shaf Keshavjee.

RECENT SSTP GRADUATES



Dr. Douglas Cheung is a PGY-4 Urology resident and a PhD candidate who completed his SSTP with Drs. Antonio Finelli & Girish Kulkarni at Toronto General Hospital, University Health Network. His research interests are exploring healthcare economics within uro-oncology and early detection to better understand how healthcare outcomes can be delivered in a cost effective, patient centric manner.



Dr. Matthew Guttman is a PGY-5 General Surgery resident who completed the CIP/SSTP at the University of Toronto in 2022 and attained his PhD in Clinical Epidemiology and Health Care Research at IHPME under the supervision of Drs. Barbara Haas and Avery Nathens. His research focused on using administrative health data to evaluate the long-term functional outcomes of older adults following trauma and emergency general surgery. Upon graduation from residency, he will be pursuing a fellowship in trauma surgery.

Both Drs. Cheung and Guttman believe that the SSTP is one of the best decisions that you can make for an academic career and strongly recommend that any interested residents speak with potential supervisors to explore their interest. When choosing a supervisor, prospective students should complete their due diligence by speaking to current/previous graduate students. SSTP is a unique opportunity to conduct clinical and basic science research in an environment supported by excellent mentors across every discipline. They strongly feel that interested residents speak with potential supervisors to explore their interests and consider the SSTP experience as a backbone to launch their future academic career. The support that we receive, and the opportunity are very unique: you will have the opportunity to connect with top minds, both within your Division and across the entire University, to create your own niche. You will build an academic portfolio, engage in grant writing, set yourself up for independent practice, and develop a close set of mentors and friends far beyond what you have time to explore in clinical residency. The opportunity truly can be whatever you make of it and extends far beyond the degree itself.

