OPEN SKIES

COVID-19 Issue #2 - Department of Surgery Newsletter

Vol.7 No.3
November 2020

Virtual Resident Research Day

WHAT'S INSIDE

University of Saskatchewan
Saskatchewan Health Authority

CHAIRMAN'S MESSAGE

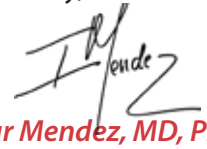
"Our Department has coalesced into a highly efficient and committed unit that continues to respond to the pandemic with resilience, compassion and a high level of integrity."

As I write these lines, the number of COVID-19 cases in Saskatchewan are rising again and Flu season is just around the corner. Although the dire projections of the initial days of the pandemic on the number of cases, hospitalizations and mortality never came to fruition in Saskatchewan, COVID-fatigue is now tangible.

Although, the surgical backlog of the initial postponement of elective surgery is weighing heavily on all of us, we have successfully implemented a province-wide surgical resumption plan to deal with current and postponed cases. The surgical algorithms put in place at the beginning of the pandemic have been very effective in dealing with regional outbreaks and have been invaluable in keeping our surgical teams and patients safe. Our proprietary smart phone App - **Inventory** - has been upgraded to provide real-time information about the continually changing areas of increase COVID-19 activity in the Province to ensure proper screening. Surgeons have at their fingertips, in real-time, access to all the necessary information to make decisions about the COVID status of their patients and implement the appropriate surgical COVID pathway.

Preparations are being made to face a second and possible more severe COVID-19 wave. For eight months, we have been dealing with the greatest health care crisis in 100 years. During this pandemic time, the societal and personal toll has been significant but I have witnessed the triumph of the human spirit. The level of support among colleagues and other health care workers has been exceptional and sustained on a daily basis. The dedication and selflessness of surgeons and surgical teams to provide care to COVID-19 positive patients has been exemplary. I have seen our Department coalesce into a highly efficient and committed unit that has responded and continues to respond to the pandemic with resilience, compassion and a high level of integrity. If there is a silver lining to the pandemic, it is the highlighting of these qualities that make us human.

Sincerely,



Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS
F.H. Wigmore Professor of Surgery
Saskatchewan Provincial Head of Surgery

OPEN SKIES newsletter is a publication of the Department of Surgery at the College of Medicine, University of Saskatchewan.

It is distributed to all surgical faculty, residents and collaborators of the Department of Surgery, as well as surgical teaching centres in Canada and abroad.

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Contributors

Dr. Ivar Mendez
Dr. Scott Adams
Dr. Mark Abou-Ghaida
Dr. Garson Chan
Dr. Alicia Chow
Dr. Chun Huang
Dr. Ruban Kanagaratnam
Dr. Ritesh Kumar
Dr. Daryl Fourney
Dr. Gary Groot
Dr. Francis Christian

Design/Digital Production
Department of Surgery Communications

DEPARTMENT OF SURGERY
College of Medicine
University of Saskatchewan

107 Wiggins Road, Suite B419
Health Sciences Building
Saskatoon, SK S7N 5E5

TEL: 306.966.7323
FAX: 306.966.8026
Email: open.skies@usask.ca
www.medicine.usask.ca/surgery

TELEROBOTIC ULTRASOUND DURING COVID-19

Tele-robotic Prenatal Ultrasound in La Loche during the Pandemic Outbreak

In spring 2020, La Loche, a northern village in Saskatchewan, became the epicentre for the COVID-19 pandemic in Saskatchewan. With more cases in the Far North than the two largest cities in the province, provision of healthcare services became even more challenging and barriers to care became even greater for this northern community. International guidelines recommend that obstetrical ultrasound imaging be continued throughout the pandemic, though in this community where ultrasound services are available only one day per month even at the best of times, new solutions were urgently required for the continued provision of ultrasound services during the COVID-19 outbreak.

To minimize travel in and out of the community and to meet urgent healthcare needs, a team in the Department of Surgery, in collaboration with the Department of Medical Imaging and Northern Medical Services, rapidly developed a telerobotic ultrasound clinic in La Loche. This work, led by Drs. Ivar Mendez, Scott Adams, Paul Babyn, Brent Burbridge, Leslie Chatterson, and Veronica McKinney, drew upon recent clinical trials at the University of Saskatchewan which demonstrated the feasibility of telerobotic ultrasound for abdominal and obstetrical ultrasound.

Using a telerobotic ultrasound system, sonographers or radiologists 605 km away in Saskatoon remotely manipulated an ultrasound probe, remotely performing and interpreting diagnostic ultrasound exams for patients in La Loche. Nearly 30 patients had ultrasound exams performed using this technology during a time when the community needed this technology the most, providing patients timely access to specialist radiology services and minimizing the risk of transmission of COVID-19.

The team has now established telerobotic ultrasound systems in three Saskatchewan communities which otherwise do not have regular access to diagnostic ultrasound. The team's work demonstrates how telerobotic ultrasound may improve access to diagnostic ultrasound imaging, increase patient safety, and reduce health inequities during and after the COVID-19 pandemic.

NEW FACULTY IN SURGERY

Dr. Mark Abou-Ghaida, Orthopedic Surgery
Moose Jaw, SK

Dr. Garson Chan, Urology
Saskatoon, SK

Dr. Alicia Chow, General Surgery
Moose Jaw, SK

Dr. Mark Abou-Ghaida graduated from medical school at the University of Alberta and completed an Orthopaedic Surgery residency at the University of Saskatchewan. He went on to complete further subspecialty training in Sports Medicine and Adult Hip and Knee Reconstruction. He is certified by the Royal College of Physicians and Surgeons of Canada and is registered with the American Board of Orthopaedic Surgery.

His current areas of interest are in shoulder and knee sports medicine, shoulder/hip/knee joint salvage and replacement, and in adult and pediatric trauma.

Dr. Abou-Ghaida is an avid sportsman and enjoys spending his leisure time outdoors exploring local and countrywide destinations and attractions.

Dr. Garson Chan completed medical school at the University of Saskatchewan and his urological surgery training at Western University. He then spent two years of additional clinical training with an immersive fellowship in neurourology, reconstruction and functional urology in Melbourne, Australia. It was here that he experienced for the first time, winter without snow. He has still not become accustomed to the local delicacy of Vegemite.

Dr. Chan has presented at numerous international meetings, co-authored over 30 peer-reviewed articles and abstracts, and serves as a reviewer for several urology journals.

Dr. Chan strives for excellence in genitourinary reconstruction, and hopes to start offering sacral neuromodulation for lower urinary tract dysfunction. His other clinical interests also include stricture disease, erectile dysfunction, urinary incontinence, and pelvic organ prolapse. He is happy to return home to Saskatchewan, where there are 4 full seasons.

Dr. Alicia Chow received her Bachelor of Science in Biology from the University of Regina. She completed medical school and General Surgery residency at the University of Saskatchewan. Throughout residency, she developed a special interest in thyroid cancer. Following residency, she completed a one-year Head and Neck Surgical Oncology fellowship at the University of Manitoba in Winnipeg.

In addition to general surgery, her subspecialty training includes thyroids, parathyroids, parotids, skin cancers, neck masses and oral cavity lesions.

She is thrilled to be back home in Saskatchewan with her one-year old son Emmett and husband Dat. She recently started her practice in Moose Jaw on September 1, 2020 and is excited to serve the community.

Dr. Chun Huang, General Surgery
Moose Jaw, SK

Dr. Ruban Kanagaratnam, General Surgery
Swift Current, SK

Dr. Ritash Kumar, Neurosurgery
Regina, SK

Dr. Chun Huang graduated medical school at the University of Saskatchewan and completed his postgraduate training in Urology at the University of Manitoba. He then moved to the United States, completing a 2-year fellowship in Urologic Oncology at Memorial Sloan Kettering Cancer Center in New York.

His research interests include improving oncologic outcomes in patients undergoing surgery for cancers of the genitourinary tract. During his fellowship, he led the largest effort to virtually map lymph node recurrences after surgery for urothelial carcinoma of the bladder.

His clinical interests include testis, prostate, bladder, kidney, and adrenal malignancies. He hopes to add to the expertise in bladder cancer management in Saskatchewan, including offering complex urinary diversion such as neobladders after radical cystectomy.

Dr. Ruban Kanagaratnam is a new staff surgeon at the Cypress Regional Hospital in Swift Current, Saskatchewan. He completed his General Surgery training at the University of Saskatchewan followed by a Trauma and Acute Care Surgery Fellowship at the University of Toronto.

For the past 7 years, he has worked as a community General Surgeon in rural Newfoundland, Manitoba, and most recently in British Columbia.

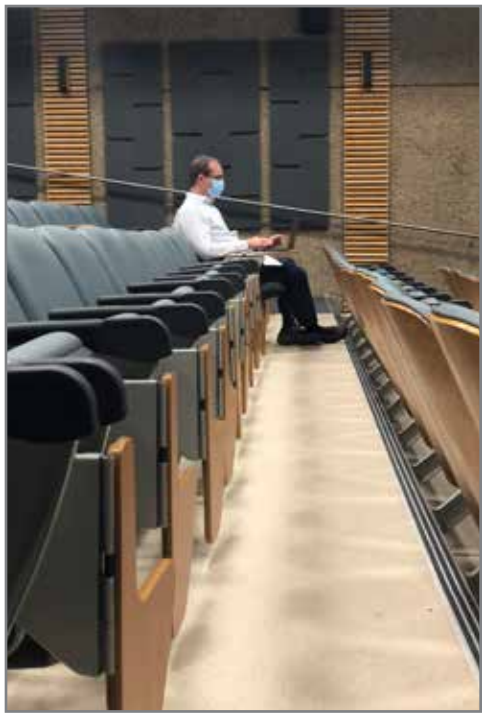
In addition to his clinical work, he has been active in clinical research in the community setting. His most recent projects involved community involvement initiatives, provincial surgical referral pattern analysis, high risk colorectal cancer surveillance program development, access to health care in rural remote and 3D printing in rural medicine.

Dr. Ritesh Kumar is a staff surgeon with the Division of Neurosurgery in Regina, Saskatchewan.

He completed his Bachelor of Science in Biochemistry at the University of Ottawa. He then continued on to completed both his M.D. and his Neurosurgical Residency Training at the University of Ottawa. In the middle of his residency training he took 5 years to complete his Ph.D. in cancer signalling, studying the molecular biology of glioblastoma, a devastating brain tumor and worked on the development of novel therapeutic targets. After completing both his Ph.D. and residency, he started his practice in Regina, SK.

His academic interests are mainly on brain tumors with a special emphasis on glioblastoma. He hopes to continue basic science and clinical research through collaborations with colleagues at the U of S. Outside of academia his hobbies include travelling and as a result he has visited 13 countries in the last 10 years. He also enjoys playing basketball, watching movies and spending time with his family.

VIRTUAL RESIDENT RESEARCH DAY



Dr. John Shaw, (attending in Theatre)

Dr. Nawaf Abu-Omar (R3, General Surgery)

Dr. Dary Fourney, Director of Research

On October 8th, our Resident Research day was held with a virtual format for the first time. Each and every year, I continue to be impressed by the quality of the studies presented from all across our Department. This outstanding effort from our residents made the task of our judges (Dr. L. Mack, Dr. S. Papagerakis, Dr. Y. Luo, Dr. J. Radic and Dr. L. Sims) quite challenging.

Attendance was excellent. Audience participation was not diminished by the virtual format, facilitated by our moderators (Dr. P. Mick and Dr. S. Gowing), as well as the innovative use of audience polling software. Our invited guest was Dr. Lloyd A. Mack, Professor of Surgery & Division of Oncology, University of Calgary, who spoke on "Evolution of Cytoreductive Surgery and Heated Intraperitoneal Chemotherapy; It All Starts with the Appendix."

The smooth interaction with the virtual format would not have been possible without the efforts of many staff in the Department of Surgery. Luis Bustamante deserves a special mention for leading the technical aspects of the virtual event logistics. I also wish to thank Karen Mosier and Angie White for developing the program and promotion. Department staff worked on "trial runs" of the event to ensure that everything would run smoothly while following COVID precautions in the RUH Mall Lecture Theatre.

Here is a sampling of some of the feedback from the evaluations: "I enjoyed the residents presentations the most. It's wonderful to see the productivity of our learners"; "Seeing the quality of research the residents are involved in, its inspiring to see our residents developing into clinician scientists."; "The perfect organization of a virtual event during a pandemic crisis. The coordination between in person with virtual participants was excellent. It was very rewarding to see that there were so many participants."

In summary, the challenges of 2020 made Resident Research Day extra special this year. It brought the whole Department together for the first time since the COVID crisis started, reminding us all of a "higher purpose", achieving excellence through innovation and collaboration.

Developing a Rapid Evidence Response to COVID-19: The Collaborative Approach of Saskatchewan

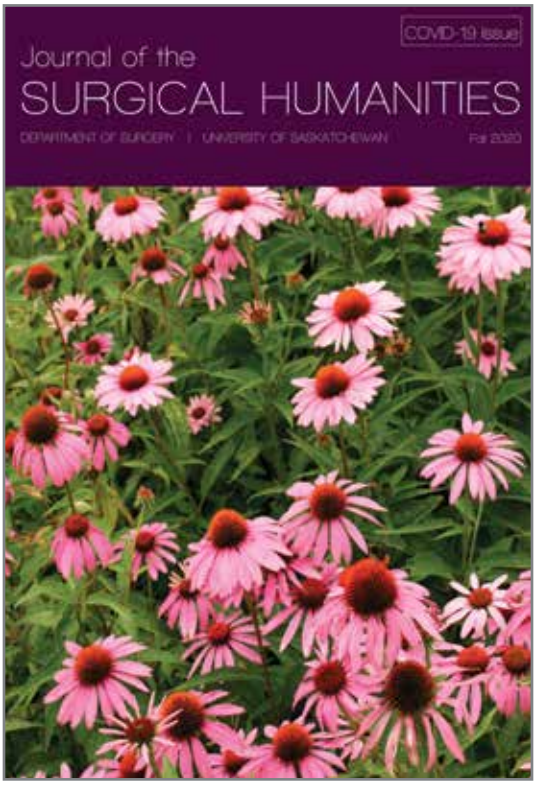
Dr. Gary Groot, Chair, COVID Evidence Support Team (CEST)

The COVID-19 Evidence Support Team (CEST) was the Saskatchewan initiative that merged the support of COVID-19 response partners, policymakers, researchers, and clinical practitioners in a knowledge generation process. The primary aim of CEST was to meet the urgent need to synthesize COVID-19 evidence to facilitate decision-making and pandemic response in Saskatchewan. To achieve this goal, an oversight committee of key representatives from the Saskatchewan Health Authority (SHA), College of Medicine at the University of Saskatchewan, Health Quality Council (HQC), and Ministry of Health was established. Chaired by Dr. Gary Groot, the oversight committee developed a rapid, evidence-based system in response to COVID-19 inquiries from the SHA Emergency Operations Centre (EOC) and its standing committees, and more recently the Public Health Incident Command Center (PHICC).

The standard process of CEST included four main steps: identifying questions, assigning questions, evidence search and synthesis, and sharing reviews with EOC. This process generated two data types: Evidence Search Reports and Rapid Review Reports. Finally, a database and repository, including a dashboard was created on the SHA library website to organize the questions, their status, and provide a single electronic platform for easy access to the reviews. The production and development of rapid reliable evidence initiated a new learning cycle in response to the COVID-19 pandemic and enabled decision-makers to deliberately implement change and weigh costs and benefits of their actions based on the latest knowledge using a team that was both interdisciplinary and inter-institutional. While the initial knowledge users were the EOC, the repository could serve as a long-term knowledge translation tool for administrative, academic, and clinical purposes.

This initiative has laid the inter-jurisdictional collaborative groundwork necessary for a functioning Learning Health System in Saskatchewan.

COVID-19 ISSUE: SURGICAL HUMANITIES JOURNAL



Cover, COVID Surgical Humanites Journal

Humanities Article: Dispatches from the Front Lines ...
ICU - SP Emergency Field Hospital, Cremona, Italy (Image courtesy of Samaritan's Purse)

The Fall 2020 edition of the Journal of The Surgical Humanities will shortly be in your hands (and on your screens). This has been an extraordinary year – and we hope that the Journal will be judged by you, the Reader, to be an extraordinary issue as well.

Again and again, our medical and paramedical staff, our housekeeping staff, our grocery store workers and all those who have kept our lives moving as normally as possible, have risen to extraordinary levels of selfless duty and sacrifice in the service of our fellow human beings. Nor has the pandemic been successful in halting the progress of the spirit of the artist – all over the world, artists, musicians, poets and novelists have been inventing extraordinary new ways in which to engage the creative spirit within and the world without.

Many centuries ago, there was a time every bit as extraordinary as these 2020 times – the "great London plague" of 1665 was meticulously chronicled by the diarist and statesman Samuels Pepys. Extracts of his celebrated diary written during this time will also be carried in the Fall 2020 issue of The Journal of The Surgical Humanities.
All this and more in the Fall 2020 issue of the Journal.

And with it, we hope, a message of hope … that should, amidst all the disruption and suffering, all the heartaches and all the loss … fit in very well with the upcoming season of Christmas cheer and usher in yet another year in mankind's extraordinary journey on planet earth.

Dr. Francis Christian
Editor, Journal of The Surgical Humanities