



Discover & Explore



**Sinai
Health**

Zane Cohen Centre
for Digestive Diseases

Network Newsletter | Fall 2022



Director's Message

This continues to be an extraordinary two and a half years for all of us – our staff and students, and in particular, all of you, who I hope will be reading this issue of the Network Newsletter from the Zane Cohen Centre. I would like to thank everyone who has worked at the Centre, or who has taken an interest in the Centre for ongoing support and cooperation.

I am very proud that we remained productive in forwarding our goals for our patients. We have a significant focus on preconception and pregnancy in our IBD Program, and our clinic supports clinicians from all across Ontario with referral numbers doubling annually. The Ontario Best Practices Research Initiative (OBRI-IBD) at the centre is focused on improving the health outcomes and treatment of Ontarians living with inflammatory bowel disease. Our IBD Biomarkers Research Program is studying genetic factors that could contribute to IBD individuals of non-European ancestry.

The GEM Project Team has found that a Mediterranean like dietary pattern was strongly associated with the defined microbial composition, and lower levels of subclinical gut inflammation. We are promoting access in care for people with inflammatory bowel disease, particularly looking at prevention of re-admissions at IBD centres of excellence, and addressing depression and anxiety symptoms in patients with inflammatory bowel disease.

Our surgical group activities continue in innovation of surgical techniques, and particularly in the study of new techniques as they apply to the function following pelvic pouch surgery. We are also looking at a better understanding of the impact of ulcerative colitis on family planning, as women with ulcerative colitis are often diagnosed in their childbearing age. We are involved in the Surgical Innovation Research and Quality Collaboration in IBD, a collaborative group sponsored by the Crohn's and Colitis Foundation in the US which will stimulate further research in IBD surgery.

In our Familial GI Cancer Registry, we have gained the ability to test multiple genes at the same time for various new syndromes and mutations that are arising in inherited syndromes such as Lynch syndrome (LS). We are studying LS risk management in an attempt to understand the effect of unmet information needs. We are exploring the role of starch in reducing LS cancer risk, as a recent study has found an association between resistant starch and reduction of risks to develop cancers of the upper digestive tract.

I would like to take this opportunity to thank our multiple donors, and in particular, Barb and Jay Hennick and family, for a transformational gift that they have given for inflammatory bowel disease research and education. I would also like to thank Stacey and Jonathan Gitlin for a very successful Spin for Sinai event, which will allow a very significant further donation to research and education in inflammatory bowel disease.

We will continue to push the boundaries as we influence patient care through our clinical research.

Wishing you well.

Sincerely,

Zane Cohen
Director

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Familial GI Cancer Registry (FGICR)

Updates to hereditary cancer genetic testing in Ontario

Thomas Ward
Genetic Counsellor



Over the last 20 years there have been tremendous updates to knowledge about hereditary causes of cancer, and advancements in genetic testing technology. We have learned of new genes associated with cancer risk and polyp development, and gained the ability to test multiple genes at the same time. In April of 2021, Ontario

Health (part of Cancer Care Ontario) expanded genetic testing in Ontario to add many newly discovered genes associated with hereditary cancer syndromes. This included genes that can cause inherited colorectal, stomach, urinary tract and gynecological cancers. The committees working on expanding the gene panel, which included many members of the of the Zane Cohen Centre team including; Dr. Raymond Kim, Melyssa Aronson, Spring Holter

Dr. Aaron Pollett and Dr. George Charames, also expanded the criteria of who could be tested for these syndromes. This means that individuals who had testing in the past may be eligible for expanded testing, and those who didn't qualify before may qualify for testing today.

If you have updates about your family history, or a strong family history of cancer, or multiple polyps, and your prior genetic testing was inconclusive (negative), please contact your genetic counsellor. We would be happy to review your case to see if updated testing is indicated. Please keep in mind that genetic testing covered by OHIP is generally offered to people affected with multiple polyps or cancer themselves.

Clinical study protocol: NeoPancOne

Dr. Steven Gallinger
Principal Investigator



GATA6 Expression as a Predictor of Response to Peri-Operative Chemotherapy in Resectable Pancreatic Adenocarcinoma: A Multicenter Canadian Phase 11 Study (NeoPancOne). Pancreatic cancer is an aggressive malignancy. When patients are diagnosed many have already developed metastases and cannot be cured. In up to 20% of patients, an operation is possible. Surgery offers the only chance of cure and results are improved substantially when chemotherapy is given after surgery. Since surgery in pancreatic cancer can be difficult to recover from, at least a third of patients do not receive additional (adjuvant) chemotherapy, thus reducing their chance of cure. Giving chemotherapy before surgery is a strategy used in other cancers. This helps to ensure more patients receive chemotherapy helping to kill cells that we cannot see,

sometimes reducing the size of the cancer, making the operation easier, and delivering chemotherapy more effectively to tissues surrounding the main cancer before these sites are exposed to tissue trauma from surgery. Some studies have shown that this preoperative (neoadjuvant) sequence improves survival in patients undergoing an operation. From work at the Princess Margaret Cancer Centre, we have shown that there are patients who have a 'classical' type of pancreatic cancer, who seem to benefit and respond to chemotherapy compared to a 'basal' group, who have aggressive disease. Analyzing tissue and blood identifies patients who should undergo surgery with possible better outcomes, and those who would not benefit, is important for patient survival and improved quality of life.

Lynch GC risk management

Dr. Tae Hart
Scientist



Women with Lynch syndrome (LS) are at increased lifetime risk for endometrial and ovarian cancers, but screening options are limited and largely low in efficacy. Along with FGICR genetic counsellors Melyssa Aronson, Thomas Ward, Kara Semotiuk, and Drs. Zane Cohen and Sarah Ferguson, we have been conducting interviews with women with LS on how they decided to manage their gynecological cancer risk. This study has now recruited 20 women with LS who have been undergoing gynecological cancer surveillance (i.e., screening) and 15 women who have undergone risk-reducing surgery. Participants completed semi-structured telephone interviews. Qualitative data analyses were used to examine experiences in the healthcare system and to understand participants' unmet information needs. Findings revealed a myriad of informational decision-making

needs. Women who received risk-reducing surgery reported needing more information about hormone replacement therapy, managing post-surgical physical changes, and more comprehensive post-surgery engagement with practitioners. Participants using surveillance discussed problems in self-advocating for screening with their healthcare providers and desired tailored information regarding risk-management, including surgery. Many participants wanted more support from healthcare providers around LS. Strategies were recommended by all participants to improve LS care. The data from this study have been accepted for a research poster at the 2022 meeting of the Collaborative Group of the Americas on Inherited Gastrointestinal Cancer. Our research team is working on two papers for publication from the data. We are also working on accessible tools for people with LS to manage their gynecological risk.

Role of starch in reducing Lynch syndrome risk

Kara Semotiuk
Genetic Counsellor



An article entitled “Cancer Prevention with Resistant Starch in Lynch Syndrome Patients in the CAPP2-Randomized Placebo Controlled Trial: Planned 10-Year Follow-up” was recently published in the American Association for Cancer Research

(AACR). Dr. John Burn and researchers at Newcastle University and the University of Leeds in the United Kingdom lead, a multi-clinical international trial called CAPP2 that included almost 1,000 people with Lynch syndrome (LS). Some participants were from our own Familial Gastrointestinal Cancer Registry (FGICR). This study found an association between resistant starch (RS) and reduction of risk to develop cancers of the upper digestive tract in LS, such as the stomach, small bowel, bile duct and pancreas. Interestingly, they did not find the same effect on lowering the risk for colorectal cancer in LS. The study showed that eating 30 grams of resistant starch daily in the form of a powder supplement for an average of 2 years may help prevent cancer in people with LS. The benefit was a delayed effect; the reduction of risk became apparent after 10 years of follow-up. Resistant starch can be found in plant-based foods such as cooked and cooled pasta and

potatoes, rice, beans, seeds, oats, peas and slightly unripe bananas. If you have LS, we recommend that you speak to your doctor about whether increasing resistant starch is right for you, and they could refer you to a dietician to discuss how to add 30g of resistant starch into your diet.



Image taken from: irishnews.com, source: <https://bit.ly/3eAMC5V>

Publications from FGICR collaborations

Melyssa Aronson
Genetic Counsellor

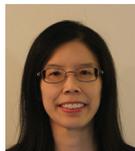
- **Variation in the risk of colorectal cancer in families with Lynch syndrome: a retrospective cohort study.** *International Mismatch Repair Consortium. Lancet Oncol. 2021 Jul;22(7):1014-1022. doi: 10.1016/S1470-2045(21)00189-3. Epub 2021 Jun 7.* The FGICR has collaborated with Drs. Mark Jenkins and Aung Ko Win who developed the International Mismatch Repair Consortium (IMRC). The IMRC, located in Australia, is collecting data from Registries and clinics on families with Lynch syndrome (LS) around the world. This paper reports on 5585 families with LS from 22 countries. The researchers found that there are unknown familial risk factors that impact colorectal cancer risk in families with LS. That means that even among people with the same gene mutation in the same gene (i.e. *MSH2*), the colorectal cancer risk differs between families. For example, there is a wide variation in colorectal cancer risk within 250 families carrying the same *MSH2* mutation (called c.942+3A>T). “Depending on sex and continent, approximately 9–15% of carriers had a colon cancer risk less than 20% and approximately 33–45% of carriers had a colon cancer risk more than 80%.” This wide range of risk may have something to do with unclear familial risk factors.
- **Patient-facing digital tools for delivering genetic services: a systematic review.** *Lee et al. J Med Genet. 2022 Sep 22:jmedgenet-2022-108653. doi: 10.1136/jmg-2022-108653.* The Zane Cohen Centre and FGICR are working with Drs. Yvonne Bombard and Robin Hajeems to develop an online tool that can deliver genetic services such as information about genetic testing and deciding on what types of results you may want, etc. We invited some of our patients to explore the tool as they prepared to receive research genetic results. Dr. Bombard’s team, along with co-authors from the FGICR have published 3 additional articles in 2022 examining these topics.
- **“Game Changer”: Health Professionals’ Views on the Clinical Utility of Circulating Tumor DNA Testing in Hereditary Cancer Syndrome Management.** *Shickh et al. Oncologist. 2022 May 6;27(5):e393-e401.* The FGICR is working with Dr. Kim and members of the CHARM consortium to study “liquid biopsy” which looks for circulating tumour DNA through a blood test. Many of our patients with Lynch syndrome and Hereditary Gastric Cancer are participating in this research. This study looks at the views of health care workers on this new potential technology.
- **Brief family history questionnaire to screen for Lynch syndrome in women with newly diagnosed non-serous, non-mucinous ovarian cancers.** *Kim et al. Int J Gynecol Cancer. 2022 Jul 4;32(7):891-898. doi: 10.1136/ijgc-2021-003082.* We were working with Drs. Soyoun Rachel Kim, Eiriksson and Dr. Sarah Ferguson to assess a brief family history questionnaire to screen women with newly diagnosed ovarian cancer for features of Lynch syndrome. The brief questionnaire outperformed a longer extended family history questionnaire to identify 83% of individuals had Lynch syndrome.

Research Programs & Activities

Preconception and Pregnancy in IBD program



Dr. Vivian Huang
Gastroenterologist



The Preconception and Pregnancy in IBD clinical research program continues to expand, welcoming new medical students, internal medicine residents, and student research assistants. Our consultation clinic supports patients and clinicians from all across Ontario with referral numbers doubling annually. We continue our clinical collaboration with our IBD surgery and MFM/OB colleagues at MSH and other U of T hospitals, and with Sick Kids Special Immunization Clinic. Our program aims to find ways to improve care and health outcomes for mothers with IBD and their infants. We continue to study the complex interaction between IBD, IBD

therapies, and maternal and neonatal outcomes. In order to achieve these aims we work with your clinical data, your samples, and responses from patient and physician surveys. Please contact us if you would like to participate in our studies at preg.ibd@sinaihealth.ca. For more information on the Preconception and Pregnancy in IBD clinical research program please visit our website at pregnancy.ibdclinic.ca.

For our patient and clinician educational website and clinician access to our Multidisciplinary Care in IBD (MCIBD) continuing medical education program, please visit mcibd.ca

Current Studies

■ Preconception and Pregnancy in IBD Registry

Goal: to improve care and health outcomes for mothers with IBD and their infants

Involves: completion of online questionnaires and/or providing consent for chart review

■ Mental Health during Pregnancy in People with IBD

Goal: to investigate mental health during pregnancy in people with IBD, and to understand the challenges of accessing said services

Involves: completion of an online questionnaire

■ Aspirin for the Prevention of Preeclampsia in Women with IBD

Goal: to assess patient perception and attitudes regarding aspirin use for the prevention of preeclampsia

Involves: completion of an anonymous online questionnaire

■ Breast Milk IBD study

Goal: to study whether and how IBD may affect breast milk composition and whether composition affects infant growth and development

Involves: completion of questionnaires from pregnancy to post partum, collection of breast milk samples at 1 and 3 months

OBRI-IBD Initiative



The Ontario Best Practices Research Initiative-Inflammatory Bowel Disease (OBRI-IBD) was developed to improve the health outcomes and treatment of Ontarians living with Inflammatory Bowel Disease through the efforts of patients, researchers, gastroenterologists, and allied health professionals.

Over the last two years, Dr. Laura Targownik and her team have been working towards building a platform to improve the collection of cross-sectional and longitudinal patient-centered data on IBD processes and outcomes with high fidelity. The primary mission of the initiative is to become the premier data source for real-world data across multiple diverse practice types. With the data collected from patients, there is a growing need to organize and maintain data collection from all these patient experiences. The implementation has successfully undergone the integration of the permission to contact framework. This enrollment strategy facilitates patient engagement in research by inviting all patients to allow communication for research purposes. The addition of the framework reduces time in each research to understand readiness for the study



Dr. Laura Targownik
Program Director

and the number of potential available eligible subjects. The OBRI-IBD Initiative currently involves data capturing within clinical care practices at Mount Sinai Hospital. The process includes ensuring critical key data in clinical care is included in patient charts. We will prepare the ground to attract more clinics and physicians to the OBRI-IBD research registry to ensure that data is available for any upcoming real-life research as much as possible. This platform already has supported us with several real-life studies, and we hope to continue for more in this long way to go! Our website for the OBRI-IBD Initiative will be launched this year, allowing patients, researchers, gastroenterologists, and allied health professionals to get an insight into our work.

For more information or questions related to the OBRI-IBD Initiative, don't hesitate to get in touch with us at obri.ibd@sinaihealth.ca, or you may call 416-586-4800 x 8348

We would like to welcome Kasra Boyerahmadi to the team as the Project Manager for Dr. Laura Targownik's research projects.

IBD Biomarkers research programs

Dr. Mark Silverberg
Gastroenterologist



IBD Biomarkers research program is in its 20th year. The goals of our research program are to identify susceptibility genes and biomarkers for IBD and to explain the contribution of these markers to the cause and clinical course of IBD. To help us do this, we work with your samples: blood, biopsies, saliva & stool.

This research program has been funded mainly by grants from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK/NIH), Crohn's and Colitis Canada (CCC), Canadian Institutes of Health Research (CIHR), the International Organization for the Study of Inflammatory Bowel Disease (IOIBD) as well as generous donations which are critical to support the work that we do.

We have **exciting studies** to participate in: *(Please contact us if you would like to help us)*

■ **NEW Study: Non-European Study: Genetics of IBD**

Goal: To understand the genetic factors that could contribute to IBD in individuals of non-European ancestry.

Involves: - One time donation of blood and/or saliva sample & questionnaire

- Diagnosed with Crohn's Disease or Ulcerative Colitis who identify as: African American or Black or Hispanic/Latinx
- Compensation is provided after participation is completed

■ **UC Diet Study**

Goal: To understand if a high fiber, low-meat diet can affect the severity of disease activity in UC patients by altering the microbiome.

Involves: The study is 10 weeks in length and food is delivered to patients for 8 weeks.

Patients undergo a flexible sigmoidoscopy with biopsies before starting the study & at the end of the study. Blood, stool & questionnaires collected every 2 weeks over the 10 week period

■ **UC Relapse**

Goal: To identify gene expression pathways activated during flares to understand mechanisms and aid in predicting future relapses

Involves: UC patients in remission, blood, stool & questionnaires collected every 3 months over a

2 year period, optional colonoscopies can be arranged after 1 year & 2 years from the start of the study

■ **Prospective Pouch**

Goal: To examine the structure and function of the microbiome in patients who undergo pelvic pouch surgery to identify how the microbiome may contribute to the onset of ileal inflammation.

Involves: 6 pouchoscopies with biopsies, blood, stool & questionnaires collected over 2 years

For more information on the Silverberg Lab, please visit our lab website at: research.lunenfeld.ca/silverberg

A full listing of all clinical-translational and clinical trial research projects can be found at: zanecohencentre.com/ibd/research

Publication Highlights

■ **Combined Histo-endoscopic Remission but not Endoscopic Healing Alone in Ulcerative Colitis is Associated with a Mucosal Transcriptional Profile Resembling Healthy Mucosa**

Lead MSH author: Hernandez-Rocha, Cristian; Nayeri, Shadi et al.

Findings: UC patients with a composite histological-endoscopic remission showed a significantly lower risk of relapse compared to histological-endoscopic activity.

■ **A Role for CXCR3 Ligands as Biomarkers of Post-Operative Crohn's Disease Recurrence**

Lead MSH Author(s): Walshe, Margaret; Nayeri, Shadi; Hernandez-Rocha, Cristian et al.

Findings: CXCR3 ligands are associated with CD recurrence following ileocolonic resection. Incorporation of novel blood-based candidate biomarkers may aid in identification of CD recurrence.

Clinical trial for a dietary approach in Crohn's Disease

Dr. Hillary Steinhart
Gastroenterologist



This past year our team have carried out several international clinical trials, investigating new therapies for IBD including stem cell therapy for fistulizing Crohn's disease (CD) and a novel dietary approach in Ulcerative Colitis (UC) and CD. Patient information sessions are now available for patients interested in gaining more information about clinical trials in IBD at MSH. Please refer to: zanecohencentre.com/ibd/research for the list of actively recruiting clinical trials. For information about patient information sessions or questions related to actively recruiting clinical trials please contact Shlomit Boguslavsky, at (416) 586-4800 ex.8351 or email Shlomit.Boguslavsky@sinaihealth.ca.

We are participating in a research study to explore the effectiveness of the "Tasty&Healthy" dietary approach based on avoiding "pro-inflammatory" and processed ingredients, for inducing and maintaining remission in young adults.

We are looking for individuals:

- Young adults aged 18-40 with Crohn's Disease with less than 3 years of disease duration
- In clinical remission or experiencing mild or moderate disease activity that warrants change in treatment

This study will last up to 24 weeks. Your Crohn's Disease will be assessed and, if eligible, participants will be randomized into two randomized controlled trials both including the Tasty&Healthy dietary intervention for 8 weeks vs. 1) EEN (Modulen) in mild-moderate CD and vs. 2) a control group continuing their habitual diet. Responders from both trials will be offered to participate in an open label extension personalized-diet study of further 16 weeks (total 24 weeks). Reimbursement will be provided for study-related travel expenses and to assist in purchasing tasty and healthy foods.

The GEM Project



Dr. Ken Croitoru
Gastroenterologist



The Crohn's and Colitis Canada GEM (Genetics, Environmental and Microbial) Project is now in its 14th year. The GEM Project aims to define biomarkers that will quantify risk and predict who will develop Crohn's disease (CD). This is a unique cohort of over 5,000 first-degree relatives of Crohn's patients recruited worldwide. Since its inception in 2008, 100 subjects have developed CD. From the valuable samples provided by subjects, we have collected genetic data, environmental and dietary data, assessed the composition of their gut bacteria (microbiome), quantified markers of gut leakiness and of pre-clinical inflammation. Our team of researchers continue to work with the available data to develop a combined prediction model that will determine the risk a person has for developing CD. The identification of the genetic, environmental or microbial factors that put someone at risk will guide the development of preventative strategies and potentially therapeutic avenues for those with a diagnosis. In the past year, the GEM team has continued to make valuable discoveries in the field. Using the food frequency questionnaire data, the GEM team found that a Mediterranean-like dietary pattern was strongly associated with a defined microbial composition and lower levels of subclinical gut inflammation (*Turpin, et al., Gastroenterology, 2022*). The GEM team was asked to present our findings at conferences including CDDW, DDW, and ECCO, as well as other invited talks. In particular, Dr. Turpin presented at a plenary session at DDW on our work showing that living with dogs may protect against developing Crohn's disease.

This generated a lot of media interest. See the GEM Project website (gemproject.ca) for links to related news articles. In addition, our research team has many other on-going studies focused on the biology of IBD:

- **PIONIR:** A pilot diet trial examining the impact of the Tasty&Healthy dietary approach on risk factors for developing Crohn's disease among first-degree relatives of Crohn's patients.
- **Weston Diet:** A pilot study that examines the impact of different dietary components on risk factors for developing Crohn's disease among first degree relatives of individuals allowing us to design a personalized approach to dietary intervention. If interested in participating please visit croitorulab.com and find our contact info under "Contact Us".
- **PRECIOUS:** Examine the predictive performance of PredictSURE IBD™, a classifier to predict prognosis of patients with CD or UC from diagnosis, in North American patients.
- **IMAGINE:** A large cohort study aimed to better understand the key mechanisms in the diet-microbiome-host relationship in patients with IBD and IBS. If interested in participating please visit imaginespor.com and use the "Participate in Research" option.

This past year we welcomed new members to the team including Dr. Hamza Mbarache, Dr. Bhupesh Thakur, Dr. Helena Martinez Lozano, and Dr. Pablo Andres Olivera Sendra and 2 new coordinators, Nicole Kayrala, and Alireza Tavakoli. We would also like to extend congratulations to Williams and Hamza who welcomed new babies this past year. At last a big congratulations to Dr. Sun-Ho Lee for completing his PhD.

Promoting Access and Care for IBD Patients

Dr. Geoffrey Nguyen
Gastroenterologist



Several projects aim to enhance access in remote communities and to improve quality of care for all IBD patients. Here is a summary of 4 ongoing projects:

Addressing Depression and Anxiety Symptoms in Patients with Inflammatory Bowel Disease (ADAPT-IBD). While anxiety and depression are more common in IBD than in the general population, it is often under-diagnosed and under-treated. In an effort to improve mental health care in IBD, our team is testing the impact of web-based Cognitive Behavioral Therapy.

PACE Telemedicine Initiative. Promoting Access and Care through Centres of Excellence (PACE) network in collaboration with Crohn's and Colitis Canada continues to bridge gaps in access to care across Canada. Since 2016, Mount Sinai Hospital has successfully implemented PACE Ontario telemedicine network to provide excellent IBD care for those who have limited access to gastroenterologists. With shortening of wait times and evidence of cost savings, this year marks the expansion of this initiative where the program will be rolled out to 5 other provinces: Alberta, Quebec, Manitoba, Nova Scotia and Saskatchewan. The team will evaluate critical metrics to examine the feasibility and usability of this program for potential sustainable funding. Our multidisciplinary team has also added an additional third RN to help with navigating the expanding number of patients in the program.

Prevention of Readmissions at IBD Centres of Excellence. The aim of this study is to evaluate a nurse led initiative to reduce readmission rates at IBD centres of excellence. As there is a shortage of IBD trained nurses in Canada, we are currently evaluating the impact of IBD nursing staff post discharge and potential impact on IBD-related outcomes. This study also integrated online platform and patient monitoring as another innovative way for nurses to improve the quality of IBD care. With the completion of the study, we hope to evaluate this post discharge nursing intervention as a cost-effective initiative that reduces the risk of readmission to hospital and improves the quality of care for patients with IBD.

Eliciting Patient Preference for Prioritization of Healthcare Processes in the Management of Inflammatory Bowel Disease. Patient perspectives are often under-represented in clinical guideline and quality indicator (QI) development. Funded by Crohn's and Colitis Canada, the team and the University of Calgary build upon previous research of the PACE program to develop and launch two online surveys using a novel approach of best-worst scaling. The project aims to elicit and compare preferences of IBD related healthcare processes and outcomes in a nationally representative sample of patients and providers. Findings will be used to justify and advocate for further patient centred initiatives. Our patient survey was recently selected to be launched through IBD Partners - a patient centred research network comprising of over 16,000 IBD patients in the United States, with the aim of deepening our understanding of the North American patient perspective. To take part in our clinician survey, please email Meghan.Harris@sinahealth.ca

Surgical Group Research Activities

Dr. Erin Kennedy
Head of the Division of General Surgery



Our team has successfully developed a collaborative network both locally, provincially and nationally and has led several multidisciplinary initiatives, including the development and implementation of a synoptic MRI report for rectal cancer across Ontario. This quality-improvement project focused on management of rectal cancer patients. Here are some of the current projects pertaining to the surgical group:

Home to Stay: An integrated monitoring system using a mobile app to help reduce readmissions following colorectal surgery

My team and I convened a Patient Advisory Committee to co-develop and implement an integrated discharge monitoring system using an interactive Mobile App for colorectal surgery patients. The group developed a program called "Home to Stay" which is an interactive mobile app as a home monitoring system to support patients at home after surgery by tracking and helping them to manage their symptoms for 30-days following their surgery. The team is now conducting a CIHR funded randomized controlled trial (RCT) to evaluate the effectiveness of the app. The primary objectives are to improve the patient experience and reduce the number of unplanned hospital visits following colorectal surgery. Currently, 120 patients are enrolled in the trial at participating sites in Vancouver and Toronto, with an aim to recruit a total of 670 patients over a 2 year period. This trial is necessary to provide high quality evidence about the effectiveness of this mobile app. The results will help to establish the appropriateness of this strategy to improve the quality of care while reducing health care costs for patients, health care providers, hospital administrators and policymakers.

Phase II study to assess the safety of non-operative management (NOM) for low rectal cancer

Currently, the standard treatment of low rectal cancer is chemoradiotherapy followed by surgery that includes either a temporary or permanent stoma (i.e., bag for stool). This is followed by 8 cycles of chemotherapy given every 2 weeks for 4 months. However, in about 20% of patients, the tumour goes away completely after chemoradiotherapy. This is called a complete clinical response. Our research team is leading a pan-Canadian clinical trial supported by CIHR to follow patients who have had a complete clinical response and only perform surgery if the tumour regrows. This is called non-operative management (NOM). At present, there are 47 patients enrolled in the trial at 13 participating sites across Canada, with an aim to recruit a total of 90 patients over a 5 year period. Results of this study will be highly relevant to both patients and physicians, as it is expected that non-operative management in this subset of patients will be as effective as surgery to achieve local control. Accordingly, up to 20% of patients with low rectal cancer may avoid surgery with a permanent stoma and experience improved long term functional results and quality of life.

Elegance UC Study

Dr. Anthony De Buck and Dr. Mantaj Brar
General Surgeons



We continue to lead the The 'ELEGANCE UC study' which aims to better understand the impact of ulcerative colitis (UC) on family planning. Women with UC are often diagnosed in their childbearing age. Their diagnosis, therefore, influences women in their family planning, based on their understanding of potential harmful consequences of UC on maternal and fetal health. Therefore, increased involuntary childlessness has been well described in female patients with UC. This study aims to investigate the factors influencing family planning in a very large cohort of patients in North-America. Several large American IBD centres are already collaborating on this project to better understand the reason for childlessness as well as the safest mode of delivery in patients having received an ileal pouch as part of the surgical treatment of UC.

As a team, we hope to improve patient care by a better understanding of the risk factors as well as providing better information to health care providers (gastroenterologists, obstetricians, surgeons and family doctors) and patients. This may improve maternal care in this large population of patients in their childbearing age.

FUNCTION Trial

The FUNCTION trial is a multicentric international randomized trial looking at the functional outcome of patients receiving pouch surgery. Patients are now actively recruited for this trial aiming to assess the difference in functional outcome between laparoscopic and transanal pouch surgery, a more innovative way of treating UC patients. Multiple large IBD centres in North-America and Europe are participating in this effort.

IBD-SIRQC Initiative

We have successfully applied to participate to the 'Surgical Innovation, Research and Quality Collaborative in IBD' (IBD-SIRQC) initiative. This is a very recent collaborative sponsored by the Crohn's and Colitis Foundation USA to stimulate research in IBD surgery. This project gathers 8 large IBD centres in North-America. Mount Sinai Hospital is the only Canadian centre to participate in this ground-breaking project as 1 of the 8 participating centres. IBD-SIRQC aims to collect clinical data as well as biosamples of 5000 patients to facilitate high-quality research. This is a very unique project that has never been done in IBD surgery and will allow us to obtain a large sample of robust data.

Announcements

Dr. Zane Cohen appointed to the Order of Canada



Congratulations to Dr. Zane Cohen, Director of the Zane Cohen Centre at Mount Sinai Hospital on his appointment to the Order of Canada for his innovative surgical methods in the field of colorectal surgery and for his leadership in the treatment of gastrointestinal diseases. With a medical career spanning more than four decades, Dr. Cohen is an internationally renowned surgeon, whose leading-edge techniques in the field of inflammatory bowel disease and inherited colorectal cancer were the first to be deployed in Canada. He was the first surgeon to use novel surgical techniques for patients with ulcerative colitis, including the Kock pouch and the J-pouch. These techniques helped people resume normal lives, without the need for an external bag to collect waste. Dr. Cohen developed Canada's first Colorectal Surgery Training Program at the University of Toronto along

with a Fellowship Training Program. While Chair of U of T's Division of General Surgery, he initiated a gender neutrality policy to recruit the best and brightest female surgeons. The proportion of female surgeons in Toronto's academic teaching hospitals subsequently rose from 40 percent. Dr. Cohen served as Mount Sinai's Surgeon-in-Chief from 1990 to 2006. He also established one of the world's largest research databases for patients with IBD and the largest Hereditary Gastrointestinal Cancer Program in Canada. A new emphasis on testing and screening, developed at Mount Sinai and adopted widely, has prevented many cases of fatal colon cancer. The Order of Canada was developed by the Governor General of Canada is one of the nation's highest honours, recognizes Canadians who have made extraordinary contributions to the country. This year's appointees were announced on June 29, 2022.

Welcome to our Advanced IBD fellows

Pablo Olivera Sendra (Argentina)
Roxana Chis (Canada)

Sun-Ho Lee (South Korea)
Mishal Al Showair (Saudi Arabia)

Ronit Das (United Kingdom)
Erin Ly (United States of America)

Thank you to departed fellows

Cristian Hernandez-Rocha (Chile)
Rogier Goetgebuer (The Netherlands)

Haim Leibovitzh (Israel)
Emmanuel Gonzalez Moreno (Mexico)

Helena Martinez Lozano (Spain)

Provincial Head of the Provincial Genetics Program



We are delighted to announce that Dr. Raymond Kim will be the Provincial Head of the Provincial Genetics Program effective immediately. In this role Dr. Kim will provide strategic leadership and oversight to the Provincial Genetics Program (PGP) access and quality improvement initiatives.

Dr. Kim is a well respected and highly engaged leader in the field of medical genetics in Ontario, known for his passionate advocacy for patients and families, genetic counsellors and the entire team of providers caring for this important patient population. He is a graduate of the MD/PhD Program at the University of Toronto and is uniquely trained in both internal medicine and medical genetics. As a Clinician-Scientist, he has held multiple clinical, scientific and health leadership roles. Dr. Kim is well known to Ontario Health (Cancer Care Ontario) as he has been an active contributing member of several working groups and committees, including the Clinical Cancer Genetics Services Models of Care and Hereditary Cancer Testing Criteria Working Groups. More recently, he was appointed to the newly formed Provincial Genetics Advisory Committee (PGAC). Dr. Kim is also a

longstanding member of the Ontario Genetics Advisory Committee (OGAC), a sub-committee of the Ontario Health Technology Advisory Committee (OHTAC). Dr. Kim has a strong interest in dissemination of knowledge about genetics and genomics and the use of novel technologies in research and clinical care. He is the Scientific Lead for the Ted Rogers Centre for Heart Research Cardiac Genome Clinic and the Director of the Ontario Hereditary Cancer Research Network at the Ontario Institute for Cancer Research (OICR). Dr. Kim leads several large-scale genomics studies including CHARM: Cell free DNA in Hereditary and High-Risk Malignancies, a pan-Canadian study evaluating novel liquid biopsy techniques for the early detection of cancer in hereditary cancer syndromes. Dr. Kim is a practising medical geneticist at the University Health Network (UHN) hospitals, Sinai Health System, and The Hospital for Sick Children in Toronto. He is the Medical Director of Cancer Early Detection and the Familial Cancer Clinic at the Princess Margaret Cancer Centre, and an Associate Professor in Medicine at the University of Toronto. Please join us in congratulating Dr. Kim on his appointment to this role and feel free to share this announcement with those who may be interested.

Our Wings to Fight

The Zane Cohen Centre team attended the annual gala on **September 16, 2022**. Our Wings to Fight is a non-profit organization raising funds and awareness in Support of IBD Research for The Zane Cohen Centre for Digestive Disease. What started out as a desire for the group to make a difference has become a mission to finding a cure for this debilitating disease. The cheque presentation event will occur on **Friday, November 4th** at the Zane Cohen Centre. Learn more at: ourwingstofight.com



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all we do from seamless care to scientific discovery**



“Join the dots more quickly” to bring new knowledge into practice for better care for patients and their families. There are many ways to support our work. These include gifts of cash, stocks or existing insurance policies. Legacy gifts to the Zane Cohen Centre can also be designated in a will.

To donate online: www.zanecohencentre.ca/donate

or contact:

Sinai Health Foundation

Phone: 416-586-8203

Toll free: 1-877-565-8555 or

Email: foundation@sinaihealthfoundation.ca

Mail: Sinai Health Foundation

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