



UNIVERSITY
OF ALBERTA

2023-24 ANNUAL REPORT

DEPARTMENT OF ANESTHESIOLOGY
AND PAIN MEDICINE

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MESSAGE FROM THE CHAIR & ZONE DEPARTMENT HEAD

Dear Colleagues and Friends,

We are pleased to present our 2023-24 annual report for the University of Alberta Department of Anesthesiology and Pain Medicine. As we reflect on the past year, we are deeply appreciative for the dedication and achievements of our faculty and staff. Your steadfast commitment to excellence continues to shape the success of our department and advance our mission to improve patient care, foster innovation, and educate the next generation of healthcare professionals.



Dr. Derek Dillane
Professor and Chair

Our department consists of 6 full time continuing faculty, 2 special continuing faculty and almost 200 clinical faculty based at 11 hospitals, including 4 major teaching hospitals, in the Edmonton area. We are committed to excellence in clinical care, exemplary postgraduate education in anesthesiology, perioperative and pain medicine and the discovery and dissemination of new knowledge in both basic science and clinical research.



Dr. Dominic Cave
Clinical Professor
Zone Department Head

Every day, our clinicians deliver outstanding care across the full spectrum of anesthesiology and pain medicine demonstrating expertise and resilience. We have expanded access to specialized treatments, enhanced patient outcomes, and strengthened partnerships within our healthcare system. These efforts ensure that we remain at the forefront of delivering high-quality, patient-centered care. In addition to excelling within these areas, our clinical team is dedicated to upholding the highest standards of patient safety and quality. A special thanks goes to Dr. Paula Holinski and all our patient safety leads for their exceptional efforts in advancing quality improvement initiatives. Their leadership and dedication have led to significant strides in ensuring safer, more effective care for our

patients. Looking ahead to 2025, we are excited to place an even greater emphasis on patient safety and quality initiatives. We will be sharing more details about these efforts in the coming months and look forward to engaging with all of you as we work together to achieve these goals.

Under the expert direction of Dr. Warren Luksun, our Anesthesia Care Team program has made remarkable strides in improving access to healthcare. This innovative approach leverages the skills and potential of dedicated RT III Respiratory Technicians, recognizing their invaluable contributions to patient care. By fostering collaboration within the anesthesiology led team, the program ensures efficient and high-quality perioperative care. This model enhances both operational efficiency and patient outcomes, reinforcing our commitment to excellence in clinical care.

Our department's research endeavors continue to thrive, driven by the outstanding work of our research faculty in both clinical and laboratory settings. Their efforts consistently result in significant achievements, including securing competitive grants, publishing in top-tier journals, and delivering academic presentations at prestigious conferences on both national and global stages. These successes not only enhance our reputation as a leading institution but also contribute to advances that have a meaningful impact on patient care and the broader medical community. Here we would like to recognize the dedication of our senior researchers for their mentorship and support of the early career researchers in our department.

Equally commendable are our advancements in clinical education and training. Our faculty's dedication to fostering a culture of learning has enriched the experiences of our residents, fellows, and students. By integrating cutting-edge practices and mentorship, we continue to prepare future clinicians and researchers to excel in an ever-evolving healthcare landscape.

This year, we extend our heartfelt gratitude to all department members who have retired, recognizing their years of dedication, expertise, and unwavering commitment to our mission. Their contributions have played a pivotal role in shaping the success and reputation of our department. Through their hard work and leadership, they have left an enduring legacy, and their impact will be felt for years to come. A special mention goes to Dr. Rob Seal, who recently received the prestigious Life Achievement Award – Medal of Service from the Edmonton Zone Medical Staff Association (EZMSA). Dr. Seal is widely recognized for his outstanding contributions to pediatric cardiac anesthesia at the University of Alberta Hospital and his dedicated service

to the broader anesthesia community. As a past president of the Canadian Anesthesiologists' Society, he has demonstrated exemplary leadership and commitment to advancing the field of anesthesiology nationally. We are proud to celebrate this well-deserved recognition of his remarkable career and wish him well in his role as Chair International Council of Motorsports Sciences. We would also like to recognize Dr. Scott Paterson who was awarded "Member Emeritus" status from the Alberta Medical Association (AMA). The Member Emeritus Award recognizes over 20 years of distinguished service. During that time Dr. Paterson served the AMA on many engagement panels, working groups, committees, and the Section of Anesthesia executive. As a long-serving Section of Anesthesia Fees Representative Dr. Paterson consistently demonstrated level-headed fairness and meticulous attention to detail, values our anesthesia community has greatly benefited from. We wish all our retired colleagues the very best in this new chapter of their lives and thank them for their remarkable service to our team and the patients we serve.

Thank you all for your contributions to this extraordinary year. Together, we will build on these successes and continue to achieve excellence in all aspects of our mission.



TERRITORIAL ACKNOWLEDGEMENT



THE UNIVERSITY OF ALBERTA, ITS BUILDINGS, LABS AND RESEARCH STATIONS ARE PRIMARILY LOCATED ON THE TERRITORY OF THE NÉHIYAW (CREE), NIITSITAPI (BLACKFOOT), MÉTIS, NAKODA (STONEY), DENE, HAUDENOSAUNEE (IROQUOIS) AND ANISHINAABE (OJIBWAY/SAULTEAUX), LANDS THAT ARE NOW KNOWN AS PART OF TREATIES 6, 7 AND 8 AND HOMELAND OF THE MÉTIS.

THE UNIVERSITY OF ALBERTA RESPECTS THE SOVEREIGNTY, LANDS, HISTORIES, LANGUAGES, KNOWLEDGE SYSTEMS AND CULTURES OF ALL FIRST NATIONS, MÉTIS AND INUIT NATIONS.

VISION, MISSION, & VALUES

VISION

A Department of Anesthesiology and Pain Medicine recognized for people who embrace exceptional patient care and innovative education and research.

MISSION

To provide the best quality patient care, education and research through teamwork, safe practices and innovation.

VALUES

Transparency - The availability of information is free and open while simultaneously remaining respectful of privacy requirements and confidentiality agreements. We believe this to be the foundation of the way we work with each other, our colleagues and patients.

Accountability - We own our actions and outcomes. We believe in measuring and reporting our results.

Respect - We value others, their differences, their contributions, their inherent worth as individuals. We believe in the autonomy and dignity of individuals, the mutuality of our relationships and the principle of inclusiveness.

Professionalism - We fulfill our duty to the public, give back to the profession, act with integrity, fulfill our obligations to one another and deliver safe care. We believe in the principle "First do no harm".

Learning - We are lifelong learners. We believe in creating a nurturing, learning environment that challenges and mentors individuals to reach their full potential.

Innovation - We are open to trying and evaluating better ways of doing things and to a culture of curiosity and discovery.

Workplace satisfaction - We are a workplace that values its people, is responsive to their lifestyle needs and engages their hearts and minds. We believe in valuing the worker as much as the work.

Wellness - We are committed not only to the wellness of our patients, but to ourselves, each other and our families. 'Balance' is fundamental to this value.

CLINICAL LEADERSHIP

LIVER TRANSPLANT GROUP

Our liver transplant anesthesia group provide perioperative care at one of the busiest transplant centers in Canada. We have an outstanding group of anesthesiologists, from a varied background, providing a wide breadth of practice and skills.

Transesophageal echo is available, and several team members are advanced TEE certified. Anesthesia is involved in the selection and approval of each transplant candidate and routinely attend transplant rounds.

Each transplant presents its own unique complexities, and the average MELD of our recipients is increasing. Managing massive hemodynamic and coagulopathic derangement is a part of our everyday practice. Additionally, approximately 20% of our recipients undergo transplantation on continuous renal replacement therapy, adding further complexity. Advanced life support equipment such as ECMO is available at our center, as well as ROTEM for real time assessment of coagulation.

Dr. Justin Byers

Assistant Clinical Professor

Division Lead for Liver Transplant Anesthesia

Department Fellowship Director of Liver Transplant



MULTIDISCIPLINARY PAIN CLINIC

The Chronic Pain Team, located at the Kaye Edmonton Clinic provides multidisciplinary services for patients with complex and challenging pain problems. Most referrals are from other pain clinics in the city. Staffed by 5 fellowship trained physicians, the clinic follows the evidence based biopsychosocial treatment model for managing most chronic pain conditions. Input from nursing, clinical psychology and physiotherapy remain invaluable.

Virtual follow up clinics (established during COVID) are popular and are appreciated mostly by those from rural communities who find this method of delivering clinical services convenient, time saving and cost effective.

Our in-patient (on call) chronic pain service is only available at the University Hospital. For over 30 years medical and surgical disciplines, have utilized this service to provide timely care to patients. Collaboration with addiction medicine, liaison psychiatry and acute pain services is now well established.



The Clinical Psychology Team has been providing a growing range of pain management courses from Pain 101 to Pain 701. Dr Mark Simmonds (a certified teacher in this area) teaches on mindfulness and self-compassion and his courses are well attended and also well received by our patients.

Interventional procedures are now mostly office based using the latest in ultrasonography (recent purchase of USS machine). Our evidence based spinal cord stimulator programme is up and running having successfully implanted several patients early this year.

Our team is continually engaged in education of residents from anesthesiology, addiction medicine, psychiatry and clinical psychology. Dr Bruce Dick is involved in collaborative research initiatives both locally and internationally.

Dr. Jabulani Moyo

Assistant Clinical Professor
Director, Multidisciplinary Pain Clinic
Kaye Edmonton Clinic

NEUROANESTHESIA GROUP

Throughout the last year the neuroanesthesia team from the Department of Anesthesiology and Pain Medicine at the University of Alberta Hospital has continued to support our neurosurgical colleagues and deliver emergent and elective neuroanesthesia services.



During 2023, a total of 503 craniotomies were performed which was a slight increase from the previous year. One hundred and nineteen of the craniotomies were emergent, requiring surgery within 12 hours. Included in the latter were 43 STAT cases for hemorrhage. Tumours continued to be the most prevalent pathology requiring craniotomy with 184 tumour resections being performed over the year. The remainder of craniotomies were undertaken for a variety of procedures including clipping of aneurysms and arteriovenous malformations, microvascular decompression and epilepsy procedures. The number of carotid endarterectomies increased significantly to 80 for the year, compared to 2022 when we were just averaging 1 per week. Like previous years, brain biopsy, burr hole and

ventriculoperitoneal shunt surgeries contributed a significant case load as well as pituitary procedures. Another substantial case load came from spine procedures. Awake insertion of deep brain stimulators steadily continued to gain momentum. The majority of these being inserted for Parkinson's disease.

Out with the operating to room, the adult anesthesiology division as a whole, continues to deliver anesthesia for the biplanar angiography suite where complex vascular procedures, including the coiling of aneurysms and arteriovenous malformations are performed. In addition, endovascular thrombectomies for ischemic stroke patients, are also performed in the angiography suite. Cases in our dedicated MRI operating suite with a state-of-the-art 3T MRI slowed during 2023 as our suite underwent maintenance. With this completed, we hope to resume momentum in MRI cases both for tumour resection and laser interstitial thermal therapy.

The diverse neurosurgical program enables us to continue to provide our anesthesiology residents with a wide neuroanesthesia experience. This combined with the enthusiasm of our neuroanesthesiologists has ensured we continue to excel in teaching and is reflected in our rotation feedback. The neuroanesthesia fellowship program is actively seeking candidates. We strive to achieve accreditation from the International Council on Perioperative Neuroscience for our fellowship.

We currently have 16 dedicated neuroanesthesiologists in our team. Last year we welcomed Dr. Jane Yang to our group. Drs Lynn Squires and Mark Wyldbore will be joining us in the near future.

Dr. Jane Yang completed her residency at the University of Alberta in 2023. She then traveled east to complete a neuroanesthesiology fellowship at the University of Toronto. In addition to bringing her knowledge to our department Dr. Yang also works at the Royal Alexandra Hospital.

Dr. Squires also completed her residency at the University of Alberta in 2023 and has recently completed an obstetric anesthesiology fellowship at Stanford University. In addition to obstetric and neuroanesthesia, she also has interests in blood management strategies and ultrasound use in the operating room.

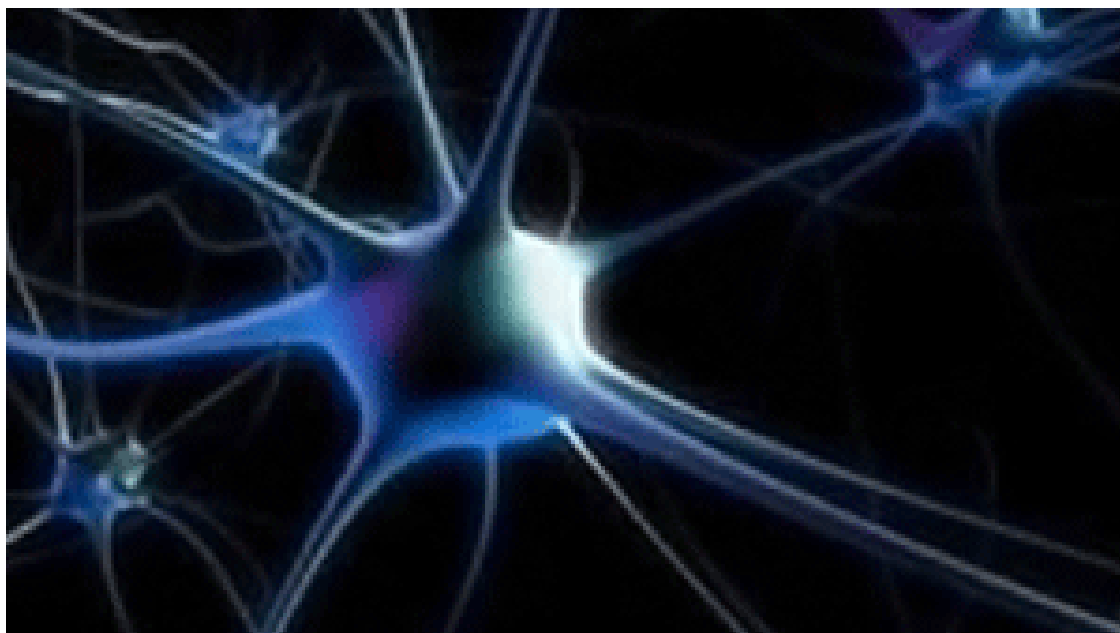
Dr. Mark Wyldebore completed his anesthesia training through the military in London, UK and before joining us he worked at the Queen Victoria and the Royal London Hospital. He has undertaken fellowships in trauma, neuro and regional anesthesia and paediatric anesthesia. He has interests in medical education and clinical leadership. Our staffing requirements are continually reassessed to ensure we provide the necessary elective and emergency coverage.

Dr. Susan Halliday

Assistant Clinical Professor

Division Lead for Neuroanesthesia

Department Fellowship Director of Neuroanesthesia



PEDIATRIC ANESTHESIA GROUP



The Division of Pediatric Anesthesiology is based out of the Stollery Children's hospital. As a quaternary pediatric surgical site with a bed base of over 200, it remains an exciting and vibrant place to work.

In 2023-24 the program supported the training in pediatric anesthesia of both FRCPC residents and FPA trainees as well as 2 fellows in subspecialty pediatric anesthesia and 2 staff anesthesiologists undergoing extra training in pediatric cardiac anesthesia. Trainees have been both local and from out of province.

Members are actively involved in local and provincial administration as well as quality initiatives and pediatric cardiac intensive care, including cross appointments.

We continue to support a successful liver transplant program, busy acute pain service, large and high complexity cardiac surgical program as well as extensive out of operating room practice.

With complex airway reconstruction both with and without cardiopulmonary bypass, high risk neonatal general surgery, neurosurgery, a plastics and burn team and busy orthopedic trauma and spine service, it might seem there would be no space for community pediatric practice, but that is also heavily represented. Allowing for full exposure and training for our trainees in one place.

The Division of Pediatric Anesthesia performed over 17,000 anesthetics across the operating rooms, cardiac catheterization labs and diagnostic imaging locations in the last year, with a growing division of currently 17 staff pediatric anesthesiologists and 3 fellows. Active recruitment is underway to keep up with the growing demand for care.

Dr. Dominic Cave

Clinical Professor
Zone Clinical Department Head Anesthesia
Interim Section Chief Pediatric Anesthesia



REGIONAL ANESTHESIA & ACUTE PAIN MEDICINE GROUP

I started as the subspecialty director in January 2024 following the departure of our previous director, Dr. Vivian Ip, and I am excited to take on this dynamic and challenging role.

The Acute Pain Service (APS) is a subspecialty group of fellowship-trained anesthesiologists and perioperative nurses with enhanced training in pain management. Our focus is ultrasound-guided regional anesthesia and acute pain management for adult patients presenting for day case surgery, same-day admission (SDA) after surgery, and medical inpatients with acute pain concerns. Our service also collaborates closely with the chronic pain service to manage clinically challenging acute-on-chronic pain patients. We serve patients at the University of Alberta Hospital, where we provide 24hr on-call coverage and run a regional anesthesia operating room up to 4 days per week, and Leduc Community Hospital where we provide regional anesthesia for foot and ankle procedures. In addition, we facilitate a Home Regional Program for selected post-operative patients with the support of Alberta Health Services Virtual Home Hospital.

Our team consists of 8 anesthesiologists, 3 acute pain nurses, and several anesthesia technicians and anesthesia care team respiratory therapists (RT3). On average, our team performed 172 nerve block and catheter procedures per month over this past year. Junior and senior anesthesia residents rotate through our service, as well as anesthesia fellows from within Canada and internationally. Our current fellow, Dr. Colleen Harnett, will be completing her fellowship in February 2025.

Each year, our group takes on a new clinical project. Our focus for 2024 has been improving our approach to addictions and opioid agonist therapy in the setting of acute pain. Our team members have been shadowing the ARCH team at the Royal Alexandra Hospital and collaborating with clinical nurse educators in the emergency department, General Systems ICU and burn unit to improve the care we provide to this vulnerable patient population.

Dr. Akua Gyambibi

Clinical Lecturer

Department Fellowship Director of Regional Anesthesia and Acute Pain Medicine

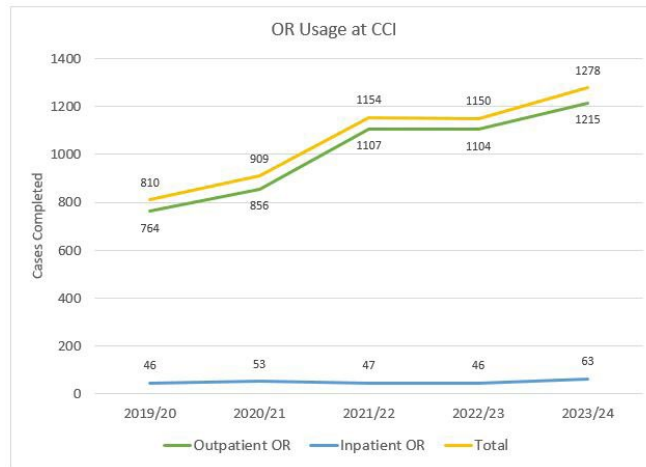


CLINICAL UNITS

Cross Cancer Institute

The Cross Cancer Institute runs one operating room daily, but has been approved to have a second operating room built. Construction is expected to start as early as December. The Cross Cancer will completely shut down during renovation and we are expecting a temporary relocation to the University of Alberta Hospital to continue services.

The administration of anesthesia by MAC and avoiding airway manipulation remains the standard for most surgeries. We continue to show great efficiency as can be seen in the graphic below.



In 2024, we lost four high-volume breast cancer surgeons in the Edmonton Zone. While we know that this will affect the overall numbers of surgeries at the Cross Cancer, we cannot yet fully foresee how much.

Dr. Timur Ozelsel
 Clinical Professor
 Site Lead, Cross Cancer Institute



Grey Nuns Community Hospital

At the Grey Nuns Community Hospital (GNCH) the Department of Anesthesia has been diligently serving the community with a commitment to excellence.

Anesthesiologists

The Grey Nuns Community Hospital is fortunate to have a team of 20 dedicated anesthesiologists with a total full-time equivalent (FTE) of 18. Our department boasts individuals with a diverse set of subspecialty skills including pre and post graduate medical education, medical simulation, intensive care, chronic pain management, transesophageal echocardiography, addictions medicine, and zone quality improvement. These highly skilled and experienced team members play a pivotal role in ensuring the highest quality of care for patients at the Grey Nuns Community Hospital.

The GNH would like to welcome the following additions to our department

- Dr. Sami Belhaj
- Dr. Jaasmit Khurara
- Dr. Ian Kluk
- Dr. Daniela Marsicano
- Dr. Tom Varughese

Surgical Specialties

1. Vascular Surgery (Northern Alberta Vascular Centre)
2. General Surgery
3. Gynecology
4. Obstetrics
5. Otolaryngology (ENT - Ear, Nose, and Throat)
6. Orthopedics
7. Plastics
8. Operative Dental Care for Complex Patients

Surgical and Obstetrical Activity

The Grey Nuns Community Hospital conducts a significant number of surgical and obstetrical cases, including both elective and emergency procedures.

Academic Year	Electives Cases	Emergency Cases	Obstetrical Activity: C-Sections	Obstetrical Activity: Vaginal Deliveries
2023/2024	6,189	1,521	2,449	3,367
2022/2023	6,719	1,560	2,203	3,384
2021/2022	5,996	1,613	n/a	n/a
2018/2019	7,545	1,684	n/a	n/a

*Chart does not include the first two academic years of the Covid-19 pandemic.

Out-of-Operating-Room Services include.

1. Deep procedural sedation for complex/challenging endoscopy, ERCP, and bronchoscopy
2. Electroconvulsive therapy
3. Support for ICU and ED colleagues with emergent or difficult airway management (Difficult Airway Management Team)
4. Preadmission clinic and perioperative consults



New Initiatives

Anesthesia Care Team – We have successfully launched and maintained the Anesthesia Care Team program since April 2024. We currently run this program 4-5 times a week. Surgical services included in the Anesthesia Care Team include plastic, orthopedics, and ear nose and throat. We currently have a total of four RT3 trained staff who help to run this successful program. Currently we are the only site running a consistent Anesthesia Care Team program in the province.

Ongoing Initiatives

The Grey Nuns Community Hospital and the Department of Anesthesia is actively engaged in various initiatives aimed at enhancing the quality and safety of patient care. These initiatives reflect the commitment to continuous improvement and the well-being of its patients:

1. National Surgical Quality Initiative Program (NSQIP): The hospital is actively involved in the National Surgical Quality Initiative Program (NSQIP), a national program focused on improving surgical care quality, patient outcomes, and safety. Through participation in NSQIP, the Department of Anesthesia works to continuously enhance its surgical practices and patient care.
2. Vascular Surgery Initiative (VQI) The hospital is also part of the Vascular Surgery Initiative (VQI), which emphasizes quality improvement in vascular surgery procedures. This initiative ensures that patients receive the highest standard of care in vascular surgery, with a focus on comparison with similar centres and optimizing outcomes.
3. Development of New Bi-Site Surgery Quality Council: In collaboration with the Misericordia Hospital, the Grey Nuns Community Hospital is a part of the newly formed Bi-Site Surgery Quality Council. This council includes representation from both hospitals, fostering a collaborative approach to enhancing healthcare quality. The aim is to collectively improve patient care and safety through shared expertise and best practices.

Other initiatives include surgical site infection reduction, urinary tract infection reduction, optimal perioperative antibiotic prophylaxis timing, perioperative glycemic control, and breast feeding in the perioperative period.

Dr. Raveen Bhalla

Associate Clinical Professor
Site Lead, Grey Nuns Hospital

Leduc Community Hospital

Leduc Community Hospital (LCH), department of anesthesia provides services to 3 operating rooms, 1 postoperative anesthesia care unit, 1 preadmission care clinic and 1 endoscopy suite. Services are provided through one staff general practitioner anesthesiologist at an FTE 0.75 and the remaining services are shared among the University of Alberta Hospital anesthesiologist group and a couple of general practitioner anesthesiologists on a locum and availability basis. LCH provides services to seven surgical specialties of general surgery, neurosurgery, orthopedics, plastics, ENT, urology and recently, vascular surgery. These specialties run in the 3 operating rooms from Mondays to Fridays.

The endoscopy suite performs gastroenterological procedures on Mondays and Wednesdays provided by a gastroenterologist and a general surgeon. The preadmission clinic has two weekly sessions, Tuesdays, and Fridays. LCH has two periods of shutdown per year, one week at the end of December and two weeks in the last week of July and first week in August, over the summer season. LCH does not perform any emergency cases, and all surgical cases are ambulatory in nature.

The LCH anesthesia department has updated some of its equipment with the possession of new target-controlled infusion pumps in each of its operating rooms and the endoscopy suite. The department is mutually involved with teaching and continuous professional development with the nursing department and facilitates in-service teaching sessions one Friday every month with a hiatus during the summer season. With the success of the virtual preadmission clinic in the zone, the Leduc anesthesia department will virtualize its Friday preadmission clinic and maintain the Tuesday preadmission clinic in person. The LCH scheduling and preadmission guidelines have been updated.

Dr. Mahmood Zaki

Assistant Clinical Professor

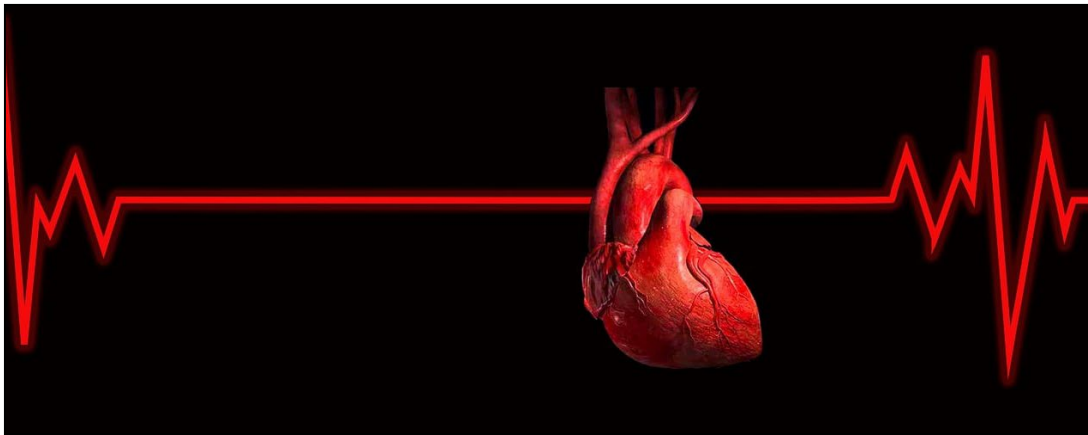
Site Lead, Leduc Community Hospital



Mazankowski Alberta Heart Institute

The cardiac anesthetic group continued to provide excellent care for the patient population presenting for surgery at the Mazankowski Alberta Health Institute in 2024. Case load remained at about 150 cases. In the cardiac catheterization laboratory, the local population demand for catheter ablation therapy for atrial fibrillation/flutter remains significant. This is in keeping with what is happening across all provinces in Canada. Waitlists currently sit at two years for therapy. Funding for extra work has been provided by AHS, and our commitment to this population of patients has increased significantly. Elsewhere, a transcatheter edge-to-edge mitral valve repair program has started this year. Consequently, there will be an increase in the size of the structural heart program in the future.

Away from the bedside, the nonclinical work delivered by members of the group continued.



Drs. Angela Neufeld and Kieran Ganton (R3), along with Dr. Susan Nahirniak (Transfusion Medicine), were successful in obtaining grant funding through the Kaye Competition for their study entitled: *Effects of Whole Blood Storage Method on Platelet Function and Hemolysis in Cardiac Surgery Patients Undergoing Intraoperative Autologous Whole Blood Donation*. This study will assess 3 intraoperative storage methods (continuously rocked, intermittent mixing, and still) for platelet function retention and hemolysis.

Dr. Wing Lam has coordinated our site's involvement in the TRICS IV and Newton-CABG studies. Current quality improvement projects have focussed on ERACS and pre-admission clinic patient satisfaction. Drs. Lam and Surita Sidhu have co-lead initiatives in enhancing education in cardiac surgery and anaesthesia through the use of simulation sessions and the use of cardiopulmonary bypass techniques in pig models. Dr. Sidhu has also assumed a co-editor and authorship role for a book, *Practical Perioperative Transoesophageal Echocardiography* (Sidebotham et al).

Dr. Anthony George

Assistant Clinical Professor
Site Lead, Mazankowski Heart Institute

Misericordia Community Hospital

The period from July 1, 2023 to June 30, 2024 has been a transition period and has brought with it a significant number of changes at the department and site levels. Within the department we have seen changes in staffing as well as in department initiatives. I want to take this opportunity to thank our outgoing Facility Chief, Dr. Will Flexer, for his years of service in that position and for leading our department through what will hopefully stand as the most challenging period that any of us will see in our careers. Sadly this year was also marked by the announcement of the retirement of Dr. John Soong after 35 years of service at the Misericordia Hospital. We thank John for his leadership, mentorship, and tireless work in support of our department and in service to the people of Alberta. We wish him health, happiness and well-earned relaxation in his retirement.

Our main operating room complex consists of 10 multi-use theatres, 2 obstetrical theatres, and 2 adjacent endoscopy suites. Our clinical team currently consists of 21 anaesthesiologists, many of whom also hold other positions, aside from their clinical roles, within the hospital and with AHS. These include roles in simulation, resident/student education and mentorship, connect care, provincial clinical content and knowledge management and quality Improvement among others. We work in close collaboration with an excellent and experienced team of RTs, supportive OR, PARR and L&D nurses and outstanding surgical colleagues.

Year	Total Cases Completed	Emergency/ Unscheduled Cases Completed	C-Sections	Vaginal Deliveries
2023-2024	10827	3048	734	1621
2022-2023	n/a	1560	757	1589
2021-2022	7419	3228	n/a	n/a
2018-2019	10203	3374	n/a	n/a

*Chart does not include the first two academic years of the Covid-19 pandemic.

Surgical services present at our site include general surgery (colorectal, breast, head and neck), urology (men's health, urolithiasis, continence), orthopedic surgery (arthroplasty, spine, cancer, trauma, foot/ankle), obstetrics and gynecology, plastic surgery (including flap-based reconstruction for cancer) and finally oral and maxillofacial surgery (Institute for Reconstructive Sciences in Medicine). We also provide anesthetic services for endoscopy, ERCP, MRI and neuromodulation, an anesthetic consult service, and support to our colleagues in the newly-constructed emergency department (the previous emergency department is in the process of being repurposed). 2023-24 has seen the establishment of the Opioid Use Disorder Team (addiction medicine) as a consulting service within the hospital and the rejuvenation of our regional anesthesia program.

We continue to be a relatively high-volume surgical centre within the Edmonton Zone. In 2023-24 we completed a total of 10827 surgical cases, marking a return to pre-pandemic levels of activity.

Dr. Bernard Sowa

Associate Clinical Professor
Site Lead, Misericordia Community Hospital



Royal Alexandra Hospital

In the period of July 2023-June 2024 we gained 3 staff (total of 1.75 FTE). After many years of dedicated service, Dr. Neil Klassen retired in April 2024. He was an integral member of our leadership team, as former site chief, and at the Edmonton Zone level as former Deputy Zone Lead. His contributions to the department as an amazing clinician, leader and peer cannot be overstated. As of June 2024, our group consisted of 58 members with a total FTE of 35.

Our site consists of 32 operating theatres spread throughout the hospital in 4 key areas: the Diagnostic Treatment Centre (DTC) has 13 ORs, the Active Treatment Centre (ATC) has 8 ORs, the Orthopedic Surgery Centre (OSC) has 4 ORs and the Women's Hospital has 5 ORs with an additional 2 theatres



for Obstetrics. We have a range of surgical specialties at our site including urology, general surgery, thoracic surgery, orthopedic surgery, plastic surgery, neurosurgery (limited to spine surgery), ophthalmology, otolaryngology, maxillofacial surgery, obstetrics and gynecology. Our general surgery group specializes in bariatrics and minimally invasive surgery, trauma and oncology. We provide out of OR services to endoscopy (GI and bronchoscopy/EBUS), pacemakers, diagnostic imaging, preadmission clinic, neuromodulation (ECT), and we run a full Acute Pain Service with nursing support Monday to Friday.

In 2023-24 year, we performed 25,419 elective surgeries (DTC 6538, ATC 12,457, OSC 3015, Women's 3409) and 7155 emergency surgeries (DTC 5389, ATC 1554, OSC 7, Women's 205). Both elective and urgent surgeries are higher than the previous year. In obstetrics, we had a total of 6212 deliveries with 2474 of these deliveries being done by caesarian section (1047 elective 1426 emergent).

This year we were able to continue the development and successful implementation of the Anesthesia Care Team in the orthopedic surgery center. Over 400 patients at our site have received care as part of this model. It has shown great success in increasing patient access to surgery across the zone. We have also been doing some work headed by Drs Vargo, Kokotilo and Ho with preoperative anemia. We have been able to identify patients with iron deficiency anemia preoperatively and arrange for iron infusions. Through a new partnership with the Anemia Management Clinic at the Kaye Clinic, we hope to treat even more patients with a goal to reduce perioperative transfusions and improve patient outcomes.

Dr. Christine Fedorow

Assistant Clinical Professor
Site Lead, Royal Alexandra Hospital

Sturgeon Community Hospital

At the Sturgeon Community Hospital (SCH), the Department of Anesthesia has diligently served the community with a commitment to excellence. Fortunately, we have a team of 17 dedicated anesthesiologists of various full-time equivalents (FTE) and 3-4 locums. Our surgical specialties include obstetrics, orthopedics, general surgery, plastics, gynecology, and endoscopy. Our out-of-operating-room services include labour delivery recovery and postpartum (LDRP), cardioversion, PAC, endoscopy, ward consults/ IVs, and APS consults on the ward.

In addition, we are moving towards splitting 24-hour calls into two shifts of ten and 14-hours. This will allow us to increase the OR coverage from 7 p.m. to 11 p.m. Those measures should decrease the workload, increasing staff satisfaction and patient care and safety, mostly LDRP patients.



Furthermore, we have improved our coverage by having a designated person from 7:00 until 23:00 covering the OR specialties, allowing the obstetric anesthesiologist to fully serve labour and delivery during that time.

Year	# of day surgeries	# of inpatients	total # of cases	% of day surgeries	% of inpatients
2023-2024	3814	2228	6049	63	37
2022-2023	3832	2209	6041	63	37
2021-2022	3655	2104	5759	64	37
2020-2021	3172	2208	5380	59	41
2019-2020	3418	1221	5907	58	21

We are proudly hosting our FRCPC and FPA candidate residents, as well as several medical, RT, and paramedic students, who work in conjunction with our team to better serve our community.

Three TEE-certified anesthesiologists are involved in a new project at the SCH that aims to perform elective and emergent exams alongside the cardiology team.

Dr. Ricardo Bittencourt

Assistant Clinical Professor

Site Lead, Sturgeon Community Hospital

University of Alberta Hospital

At the University of Alberta Hospital attending anesthesiologists provide weekday coverage for the adult operating rooms and the surgical MRI suite. Surgical specialties include orthopedic, trauma, general surgery, hepatobiliary surgery, transplant, neurosurgery, spine, plastic and reconstructive, burns, urology, and ENT surgery. Anesthesia support is also provided outside the operating room for ECT, endoscopy, diagnostic imaging, MRI / CT and the Stroke Program. We also provide anesthesia staffing for a regional anesthesia block room, Acute Pain Service and a Pre-Admission Clinic.

2023-24 has presented unique challenges for the department of anesthesia related to a critical workforce shortage. Despite these challenges I am delighted to acknowledge the relentless dedication and commitment exhibited by the anesthesiologists within the department who have pulled together to cover general, and subspecialty call lines and who have worked beyond their clinical FTE to keep as many rooms open and care for as many patients as possible. I would also like to extend my appreciation to our pool of locum anesthesiologists from around the province and country who are always welcome.



In addition to our highly sought after residency program, which has expanded to 12 new residents for the summer of 2024, we have an established fellowship program with positions for regional, neuro-anesthesia, and liver transplant anesthesia. Many of our current staff anesthesiologists have graduated from one of these programs over the years and we will be happy to welcome our current regional fellow, Dr. Harnett to the group following the end of her fellowship. The Anesthesia Care Team program deserves a mention as we have completed an additional (400 check this) cases over the past 12 month using existing anesthesiology numbers using this innovative model and we thank all those involved with the program for their hard work.

Ongoing challenges include the continued imbalance of unscheduled to scheduled surgical cases. We provided anesthesia for 5,653 (47.9%) scheduled cases and 6,159 (52.1%) unscheduled cases for a total of 11,812 surgeries. We have identified correction of this imbalance as a priority to address over the next 12 months to move towards an equilibrium that is sustainable for the long term.

During the past year Dr. Escuder made the decision to retire after many years as a valuable colleague and we wish him many happy years in retirement. Dr. Hajat moved to New Brunswick and Dr. Ip moved to Calgary and we wish them both well for the future. On the other side of the scale, we are very happy to warmly welcome Drs Yang, Laklouk, Wyldbore and Brown to the department and look forward to welcoming our other new recruits Drs Moazzeni, Glew, Squires and Milne over the summer and fall as the department moves back towards full strength.

Dr. James Green

Professor (Special Continuing)
Site Lead, University of Alberta Hospital

AWARDS & RECOGNITION

INTERNAL AWARDS



TEACHER OF THE YEAR

Dr. Cathy Tang



DR. BRENDAN T FINUCANE RESIDENT ORAL RESEARCH AWARD

1st Place - Dr. Melissa Shears

Polypharmacy: a flag for high-risk emergency surgery patients

DR. BARRY A FINEGAN FELLOW RESEARCH AWARD

1st Place - Dr. Charles Gelinas

A randomized trial of nerve block versus local infiltration for transcatheter aortic valve implantation – Preliminary results

RESIDENT POSTER RESEARCH AWARD

1st Place - Dr. Ryan Brenneis

Two Pokes Too Many: Training and Implementation of Nursing Performed Ultrasound Guided Intravenous Access at The University of Alberta

GRADUATE STUDENT ORAL PRESENTATION

1st Place - Fulin Wang

Optimizing resuscitation of the donation after circulatory death heart by mitochondrial protection in a porcine model



DEPARTMENT EDUCATION LEADERSHIP AWARDS



OUTSTANDING ACHIEVEMENT FOR NEW EDUCATORS

Dr. Haotian Wang

EXCELLENCE IN MENTORING

Dr. Susan Halliday

AWARDS & RECOGNITION

EXTERNAL AWARDS

2024 ROGERIO A. LOBO AWARD

Recognizing the most outstanding contribution to Reproductive Sciences by a member of the Society for Reproductive Investigation (SRI) for Reproductive Investigation



Dr. Stephane Bourque

Use of Photoacoustic Imaging to Study the Effects of Anemia on Placental Oxygen Saturation in Normoxic and Hypoxic Conditions



2024 EZMSA LIFE ACHIEVEMENT AWARD - MEDAL OF SERVICE

Dr. Robert Seal

The Life Achievement Award is presented to an outstanding frontline and retired (or close to retirement) practitioner who practiced in the Edmonton Zone. The recipient must have made contributions in at least two of these areas: going above and beyond to serve patients and the profession when the individual practiced; leaving the environment better than when they entered; teaching/mentoring; advocating for patients and/or the profession; being dedicated to compassionate healthcare improvement and improving patient care; or previously improving the health of patients and/or the community.



Edmonton
Zone Medical
Staff Association



Watch the Dr. Seal interview
(click on the image)

AWARDS & RECOGNITION

EXTERNAL AWARDS



2024 DR. MASARU YUKAWA AWARD FOR INNOVATION IN WORKPLACE WELLNESS



Dr Masaru ('Mas') Yukawa (1977-2017) was Chief of Anesthesia at the Mazankowski Heart Institute. He was an outstanding clinician, teacher and mentor. He died by his own hand, following a long standing and very private battle with mental illness. By creating this award in his name, his family wishes to stimulate the study and remediation of physical, psychological, organizational and other factors that might cause or perpetuate mental illness in those who work in the Operating Rooms of the University of Alberta Hospitals, and, by extension, in other similar places.

Recipients:

Dr. Quinn McLellan,
Dr. Wen Quing Yu
Dr. Dana Boe

Title

Investigating the Relationship between Anesthesiology Resident Physician Lounge Use, Wellness, and Sense of Community



RESEARCH

The Department of Anesthesiology and Pain Medicine at the University of Alberta is committed to the pursuit of academic excellence and knowledge generation to advance clinical care and practice. The Department’s portfolio of clinically oriented, patient driven research has continued to grow. In 2022 The Hugill Research Awards program was launched with pilot research grants being made available to department members and affiliated staff to facilitate the establishment of new research programs that address clinical research questions and challenges to patient care. These awards are supported by the Office of Research who aid in study design, statistical analysis and obtaining approvals for ethics and other required documentation..

The department is also home to three CIHR funded laboratories engaged in multidisciplinary discovery science (see **Research Summaries** from Zaugg, Bourque and Kerr labs). These facilities offer fellows and residents unique scientific opportunities to address research questions using state of the art and cutting-edge technology.

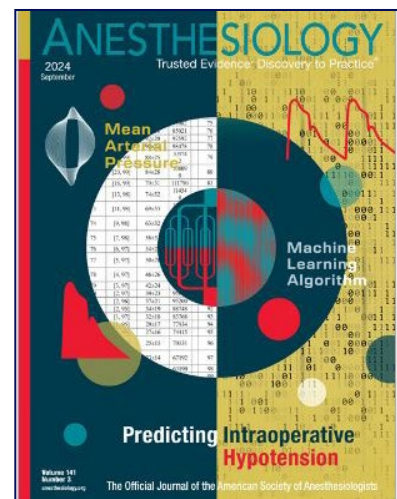


2023-24 PUBLICATIONS

39 Total Publications - see page 53 for full list.

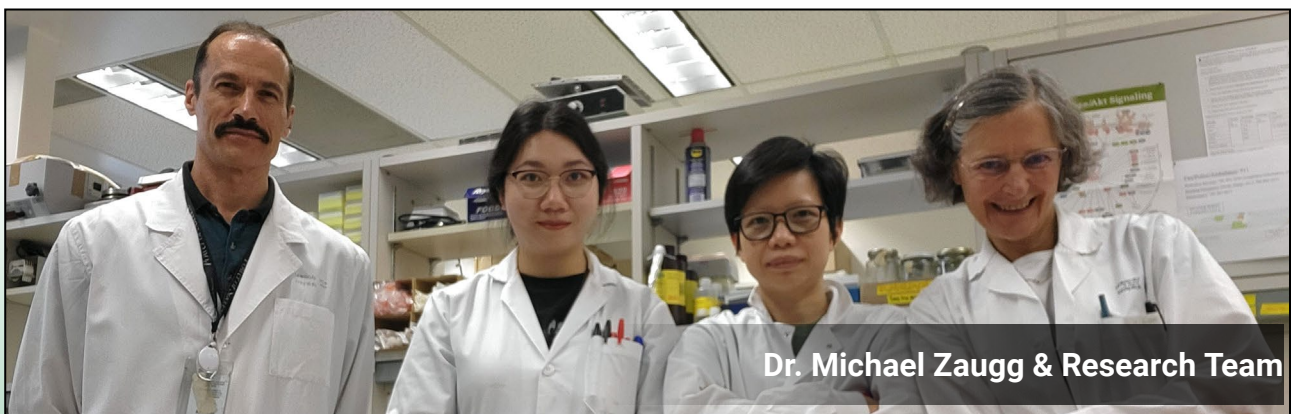
Featured Publication

Wang F, **Lucchinetti E**, Lou PH, Hatami S, Chakravarty A, Hersberger M, Freed DH, **Zaugg M**. Optimizing resuscitation of the donation after circulatory death heart by mitochondrial protection in a female porcine model. *Anesthesiology*. 2024 May 23. doi: [10.1097/ALN.0000000000005093](https://doi.org/10.1097/ALN.0000000000005093). Epub ahead of print. PMID:38780996.



RESEARCH - UPDATE FROM THE LABS

Research in the Zaugg Lab seeks to understand the signaling networks involved in the stress response related to ischemia-reperfusion injury in mammalian cells and tissues, with the goal of translating this knowledge into potential therapies aiming at improving perioperative patient care and outcomes. In addition, we strive to understand the role of metabolic stress and of inflammatory pathways in conditions relevant to perioperative medicine such as major trauma (surgery), transplantation, cardiovascular, and thoracic surgery. Finally, we understand that the enhancement and optimization of nutritional support in surgical and critically ill patients is of great importance at a time of major stress with synthesis of key blood/tissue components and necessary for proper wound healing and recovery (regeneration).



Collaborations are always welcome and we very much support research contributing to the understanding of physiological changes (e.g. genetic, metabolome- or microbiome-related) in response to anesthesia and/or to surgical stress in patients.

Additional funding has been secured from

- 1) **Crohn's and Colitis Canada: "Protecting the gut and boosting healthy immunity during oral nutrition deprivation: role of lipid mediators and interleukin-10"**. Exclusive enteral nutrition therapy (EEN, where patients receive all calories needed through formula and do not eat regular food) is used in children with inflammatory bowel disease (IBD) to induce and maintain remission by reducing inflammation of the gut and improving nutrition. It can be also used in adults with IBD, specifically frail elderly IBD patients suffering from additional diseases such as diabetes, heart failure or cancer, where the administration of strong medications with adverse side-effects needs to be minimized as much as possible. In this proposal, Dr. Zaugg's team will study a novel EEN formula containing a specific mixture of fatty acids that they developed in the past five years in their laboratories. It has unique properties, namely strong anti-inflammatory effects combined with beneficial effects on both sugar and fat metabolism in the whole body. It also boosts the immune system to efficiently counteract potentially dangerous infections. It is their hope that this novel treatment will induce remission in IBD patients more quickly and will result in a more sustained maintenance of remission. The unique mixture of fatty acids will be tested in a mouse model where they use chemicals to induce acute inflammation of the bowel mimicking IBD conditions. In these studies, they will measure gut inflammation and leakiness and also identify very specific bioactive metabolites of the administered fatty acids collectively called oxylipins and test their causal role in eliciting the beneficial effects. As some patients with severe IBD develop intestinal failure and

are ultimately dependent on intravenous nutrition (total parenteral nutrition, TPN), they will further test the unique mixture of fatty acids in an intravenous nutrition mouse model where they compare their formula with a commercially available standard one. These studies will serve as proof-of-concept that the unique mixture of fatty acids is indeed beneficial in IBD and superior to currently available standard therapies (EEN and TPN). The data collected will provide the scientific evidence necessary to initiate clinical studies in IBD patients. Dr. Zaugg's team involves collaborations with pediatric gastroenterology and immunology.

- 2) **Canadian Institutes of Health, commercialization grant: Vegaven, a novel lipid emulsion with unique superior biological actions designed for parenteral nutrition.** Millions of patients worldwide, namely patients (including infants) with intestinal failure, critically ill, and cancer patients are dependent on life-saving parenteral nutrition (PN). Currently available. PN therapies involving intravenous administration of a combination of fatty acids from lipid emulsions, amino acids, glucose, vitamins, and supplements often cause lipid-induced adverse immune and metabolic effects in these already vulnerable patients. Motivated by the unsatisfactory clinical outcomes such as liver toxicity with potential organ failure, diabetes-like metabolic conditions, and immunosuppression-associated infection risk in patients reliant on PN using currently available lipid emulsions, we developed a novel lipid emulsion (Vegaven) for nutritional therapy. Unlike clinically used lipid emulsions, Vegaven is rich in α -linolenic acid (ALA, C18:3 n-3) and stearidonic acid (SDA, C18:4 n-3). So far, it has been tested in vivo using a murine PN model. The published results provide clear evidence that Vegaven has unique superior biological actions. Vegaven leads to systemic upregulation of the immune-regulatory cytokine interleukin-10, promotes insulin signaling, and displays immunity-enhancing effects by generating beneficial ALA/SDA-derived oxylipins. The proposed experiments with highly relevant preclinical models (piglets, human biopsies) provide a path to Vegaven's successful clinical application and commercialization.

Selected Recent Publications

Wawrzyniak P, Hubeli B, Wawrzyniak M, Nouredine N, Walberg A, Scharl S, Turina M, Scharl M, Zaugg M, Krämer SD, Rogler G, Hersberger M. Crosstalk within peripheral blood mononuclear cells mediates anti-inflammatory effects of n-3 PUFA-rich lipid emulsions in parenteral nutrition. *Clin Nutr*. 2023 Dec;42(12):2422-2433. doi: 10.1016/j.clnu.2023.10.016. Epub 2023 Oct 17. PMID: 37871483

Lucchinetti E, Lou PH, Holtzhauer G, Nouredine N, Wawrzyniak P, Hartling I, Lee M, Strachan E, Clemente-Casares X, Tsai S, Rogler G, Krämer SD, Hersberger M, Zaugg M. Novel lipid emulsion for total parenteral nutrition based on 18-carbon n-3 fatty acids elicits a superior immunometabolic phenotype in the murine model compared to standard lipid emulsions. *Am J Clin Nutr*. 2022 ;116(6):1805-1819. PMID: 36166844

Nouredine N, Hartling I, Wawrzyniak P, Srikanthan P, Lou PH, Lucchinetti E, Krämer SD, Rogler G, Zaugg M, Hersberger M. Lipid emulsion rich in n-3 polyunsaturated fatty acids elicits a pro-resolution lipid mediator profile in mouse tissues and in human immune cells. *Am J Clin Nutr*. 2022;116(3):786-797. PMID: 35849016

Lucchinetti E, Lou PH, Lemal P, Bestmann L, Hersberger M, Rogler G, Krämer SD, Zaugg M. Gut microbiome and circulating bacterial DNA ("blood microbiome") in a mouse model of total parenteral nutrition: Evidence of two distinct separate microbiotic compartments. *Clin Nutr ESPEN*. 2022 Jun;49:278-288. PMID: 35623826

Lou PH, Lucchinetti E, Wawrzyniak P, Morsy Y, Wawrzyniak M, Scharl M, Krämer SD, Rogler G, Hersberger M, Zaugg M. Choice of Lipid Emulsion Determines Inflammation of the Gut-Liver Axis, Incretin Profile, and Insulin Signaling in a Murine Model of Total Parenteral Nutrition. *Mol Nutr Food Res*. 2021; 65(5): e2000412. PMID:32729969.



Dr. Stephane Bourque

The Bourque laboratory is located on the 3rd floor of the Katz Centre for Pharmacy and Health Research. My research group uses various rodent models and employs integrative and molecular approaches to investigate two broad areas of cardiovascular physiology. The first focuses on elucidating the mechanisms by which stressors (iron deficiency, sepsis) during gestation and early infancy affect growth and development of the fetus/neonate, and in turn predispose the offspring to lifelong health complications. The second focuses on identifying mechanisms underpinning the development of sepsis-induced cardiomyopathy and acute kidney injury. These projects are currently funded by grants from CIHR and WCHRI.

My research group is also actively involved in the National Preclinical Sepsis Platform of Sepsis Canada. The NPSP is a collaborative network of basic science researchers with a collective goal of conducting multi-laboratory preclinical studies on sepsis. Through an iterative process, members of the NPSP have successfully developed and characterized a standardized murine model of sepsis to harmonize study outcomes and improve data sharing. With a model in-hand, members of the NPSP are poised to conduct our first multi-centre preclinical study. This work is currently funded by grants from CIHR and Sepsis Canada.

Selected references

1. Kibalnyk Y et al. Ankrd11, a chromatin regulator and a KBG syndrome risk gene, is a critical regulator of cardiac neural crest cell biology and heart development. In press at Nat Comm. (IF: 17.69) Apr 2023.
2. Martens MD et al. Reactive Oxygen Species Modulator (ROMO1) plays an obligate role in cardiomyocyte hypertrophy. Circ Res. (IF: 23.22) 2024 Jan 5;134(1):114-116.
3. Noble RMN et al. Use of photoacoustic imaging to study the effects of anemia on placental oxygen saturation in normoxic and hypoxic conditions. In press at Reprod Sci. (IF: 2.92) Oct 2023. Manuscript selected as the most outstanding paper published in Reprod. Sci in 2023.
4. Chatterjee P et al. Sex-specific effects of prenatal hypoxia and a placental antioxidant treatment on cardiac mitochondrial function in the adult offspring. Int J Mol Sci. (IF:6.21). 2023 Sep;24(17):13624.
5. Alavi P et al. Aging is associated with organ-specific alterations in level and expression pattern of von Willebrand factor. In press at Arterioscl Thromb Vasc Biol. (IF: 10.51) 2023 Nov; 43(11):2183-2196.
6. Noble RM*, Holody CD* et al. Perinatal iron restriction is associated with changes in neonatal cardiac function and structure in a sex-dependent manner. Clin Sci (London) (IF: 6.88). 2023 Aug;137(15):1115-1130.
7. Sharma N et al. for the National Preclinical Sepsis Platform and Sepsis Canada. Development and characterization of a fecal-induced peritonitis model of murine sepsis: results from a multi-laboratory study and iterative modification of experimental conditions. Intensive Care Med Exp. (IF: 3.5) 2023 Jul;11(1):45.

8. Ssewanyana D et al. Hepcidin across pregnancy and its correlation with maternal markers of iron and inflammation, maternal body weight outcomes and offspring neurodevelopmental outcomes: A systematic review and meta-analysis. *AJOG Glob Rep.* 2023 May;3(3):100222.
9. Zhang M et al. Canadian Critical Care Translational Biology Group, the Sepsis Canada National Preclinical Sepsis Platform. Sex-based analysis of treatment responses in animal models of sepsis: a preclinical systematic review protocol. *Syst Rev.* (IF: 4.80) 2023 Mar 21;12(1):50.
10. Salim SY et al. Oncostatin M Receptor Type II knockout mitigates inflammation and improves survival from sepsis in mice. *Biomedicines.* (IF: 4.7) 2023 Feb 8;11(2):483.
11. Woodman AG et al. Perinatal iron deficiency causes sex-dependent alterations in renal retinoic acid signaling and nephrogenesis. *J Nutr Biochemistry.* (IF: 5.94) 2023 Feb;112:109227.

Recent Trainee Awards

In 2023-24, trainees from our research group were awarded 33 scholarships and travel awards totalling >\$350,000. A few notable awards include:

1. Heart and Stroke Foundation of Canada Doctoral Personnel Awards to Ibrahim Khodabocus and Jad Julian Rachid.
2. CIHR Canadian Graduate Scholarship (MSc) to Si Ning Liu.
3. FoMD 75th Anniversary and Delnor Award to Alyssa Wiedemeyer.
4. Summer Studentships from WCHRI (to Navdeep Badhan), NSERC (to Ben Magalnick), Alberta Innovates (to Anson Wong) and URI (to Avery Noppers).



Bourque Lab at the Sugarbowl

Research in the Kerr lab is focusing on the neuro-immune contributions to chronic pain states arising from injury or disease in the nervous system. We have a primary focus on pain in auto-immune disorders such as MS but are also interested in pain that arises after traumatic nerve injury to a peripheral nerve. The lab employs a variety of behavioral assays to assess pain and nociception in rodents and we also use cell and molecular techniques to understand the underlying mechanisms generating chronic pain in these disorders.

The Neuroimmunology and Pain Lab is located on the 5th floor of HMRC. It is a shared research space with the lab of Dr. Jason Plemel (Dept. of Medicine). We currently have a collaborative project examining macrophage phenotypes after

peripheral nerve injury and chronic inflammation that includes contributions from the UofA Multidisciplinary Pain Clinic and Dr. Bruce Dick (Dept. of Anesthesiology). Other collaborations involve members of the Dept. of Pharmacology (Dr. Anna Taylor and Dr. Harley Kurata) as well as a project with George Washington University (Lab of Dr. John Bethea) examining TNF, ER stress and the effects on neural plasticity on pain.

Funding. The lab is currently funded by two CIHR Project Grants “Understanding the contribution of the peripheral nervous system to central neuropathic pain” and “Deciphering macrophage phenotypes in neuropathic pain”. We are also funded by an Operating Grant from the MS Society of Canada, “Examining inflammatory processes in the DRG as a driver of neuropathic pain in MS”



Dr. Brad Kerr
Director - Research



**The Neuroimmunology
and Pain Lab**

13th ANNUAL GELFAN AND BELL ANESTHESIA CONTINUING EDUCATION AND RESEARCH SYMPOSIUM



KEYNOTE SPEAKER

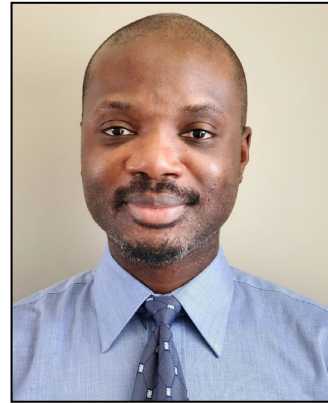
"Transforming cardiovascular care through big data and bioinformatics research"

Dr. Louise Sun MD, SM, FRCPC, FAHA
Division of Cardiothoracic Anesthesiology
Stanford University School of Medicine
Stanford, California, USA

GUEST ADJUDICATORS



Dr. Christine Fedorow MD, FRPC
Assistant Clinical Professor
Royal Alexandra Hospital



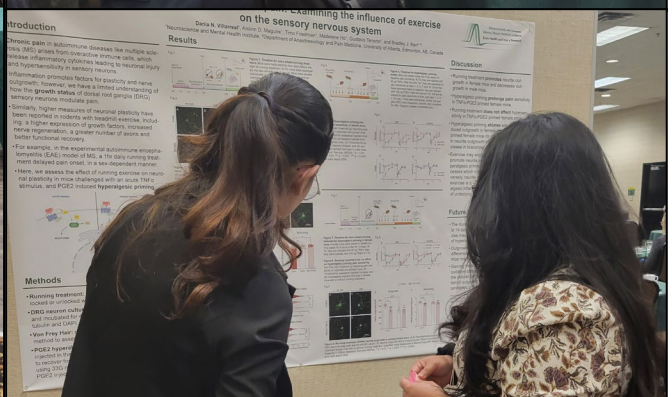
Dr. Bernard Sowa, MD, FRPC
Associate Clinical Professor
Misericordia Community Hospital



Dr. Bradley Kerr



Drs. Sowa, Fedorow & Sun



Examining the influence of exercise on the sensory nervous system

Introduction
Chronic pain in autoimmune diseases like multiple sclerosis (MS) arises from oxidative stress, which leads to inflammatory cytokines leading to neuronal injury and hyperexcitability in sensory neurons. Inflammation promotes hyperalgesia and hyperexcitability. However, we have a limited understanding of how the growth cones of these neurons respond to sensory neuron modulators.

Methods
Running treatment (control) and DRG nociceptor culture (DRG) were cultured in the presence of TNF-α and DRG. DRG were then exposed to exercise (EX) or control (CON) conditions. DRG were then exposed to DRG nociceptor culture (DRG) and DRG nociceptor culture (DRG) and DRG nociceptor culture (DRG).

Results
EX increased the expression of growth factors, neuronal nitric oxide synthase, and a greater number of axons and better functional recovery.

Discussion
EX increased the expression of growth factors, neuronal nitric oxide synthase, and a greater number of axons and better functional recovery.

Future
EX increased the expression of growth factors, neuronal nitric oxide synthase, and a greater number of axons and better functional recovery.

13th ANNUAL GELFAN AND BELL ANESTHESIA CONTINUING EDUCATION AND RESEARCH SYMPOSIUM

Simulation Workshop - TTE (Transthoracic Echocardiogram) Skills

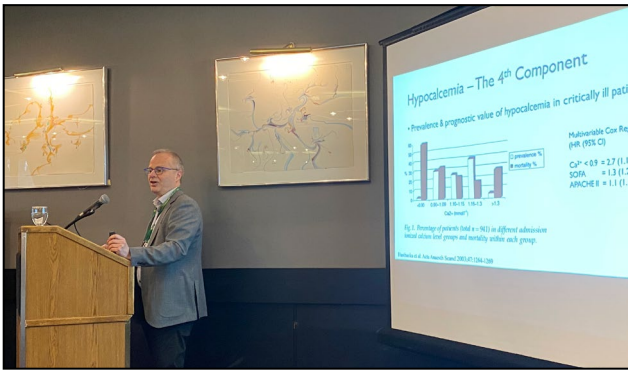
For the first time, this year an additional simulation workshop was offered and was well attended.



Instructor
Dr. Brian Buchanan BSc (hons), MD, MMed, FRCPC
Associate Professor
Department of Critical Care Medicine



DEPARTMENT MEMBERS AT EXTERNAL EVENTS



Dr. Keyvan Karkouti Spring 2024 CME Mtg



CAS June 2024

Resident Welcome BBQ July 2023



2024 Resident Retreat

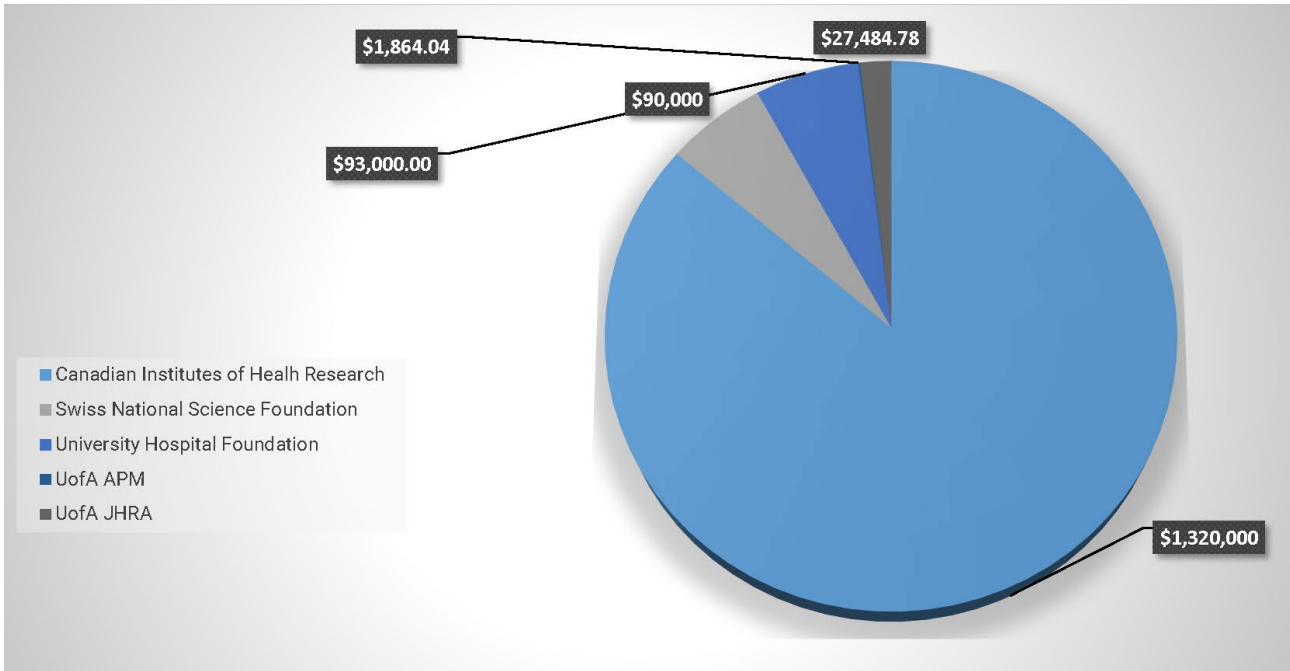


Drs. Doug Duval, Barry Finegan, Derek Dillane, Brendan Finucane at the Academy of Anesthesiology Mtg, Victoria, BC, April 2024



December 2023 OR Christmas Party

GRANTS 2023-24



\$1,532,348.82

TOTAL GRANT FUNDING

Featured Grant

Investigator: Dr. Michael Zaugg (PI)

Title: Vegaven, a novel lipid emulsion with unique superior biological actions designed for parenteral nutrition

Funder: CIHR

Funding Year: 2023

Award: \$820,000.00

GRANTS 2023-24

Manager	Description	Start Date	End Date	Award Amount	Funding Agency
Bourque,Stephane	Canada Research Chair: Tier 2	1/1/2024	12/31/2029	\$500,000.00	Canadian Institutes of Health Research
Dillane,Derek	The Accuracy and Usability of Different Glucose Measurement Methods During Surgery: A Patient-Driven Comparative Analysis	11/1/2023	4/30/2025	\$93,000.00	University Hospital Foundation
Green,James	Pharmacokinetic profile of ropivacaine given as a universal dose infusion via transverse abdominis and rectus sheath block catheters for postoperative pain control	12/1/2023	11/30/2024	\$15,000.00	Hugill Research Award
Ip,Hui Yun	Life cycle assessment of different types of anesthetics: a randomized controlled trial	8/1/2023	7/31/2024	\$1,864.04	Hugill Research Award
Qiao,Lu	Better Simulate, Than Never: A literature review and proof of concept design of a novel anesthesia machine simulator	10/1/2023	9/30/2024	\$12,484.78	Hugill Research Award
Zaugg,Michael	Vegaven, a novel lipid emulsion with unique superior biological actions designed for parenteral nutrition	10/1/2023	9/30/2026	\$820,000.00	Canadian Institutes of Health Research
Zaugg,Michael	Mechanism of alpha-Linolenic and Stearidonic Acid-Rich Lipid Emulsions on Inflammation	11/1/2023	10/30/2027	\$90,000.00	Swiss National Science Foundation

Total \$1,532,348.82

EDUCATION



The department is active at all levels of the learning continuum, from igniting interest in the specialty amongst medical students, to playing its part in ensuring an adequate supply of properly trained specialists and subspecialists for the population's needs, and to keeping its current cadre of practitioners abreast of the latest scientific and technical developments in the specialty.

Undergraduate

University of Alberta and other medical students continue to actively seek out exposure to anesthesiology in our department. While there is no mandatory rotation in the specialty, 84 students undertook electives during the 2023-24 academic year, and many more had to be turned away. An additional 76 students asked for and were given short-term shadowing exposure to our work in operating rooms and other locations. Students from the St Andrews/Edinburgh/Alberta Program, which provides undergraduate medical education to Canadian students in Scotland regularly select anesthesia as one of their options during their rotations in Edmonton. Anesthesia faculty are active in the didactic and Discovery Learning phases of the Year 1 and 2 curriculum, and also support the students' Anesthesia Club.

Student evaluations of their time with us are amongst the best in the faculty.

Fellowship Training

The scale and complexity of the care that our hospitals deliver and the caliber of our staff instructors combine to make Edmonton an ideal advanced training venue. Our fellowships are highly regarded, and entry is competitive. We received 115 applications from trained anesthesiologists during the 2023-24 year, from all over the world.

The department offers subspecialty fellowship training programs in the following areas:

Pediatric Anesthesia (Program Director, Dr. Shauna Turnbull), Cardiac Anesthesia (Dr. Joel Berube), Regional Anesthesia (Dr. Ciarán Twomey), Pain Medicine (Dr. Mark Simmonds), Liver Transplant Anesthesia (Dr. Justin Byers), Transitional Research (Dr. Michael Zaugg) and Peri-operative Ultrasound (Dr. Derek Dillane). The newest addition to our program is Neuroanesthesia, into which we hope to accept our first fellow for the 2025-26 cycle, and which, uniquely, will be financially supported by the University of Alberta Hospitals Foundation.

Graduating fellows go on to enhance subspecialist staff levels in both our own centre and farther afield. As it happens, both of our 2024 Fellowship graduates, Drs Annick Bérard-Giasson (Pediatrics) and Charles Gélinas (Cardiac) hail from Quebec and have taken their enhanced skills back to La belle province.

Family Practice Anesthesia

Family Practice Anesthetists (FPAs) (also known as General Practitioner Anesthetists or GPAs) are family physicians who come to our department to obtain a year's training in anesthesia in order to be able to facilitate surgical, obstetric and trauma care in rural and remote settings. While there is vigorous debate within the specialist community about whether such programs should continue to exist, FPAs are a vital part of our current provincial anesthesia workforce and admission to our FPA training program continues to be highly sought-after. Dr. Will Flexer (MHE) has directed the program for many years, and this year, Dr. Bryden Russell, an FPA from Camrose, took on the new role of Assistant Program Director.

25 applications were received for the four available 2023-24 training slots. Comprehensive preparation for independent anesthesia practice in a rural environment was provided, including a preparatory in-person simulation-based boot camp at the Northern Ontario School of Medicine followed by 13 clinical rotations in adult, pediatric and obstetric anesthesia, and in critical care. This year's cohort also took part in a new simulation day, hosted by the University of Calgary, in which uncommon anesthesia emergency situations were rehearsed in a risk-free environment.

All three FPA residents successfully challenged the in-house exit examination administered by Dr. Flexer, and are now, or will shortly be providing valuable service in rural Alberta. Dr. Jon Barnard will be practicing in Bonnyville, Dr. Pieter Hanekom will be moving to Stony Plain and Dr. Curtis Woolf will be going to Taber.

The FPA training program has adapted to the expansion of the specialist training program by finding new sites for its trainees. Going forward, FPA trainees will receive some of their training in Camrose, Leduc, Olds, Hinton or Banff. The FPA program will undergo an accreditation review in 2025, after which, it is expected that the program will, in line with the specialist training program, move to a competency-based evaluation model.

Continuing Professional Development

For practicing anesthesiologists, the need to stay abreast of new developments in the specialty has to be balanced against time constraints imposed by busy practices and family lives. The current manpower crisis has increased these pressures. Nonetheless, learning opportunities directed primarily towards established practitioners continue to be made available.

Weekly Grand Rounds are either site-specific, or available city-wide, using videoconferencing techniques made familiar by the pandemic. They are delivered by our own residents, faculty or external speakers. Topics were selected based on a combination of needs assessment data and expert availability. They included traditional, technical topics such as airway management and obstetric anesthesia care, as well as more topically-driven areas such as cannabis use and the implications of GLP1 Agonists. Mental health issues and equality/diversity/inclusion were also featured. Evaluations suggest that, for the most part, our rounds achieve their objectives of delivering relevant information clearly and without the perception of commercial bias.

Special sessions were offered in order to provide more in-depth CME in the areas of blood transfusion and gastric ultrasonography

Our Quality and Safety initiative was reformatted this year to eliminate as many barriers as possible to bringing forth clinical cases of education value for discussion, to good effect. As AHS' over-arching Quality and Safety program expands and deepens, profiting from the wealth of data contained in the new electronic medical record, the department will, as one would expect from a specialty with safety at the core of its mission, remain a full and energetic participant.

Our City-Wide Journal Club has, under the leadership of Dr. Landon Berger (RAH) continued to go from strength to strength. Faculty and residents alike acknowledge the value of these opportunities to interact with colleagues from other sites in the city. Dr. Simone Derzi (UAH) has taken over the delivery of the highly popular statistical interlude, while Dr. Berger decided to group discussion papers together by topic, such as airway management, the management of opioid use disorder in the perioperative context and the special challenges of providing anesthesia to the elderly. These changes have been well received, as indicated by the steadily growing attendance. Journal club dates will now be published for the whole academic year in advance, which, it is hoped, will enable even more divisional members to plan to attend.

EDUCATION LEADERSHIP

UNDERGRADUATE PROGRAM

Dr. Sean Goos

POSTGRADUATE PROGRAM

Dr. Graham Steel - Program Director

Dr. Jaime Sim - Assistant Program Director

Dr. Lu Qiao - Director Simulation

POSTGRADUATE FAMILY PRACTICE PROGRAM

Dr. Will Flexer - Program Director

FELLOWSHIP TRAINING PROGRAM

Dr. Saifee Rashid - Fellowship Program Director
Director, Education

Dr. Joel Berube - Cardiac Anesthesia Fellowship Director

Dr. Justin Byers - Liver Transplant Fellowship Director

Dr. Zak Hajat /Dr. Susan Halliday - Neuroanesthesia Fellowship Directors

Dr. Mark Simmonds - Pain Medicine Fellowship Director

Dr. Shauna Turnbull - Pediatric Anesthesia Fellowship Director

Dr. Derek Dillane - Perioperative Ultrasound Fellowship Director

Dr. Ciaran Twomey - Regional Anesthesia Fellowship Director

Dr. Michael Zaugg - Transitional Research Fellowship Director

MENTORSHIP REPORT

The Residency program is accompanied by a parallel Mentorship program. Each resident is paired with a staff anesthesiologist for the duration of their training and the pair meet regularly to discuss progress in a supportive and confidential fashion. This offers an opportunity for the resident to debrief difficult events, learn the so-called hidden curriculum, obtain career advice and to be assisted in more general ways with the transition into independent practice by a wise and experienced colleague.

The following Staff Anesthesiologists gave freely of their valuable time to the Mentorship program in 2023-24

Landon Berger
Joel Berube
Magnus Breitling
Sunita Broemling
Cathy Cave
Mairi Chadwick
Angelo Chiarella
Liz Colcy
Christine Fedorow
Ariane Fielding
Kyle Garrett
Bart Godlewski
Ferrante Gragasin
James Green
Sarah Joly
Nikhil Khembavi
Jen Klinck
Matt Kokotilo
Megan Lalonde
Wing Lam

Ed Lazar
Dayna Leighton
Daniela Marsicano
Angela Neufeld
ManCho Ng
Katie Oman
Timur Ozelsel
Deepali Patil
Lu Qiao
Russell Quapp
Saifee Rashiq
Tara Rimmer
Patrick Seguin
Surita Sidhu
Sam Stetsko
Varun Suresh
Shauna Turnbull
Tim van Haaften
Adrianna Woolsey



Dr. Steel and the 2023 R5's

RESIDENCY REPORT

Hello from the Residency Training Program

2023-24 has been a very busy year!

I'd like to start by congratulating all of our graduating residents. Montana Johnston, Jaasmit Khurana and Zohreh Moazzeni have all decided to enter clinical practice at hospitals in the Edmonton area. Rebecca Entz is starting a Pediatric Anesthesia fellowship at the Stollery, Sunny Fong is completing ICU training in Edmonton, Francesca Seal is starting a Cardiac Anesthesia fellowship in Ottawa and Melissa Shears is going to Yale and also starting a Cardiac Anesthesia fellowship.

Resident Academic Halfday is undergoing a significant revamp thanks to Drs Haotian Wang and Varun Suresh and the program has also protected individual study time for all residents on alternate Wednesday mornings to help everyone keep on top of their academic and administrative responsibilities.

Another highlight was CaRMS 2024 where we matched 12 new residents who started training on July 1st, 2024. This represents the largest intake cohort in our program's history and is allowing us to establish or strengthen relationships with more community hospitals in the Edmonton area and central Alberta.

Finally, we're starting to prepare for a Royal College accreditation survey expected in the fall of 2025 which is going to be a lot of work but also a great chance to take stock of the program's strengths and areas for improvement.

Dr. Graham Steel
 Clinical Professor
 Department Director of Education Program, Residency Program

Department of Anesthesiology and Pain Medicine - Residents: 2023-2024

PGY-5	 Rebecca Entz	 Sunny Fong	 Montana Johnston	 Jaasmit Khurana	 Zohreh Moazzeni	 Francesca Seal	 Melissa Shears	
PGY-4	 Joshua Foley	 Derrick Matheson	 Liban Mohamed	 Brigitta Riley	 Evan Ritchie	 Lindsay Rolick	 Kevin Smith	
PGY-3	 Ian Armstrong	 Ryan Brenneis	 Alan Chan	 Christine Chiu	 Jenette Clark	 Mark Crawford	 Joshua Hahn	 Jamie Hillard
PGY-3	 Kirstina Jaton	 Yashin Vajj						
PGY-2	 Dana Boe	 Tyren Deacon	 Kieran Ganton	 Gurri McLeelan	 John Saeed	 YiShi Sun	 WenQing Yu	 Rodger Craig
PGY-1	 Jerome Chapur	 Nathan Gollner	 Michelle Kwong	 Caroline Peplinski	 Serena Tejar	 Anemarie Walters-Shumka	 Jessica Zapata	 Michael Zeeman
Family Practice Anesthesia	 Jon Barnard	 Pieter Harekom	 Curtis Woolf					

SIMULATION REPORT

As we reflect on the past year, we are excited to share the progress and achievements within our simulation curriculum and medical education initiatives. Our department remains committed to advancing our simulation training and enhancing educational experiences, and your support has been instrumental in these endeavors.

This year, we have continued to build a robust foundation for our simulation curriculum, covering a broad spectrum of anesthesia topics. We proudly offer training sessions tailored to various expertise levels, blending low-fidelity and high-fidelity simulations, with specialists serving as instructors. Our low-fidelity simulations utilized task trainers such as cadaveric pig trachea for emergency surgical airway practice, bronchoscopy simulators for awake-fiberoptic procedures, and virtual reality activities to enhance communication and teamwork. Conversely, our high-fidelity scenarios utilize state-of-the-art SimMan 3G technology, trained actors, and special effects to create immersive learning environments, offering rich conceptual, emotional, and physical experiences.

We are also pleased to report the success of our Transition to Practice (TTP) Simulation and Medical Education Elective. This year, five PGY5 residents completed the rotation, which equips them with essential teaching skills and integrates simulation elements into their practice. Feedback from residents, learners, and preceptors has been overwhelmingly positive, underscoring the impact and value of this elective.

Moreover, we have secured funding to support simulation-related training, offering up to four positions annually for CME courses, such as the DASH (Debriefing Assessment for Simulation in Healthcare) course provided by the Harvard Center for Medical Simulation. These courses enhance skills both in the simulation lab and in daily OR teaching, fostering effective and memorable educators.

We extend our heartfelt thanks to all faculty members who have contributed to our simulation program over the past year. Your dedication and support are vital to our success. We are always looking for more faculty members interested in learning about simulation design, facilitation, and debriefing. If you are passionate about medical education and wish to contribute, please contact us at lqiao1@ualberta.

Please mark your calendars for the following simulation sessions in 2024-25:

- Anesthesia Crisis Resource Management (ACRM): September 23, 24, 25, 2024
- Difficult Airway Management: October 22, 24, 25, 2024
- Canadian National Anesthesia Simulation Curriculum (CanNASC): December 13, 16, 17, 18, 20, 2024
- Managing Emergencies in Pediatric Anesthesia (MEPA): Feb 10, 2025
- Obstetrical Crisis Management: March 10, 11, 14, 2025
- Trauma Emergencies: June 2, 3, 5, 2025
- Simulation Boot Camp: July 2, 3, 4, 2025

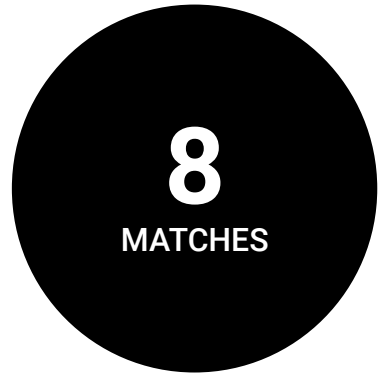
Participation in these sessions may be eligible for MOC credits in all three categories. We encourage you to get involved and contribute to our simulation program if you have a passion for medical education.

Thank you once again for your continued support and dedication. We look forward to another productive year in advancing our simulation curriculum and educational offerings.

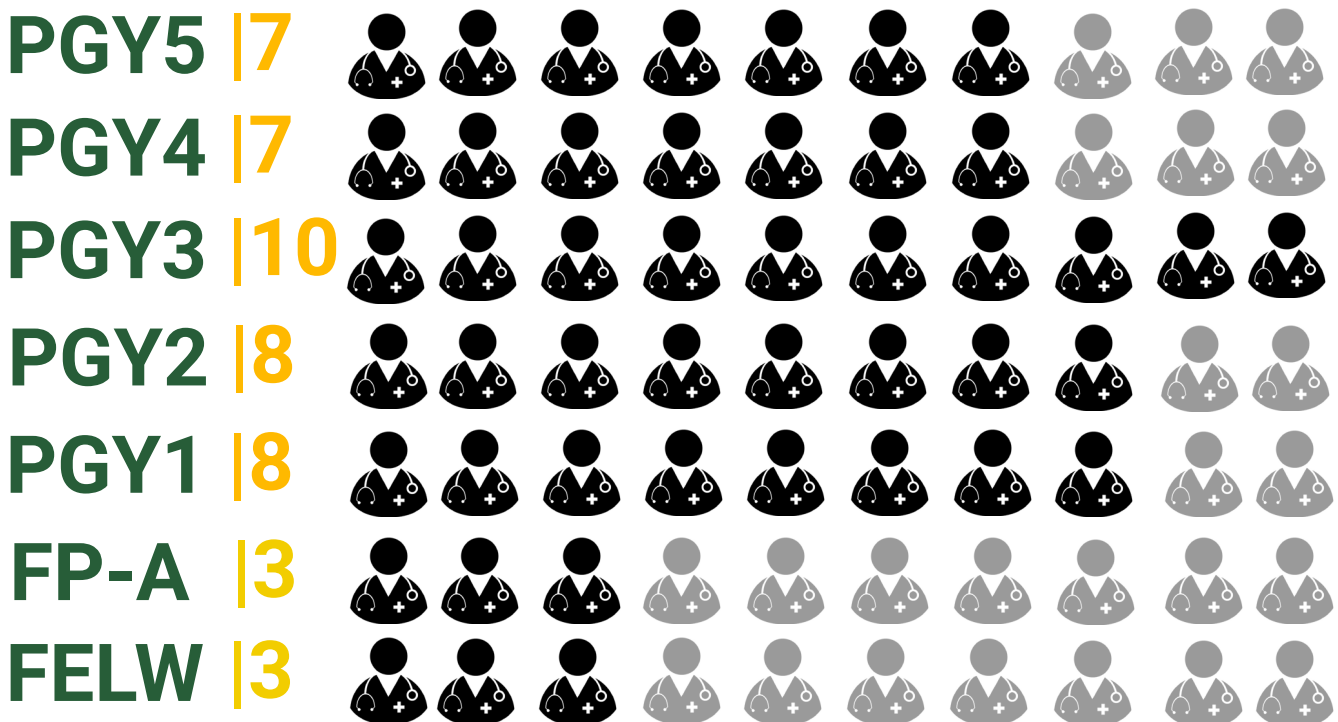
Dr. Lu Qiao
Assistant Clinical Professor
Simulation Director



CaRMS



LEARNERS



EDUCATION EVENTS 2023-24

GENERAL EVENTS

CaRMS	Feb 3, 2024
Journal Clubs	January 18, 2024 and April 23, 2024
Research Day	May 10, 2024
Written exam	Sept 26 and 27, 2024
Applied exam	April 24 and 25, 2024

ANESTHESIA KNOWLEDGE TEST (AKT)

AKT-1 PreTest	July 4, 2023
AKT-1 PostTest	Aug 21, 2023

SIMULATION

R1 Boot Camp	July 2,3 and 5, 2023
CanNASC	Dec 13, 16, 17, 18, 20, 2023 and February 14, 2024



2024 Research Day Resident Class

APPENDIX

FACULTY

Achen, Blaine

Assistant Clinical Professor

Amyotte, Nicholas

Clinical Lecturer

Baithoun, Hala

Clinical Lecturer

Baldonado, Narciso

Assistant Clinical Professor

Banasch, Matthew

Assistant Clinical Professor

Barker, Andrew

Assistant Clinical Professor

Barnard, Eduard

Associate Clinical Professor

Bateman, Kendall

Assistant Clinical Professor

Berger, Landon

Assistant Clinical Professor

Bergstrom, Richard

Associate Clinical Professor

Berube, Joel

Associate Clinical Professor

Department Fellowship Director of Cardiac Anesthesia

Bhachu, Santokh

Assistant Clinical Professor

Bhalla, Raveen

Associate Clinical Professor

Site Lead, Grey Nuns Hospital

Bird, Ruth

Clinical Lecturer

Bishop, Edward

Associate Clinical Professor

Bittencourt, Ricardo

Assistant Clinical Professor

Site Lead, Sturgeon Community Hospital

Booyesen, Corne

Assistant Clinical Professor

Bourque, Stephane

Associate Professor

Boyle, Riley Matthew

Assistant Clinical Professor

Breitling, Magnus

Associate Clinical Professor

Brin, Geoff

Clinical Lecturer

Brindley, Peter

Adjunct Professor

Broemling, Sunita

Assistant Clinical Professor

Bucyk, Brent

Assistant Clinical Professor

Bucyk, Taylor

Clinical Lecturer

Byers, Justin

Assistant Clinical Professor

Division lead for liver transplant anesthesia

Department Fellowship Director of liver transplant

Campbell, Elroy

Assistant Clinical Professor

Campbell, Jeffery

Assistant Clinical Professor

Cave, Cathy

Assistant Clinical Professor

Cave, Dominic

Clinical Professor

Zone Clinical Department Head

FACULTY

Chan, Douglas

Assistant Clinical Professor

Charlton, Jeff

Assistant Clinical Professor

Chen, Danny

Assistant Clinical Professor

Cheng, Alan

Assistant Clinical Professor

Cheng, Ronald

Assistant Clinical Professor

Cheung, Joseph

Clinical Lecturer

Chiarella, Angelo

Associate Clinical Professor

Chou, Eric Meng

Assistant Clinical Professor

Christ, Albert

Associate Clinical Professor

Chung, Brendon

Assistant Clinical Professor

Cohen, Matthew

Associate Clinical Professor

Colcy, Elizabeth

Assistant Clinical Professor

Colizza, Melissa

Assistant Clinical Professor

Datta, Ansuman

Assistant Clinical Professor

Dattilo, Franco

Clinical Lecturer

Davidson, Zachary

Clinical Lecturer

Derzi, Simone

Assistant Professor

Dick, Bruce

Professor

Chief of Psychology, Multidisciplinary Pain Clinic

Dickson, Clayton

Adjunct Professor

Dillane, Derek

Professor & Department Chair

Department Fellowship Director of Perioperative

Ultrasound

Drader, Keith

Associate Clinical Professor

DuVal, Douglas

Clinical Professor

Eagle, Christopher

Adjunct Professor

Eliasson, Teresa

Associate Clinical Professor

Elrebigi, Mona

Clinical Lecturer

Escuder, Juan Ruiz

Assistant Clinical Professor

Farries, Alayne

Associate Clinical Professor

Fedorow, Christine

Assistant Clinical Professor

Site Lead, Royal Alexandra Hospital

Fielding, Ariane

Associate Clinical Professor

Flexer, William

Assistant Clinical Professor

Department Program Director of Family Practice

Anesthesia Residency Program

Site Lead, Misericordia Hospital

Ford, Victor

Assistant Clinical Professor

Freed, Adam

Assistant Clinical Professor

FACULTY

Fuger, Jason

Assistant Clinical Professor

Funk, Gregory

Adjunct Professor

Gamez, Ryan

Assistant Clinical Professor

Garrett, Kyle

Assistant Clinical Professor

Gelinas, Jean Pierre

Assistant Clinical Professor

George, AnthonyAssistant Clinical Professor
Site Lead, Mazankowski Heart Institute**Gilchrist, Ainslie**

Assistant Clinical Professor

Gill, Rajwinder

Clinical Lecturer

Godlewski, Bartosz

Assistant Clinical Professor

Goos, Sean

Clinical Lecturer

Gragasin, Ferrante

Clinical Professor

Green, JamesProfessor (Special Continuing)
Clinical Site Lead, University of Alberta Hospital**Greenfield, Gavin**

Clinical Lecturer

Gregg, Kevin

Assistant Clinical Professor

Gunanayagam, Angelo

Clinical Lecturer

Gupta, Sunil

Assistant Clinical Professor

Gurges, Ramy

Assistant Clinical Professor

Gyambibi, Akua

Clinical Lecturer

Halliday, SusanAssistant Clinical Professor
Division Lead for Neuro Anesthesia**Hasanni, Sameer**

Assistant Clinical Professor

Haugen, Richard

Clinical Professor

Hawkins, Kenneth

Assistant Clinical Professor

Heinrichs, Jeffrey

Clinical Lecturer

Heyns, Marthinus (Daneel)

Clinical Lecturer

Hoda, Syed (Zia)

Assistant Clinical Professor

Hogan, Michael

Associate Clinical Professor

Holinski, Paula

Associate Clinical Professor

Hopkins, Alexander

Clinical Lecturer

Hult, Keith

Site Lead, Ft. Saskatchewan Community Hospital

Impey, Katherine

Clinical Lecturer

Jacka, Michael

Associate Clinical Professor

Janke, Michael

Clinical Lecturer

Jankola, Lauchlan

Clinical Lecturer

FACULTY

Jansen, Paul

Site Lead, Westview Health Centre

Jewer, Kyle

Assistant Clin Professor

Joly, Sarah

Assistant Clinical Professor

Kembhavi, Nikhil

Assistant Clinical Professor

Kerr, Bradley

Professor

Department Director of Research

Kindzierski, Robert

Assistant Clinical Professor

Klassen, Neil

Clinical Professor

Klinck, Jennifer

Assistant Clinical Professor

Knezevich, Mark

Assistant Clinical Professor

Knight, Brian

Clinical Professor

Kokotilo, Matthew

Clinical Lecturer

Koller, John

Assistant Clinical Professor

Site Lead, Stollery Children's Hospital

Zone Clinical Head of Pediatric Anesthesiology

Kowe, Olajide

Clinical Lecturer

Koziak, Adrian

Assistant Clinical Professor

Labba, Saeed

Assistant Clinical Professor

LaFontaine, Alika

Associate Clinical Professor

Lalonde, Megan

Assistant Clinical Professor

Lam, Darren

Clinical Lecturer

Lam, Wing Ying

Associate Clinical Professor

Lazar, Edward

Assistant Clinical Professor

Leung-Lee, Tanya

Assistant Clinical Professor

Levin, Iwan

Assistant Clinical Professor

Lilley, John

Clinical Professor

Lima, Ronald

Clinical Lecturer

Luksun, Warren

Assistant Clinical Professor

Ma, Michael

Clinical Lecturer

Macala, Kimberly

Assistant Adjunct Professor

Magistris, Fabio

Clinical Lecturer

Maragh, Vashti

Assistant Clinical Professor

Marsicano, Daniela

Clinical Lecturer

Matthey, Peter

Assistant Clinical Professor

McCombs, Kyle

Clinical Lecturer

McGrath, Tara

Assistant Adjunct Professor

FACULTY

Mohamed, Karim

Assistant Clinical Professor

Mohamed, Mamdouh

Clinical Lecturer

Montasser, Sam (Osama)

Clinical Lecturer

Moyo, Jabulani

 Assistant Clinical Professor
 Division Lead for Chronic Pain

Murray, Katie

Clinical Lecturer

Muzyka, David

Assistant Clinical Professor

Nanji, Jalal

Assistant Clinical Professor

Needham, Craig

Assistant Clinical Professor

Neufeld, Angela

Assistant Professor (Special Continuing)

Ng, Man Cho

Associate Clinical Professor

Noble, Colin

Assistant Clinical Professor

Noonan, Liza

Assistant Clinical Professor

Oman, Kathleen

Assistant Clinical Professor

Ozelsel, Timur

 Clinical Professor
 Site Lead, Cross Cancer Institute

Paetsch, Paul

Assistant Clinical Professor

Pagliardini, Silvia

Associate Adjunct Professor

Paterson, Scott

Clinical Professor

Patil, Deepali

Associate Clinical Professor

Pittman, Elliot

Clinical Lecturer

Popoff, Jeffrey

Assistant Clinical Professor

Primrose, Matthew

Clinical Lecturer

Qiao, Lu

 Assistant Clinical Professor
 Department Director of Simulation Education

Quapp, Russell

Assistant Clinical Professor

Quigley, Nicole

Assistant Clinical Professor

Quinn, Michael

Assistant Clinical Professor

Radtke, Kristin

Clinical Lecturer

Ramsey, Bruce

Clinical Professor

Rashiq, Saifee

 Professor
 Department Fellowship Program Director
 Department Director of Quality & Patient Safety

Rimmer, Tara

Assistant Clinical Professor

Roberts, Katrina

Clinical Lecturer

Roda, Richard

Clinical Lecturer

Rudge, Trevor

Assistant Clinical Professor

FACULTY

Rudolph, Florian

Assistant Clinical Professor

Rutten, Kelsey

Assistant Clinical Professor

Scheelar, Les

Assistant Clinical Professor

Seal, Robert

Clinical Professor

Seguin, Patrick

Assistant Clinical Professor

Sidhu, Surita

Clinical Professor

Department Coordinator Point of Care Ultrasound
Rotation, Residency Program
Co-lead Joint Cardiac Anesthesia/Cardiac Surgical
Simulation Program

Sikorski, Robert

Assistant Clinical Professor

Sim, Jaime

Clinical Lecturer

Department Assistant Director of Education,
Residency Program

Simmonds, Mark

Clinical Professor

Department Fellowship Director of Pain Medicine

Simmonds, Matthew

Associate Clinical Professor

Smith, Graeme

Assistant Clinical Professor

Snider, Doug

Assistant Clinical Professor

Sobolev, Igor

Associate Clinical Professor

Sowa, Bernard

Associate Clinical Professor

Edmonton Zone Medical informatics Lead,
Anesthesiology (Connect Care)
Co-Chair, Anesthesia Area Council (Connect Care)

Squires, Lynn

Clinical Lecturer

Steel, Graham

Clinical Professor

Department Director of Education Program,
Residency Program

Stetsko, Samuel

Assistant Clinical Professor

Strydom, Carin

Assistant Clinical Professor

Suresh, Varun

Clinical Lecturer

Tang, Cathy

Assistant Clinical Professor

Taylor, Anna

Assistant Adjunct Professor

Terblanche, Ockert

Assistant Clinical Professor

Ting, Yizhen (Heather)

Assistant Clinical Professor

Torok-Both, Clinton

Assistant Clinical Professor

Townsend, Derek

Clinical Professor

Facility Medical Director - University of Alberta
Hospital, Mazankowski Heart Institute, Kaye Medical
Clinic

Tse, Jennifer

Assistant Clinical Professor

Turnbull, Shauna

Clinical Lecturer

Department Fellowship Director of Pediatric
Anesthesia

Twomey, Ciaran

Assistant Clinical Professor

Department Fellowship Director of Regional
Anesthesia

FACULTY

Van den Heever, Zacharias
Assistant Clinical Professor

Van Haaften, Timothy
Assistant Clinical Professor

Van Rensburg, Gerhardus
Clinical Lecturer

Van Rooy, Elizabeth
Clinical Lecturer

Vargo, Michael
Assistant Clinical Professor

Varughese, Thomas
Assistant Clinical Professor

Vipulanathan, Nirupan
Assistant Clinical Professor

Wachowski, Ireneusz
Assistant Clinical Professor

Wang, Haotian
Clinical Lecturer

Wildgrube, Peter
Associate Clinical Professor

Wilson, P Scott
Assistant Clinical Professor

Woolsey, Adrianna
Clinical Lecturer

Yang, Jaeun
Clinical Lecturer

Yeh, Timothy
Associate Clinical Professor

Zaki, Mahmood
Assistant Clinical Professor
Site Lead, Leduc Community Hospital

Zaugg, Michael
Professor
Department Fellowship Director of Transitional
Research

Ziwenga, Ophillia
Assistant Clinical Professor



DEPARTMENT STAFF

DEPARTMENT OFFICE

Cruywels, Lisa - Academic Department
Manager

Harrison, Corrina - Department Operations
Corordinator

Bedard, Sean - Administrative Support

Beisel, Susan - HR/Financial Assistant

Nowak, Lorraine - Executive Assistant

Prinsen, Rosanne - Communications
Coordinator

EDUCATION

Chaba, Darci - Program Administrator

Kruzenga, Laura - Program Administrator

RESEARCH

Al Mohtar, Dima - Research Assistant

Alsaif, Maha - Project Research Coordinator

Hammal, Fadi - Research Associate

Muneer, Malia - Clinical Research
Coordinator

2023-24 PUBLICATIONS

1. Neuman MD, Sieber F, **Dillane D**. Comparative Effectiveness Research on Spinal versus General Anesthesia for Surgery in Older Adults. *Anesthesiology*. 2023 Aug 1;139(2):211-223. doi: 10.1097/ALN.0000000000004604. PMID: 37278667.
2. Vail EA, Feng R, Sieber F, Carson JL, Ellenberg SS, Magaziner J, **Dillane D**, Marcantonio ER, Sessler DI, Ayad S, Stone T, Papp S, Donegan D, Mehta S, Schwenk ES, Marshall M, Jaffe JD, Luke C, Sharma B, Azim S, Hymes R, Chin KJ, Sheppard R, Perlman B, Sappenfield J, Hauck E, Tierney A, Horan AD, Neuman MD; REGAIN (Regional versus General Anesthesia for Promoting Independence after Hip Fracture) Investigators. Long-term Outcomes with Spinal versus General Anesthesia for Hip Fracture Surgery: A Randomized Trial. *Anesthesiology*. 2024 Mar 1;140(3):375-386. doi: 10.1097/ALN.0000000000004807. PMID: 37831596; PMCID: PMC11186520.
3. Baaklini CS, Ho MFS, Lange T, Hammond BP, Panda SP, Zirngibl M, Zia S, Himmelsbach K, Rana H, Phillips B, Antoszko D, Ibanga J, Lopez M, Lee KV, Keough MB, Caprariello AV, **Kerr BJ**, Plemel JR. Microglia promote remyelination independent of their role in clearing myelin debris. *Cell Rep*. 2023 Dec 26;42(12):113574. doi: 10.1016/j.celrep.2023.113574. Epub 2023 Dec 14. PMID:38100356.
4. Senger JB, Hardy P, Thorkelsson A, Duia S, Hsiao R, Kemp SWP, Tenorio G, Rajshekar M, **Kerr BJ**, Chan KM, Rabey KN, Webber CA. A Direct Comparison of Targeted Muscle Reinnervation and Regenerative Peripheral Nerve Interfaces to Prevent Neuroma Pain. *Neurosurgery*. 2023 Nov 1;93(5):1180-1191. doi: 10.1227/neu.0000000000002541. Epub 2023 Jun 2. PMID: 37265342.
5. Carrier FM, Vincelette C, Trottier H, Amzallag É, Carr A, Chaudhury P, Dajani K, Fugère R, Giard JM, Gonzalez-Valencia N, Joosten A, Kandelman S, Karvellas C, McCluskey SA, **Özelsel T**, Park J, Simoneau È, Chassé M. Perioperative clinical practice in liver transplantation: a cross-sectional survey. *Can J Anaesth*. 2023 Jul;70(7):1155-1166. English. doi: 10.1007/s12630-023-02499-y. Epub 2023 Jun 2. PMID: 37266852.
6. O'Brien K, Feng R, Sieber F, Marcantonio ER, Tierney A, Magaziner J, Carson JL, **Dillane D**, Sessler DI, Menio D, Ayad S, Stone T, Papp S, Schwenk ES, Marshall M, Jaffe JD, Luke C, Sharma B, Azim S, Hymes R, Chin KJ, Sheppard R, Perlman B, Sappenfield J, Hauck E, Hoeft MA, Karlawish J, Mehta S, Donegan DJ, Horan A, Ellenberg SS, Neuman MD; REGAIN (Regional versus General Anesthesia for Promoting Independence after Hip Fracture) Investigators. Outcomes with spinal versus general anesthesia for patients with and without preoperative cognitive impairment: Secondary analysis of a randomized clinical trial. *Alzheimers Dement*. 2023 Sep;19(9):4008-4019. doi: 10.1002/alz.13132. Epub 2023 May 12. PMID: 37170754.
7. Sharma N, Chwastek D, Dwivedi DJ, Schlechte J, Yu IL, McDonald B, Arora J, Cani E, Eng M, Engelberts D, Kuhar E, Medeiros SK, **Bourque SL**, Cepinskas G, Gill SE, Jahandideh F, Macala KF, Panahi S, Pape C, Sontag D, Sunohara-Neilson J, Fergusson DA, Fox-Robichaud AE, Liaw PC, Lalu MM, Mendelson AA; National Preclinical Sepsis Platform, Sepsis Canada. Development and characterization of a fecal-induced peritonitis model of murine sepsis: results from a multi-laboratory study and iterative modification of experimental conditions. *Intensive Care Med Exp*. 2023 Jul 17;11(1):45. doi: 10.1186/s40635-023-00533-3. PMID: 37460911; PMCID: PMC10352196.

8. Friedman TN, La Caprara O, Zhang C, Lee K, May J, Faig CA, Baldwin T, Plemel JR, Taylor AMW, **Kerr BJ**. Sex differences in peripheral immune cell activation: Implications for pain and pain resolution. *Brain Behav Immun*. 2023 Nov;114:80-93. doi: 10.1016/j.bbi.2023.07.029. Epub 2023 Aug 6. PMID: 37544463.
9. Alavi P, Yousef Abdulla R, Brown D, Mojiri A, Nagendran J, Lewis J, **Bourque SL**, Jahroudi N. Aging Is Associated with Organ-Specific Alterations in the Level and Expression Pattern of von Willebrand Factor. *Arterioscler Thromb Vasc Biol*. 2023 Nov;43(11):2183-2196. doi: 10.1161/ATVBAHA.123.319255. Epub 2023 Sep 21. PMID: 37732483.
10. Linkiewich D, Dib KC, Forgeron PA, **Dick BD**, McMurtry CM. Perceptions of Adolescents With Chronic Pain About Peer Support: Reflexive Thematic Analysis. *J Pediatr Psychol*. 2023 Aug 29;48(8):655-663. doi: 10.1093/jpepsy/jsad014. PMID: 36860181.
11. Ferry J, Lewis O, Lloyd J, El-Boghdadly K, Kearns R, Albrecht E, Altermatt F, Ashokka B, Ayad AE, Aziz ES, Aziz L, Jagannathan B, Bouarroudj N, Chin KJ, Delbos A, de Gracia A, **Ip VHY**, Kwofie K, Layera S, Lobo CA, Mohammed M, Moka E, Moreno M, Morgan B, Polela A, Rahimzadeh P, Tangwiwat S, Uppal V, Vaz Perez M, Volk T, Wong PBY, Bowness JS, Macfarlane AJR. Research priorities in regional anaesthesia: an international Delphi study. *Br J Anaesth*. 2024 May;132(5):1041-1048. doi: 10.1016/j.bja.2024.01.033. Epub 2024 Mar 5. PMID: 38448274; PMCID: PMC11103078.
12. Martens MD, Holody CD, Wells L, Silver HL, Morales-Llamas DY, Du WW, Reeks C, Khairy M, Chen H, Ferdaoussi M, **Bourque SL**, Yang BB, Ussher JR, Lemieux H, Oudit GY, Screaton RA, Dyck JRB. Reactive Oxygen Species Modulator 1 Plays an Obligate Role in Cardiomyocyte Hypertrophy. *Circ Res*. 2024 Jan 5;134(1):114-116. doi: 10.1161/CIRCRESAHA.123.323456. Epub 2023 Nov 29. PMID: 38018429.
13. El-Boghdadly K, Albrecht E, Wolmarans M, Mariano ER, Kopp S, Perlas A, Thottungal A, Gadsden J, Tulgar S, Adhikary S, Aguirre J, Agur AMR, Altıparmak B, Barrington MJ, Bedforth N, Blanco R, Bloc S, Boretzky K, Bowness J, Breebaart M, Burckett-St Laurent D, Carvalho B, Chelly JE, Chin KJ, Chuan A, Coppens S, Costache I, Dam M, Desmet M, Dhir S, Egeler C, Elsharkawy H, Bendtsen TF, Fox B, Franco CD, Gautier PE, Grant SA, Grape S, Guheen C, Harbell MW, Hebbard P, Hernandez N, Hogg RMG, Holtz M, Ihnatsenka B, Ilfeld BM, **Ip VHY**, Johnson RL, Kalagara H, Kessler P, Kwofie MK, Le-Wendling L, Lirk P, Lobo C, Ludwin D, Macfarlane AJR, Makris A, McCartney C, McDonnell J, McLeod GA, Memtsoudis SG, Merjavy P, Moran EML, Nader A, Neal JM, Niazi AU, Njathi-Ori C, O'Donnell BD, Oldman M, Orebaugh SL, Parras T, Pawa A, Peng P, Porter S, Pulos BP, Sala-Blanch X, Saporito A, Sauter AR, Schwenk ES, Sebastian MP, Sidhu N, Sinha SK, Soffin EM, Stimpson J, Tang R, Tsui BCH, Turbitt L, Uppal V, van Geffen GJ, Vermeylen K, Vlassakov K, Volk T, Xu JL, Elkassabany NM. Standardizing nomenclature in regional anesthesia: an ASRA-ESRA Delphi consensus study of upper and lower limb nerve blocks. *Reg Anesth Pain Med*. 2023 Nov 22:rapm-2023-104884. doi: 10.1136/rapm-2023-104884. Epub ahead of print. PMID: 38050174.
14. Rajae AN, Olson DW, Freelove D, Velupillai N, Buro K, Sondekoppam RV, **Özelsel TJ**. Comparison of the Quality of Recovery-15 score in patients undergoing oncoplastic breast-conserving surgery under monitored anesthesia care versus general anesthesia: a prospective quality improvement study. *Can J Anaesth*. 2023 Dec;70(12):1928-1938. English. doi: 10.1007/s12630-023-02567-3. Epub 2023 Sep 25. PMID: 37749365.
15. Wawrzyniak P, Hubeli B, Wawrzyniak M, Nouredine N, Walberg A, Scharl S, Turina M, Scharl M, **Zaugg M**, Krämer SD, Rogler G, Hersberger M. Crosstalk within peripheral blood mononuclear cells mediates anti-inflammatory effects of n-3 PUFA-rich lipid emulsions in

- parenteral nutrition. *Clin Nutr.* 2023 Dec;42(12):2422-2433. doi: 10.1016/j.clnu.2023.10.016. Epub 2023 Oct 17. PMID: 37871483.
16. **Defoe M, Lam W**, Becher H, Lydell C, Hong Y, **Sidhu S**. Right ventricular ejection fraction derived from intraoperative three-dimensional transesophageal echocardiography versus cardiac magnetic resonance imaging. *Can J Anaesth.* 2023 Oct;70(10):1576-1586. English. doi: 10.1007/s12630-023-02569-1. Epub 2023 Sep 26. PMID: 37752378.
 17. Hammal F, Chiu C, Kung JY, Bradley N, **Dillane D**. Pain management for hospitalized patients with rib fractures: A systematic review of randomized clinical trials. *J Clin Anesth.* 2024 Feb;92:111276. doi: 10.1016/j.jclinane.2023.111276. Epub 2023 Oct 24. PMID: 37883901.
 18. Das D, Wong A, Friedman TN, **Kerr BJ**, Kurata HT, Lamothe SM. Reducing agents facilitate membrane patch seal integrity and longevity. *Channels (Austin).* 2024 Dec;18(1):2297621. doi: 10.1080/19336950.2023.2297621. Epub 2023 Dec 28. PMID: 38154061; PMCID: PMC10761044.
 19. Spence J, Belley-Côté E, Jacobsohn E, Lee SF, D'Aragnon F, Avidan M, Mazer CD, Rousseau-Saine N, Rajamohan R, Pryor K, Klein R, Tan EC, Cameron M, Di Sante E, DeBorba E, Mustard M, Couture E, Zamper R, Law M, Djaiani G, Saha T, Choi S, Hedlin P, Pikaluk R, **Lam WY**, Deschamps A, Whitlock R, Dulong B, Devereaux PJ, Beaver C, Kloppenburg S, Oczkowski S, McIntyre WF, McFarling M, Lamy A, Vincent J, Connolly S; **B-Free Investigators**. Benzodiazepine-Free Cardiac Anesthesia for Reduction of Postoperative Delirium (B-Free): A Protocol for a Multi-centre Randomized Cluster Crossover Trial. *CJC Open.* 2023 Jun 8;5(9):691-699. doi: 10.1016/j.cjco.2023.06.001. PMID: 37744662; PMCID: PMC10516716.
 20. Chatterjee P, Holody CD, Kirschenman R, Graton ME, Spaans F, Phillips TJ, Case CP, **Bourque SL**, Lemieux H, Davidge ST. Sex-Specific Effects of Prenatal Hypoxia and a Placental Antioxidant Treatment on Cardiac Mitochondrial Function in the Young Adult Offspring. *Int J Mol Sci.* 2023 Sep 3;24(17):13624. doi: 10.3390/ijms241713624. PMID: 37686430; PMCID: PMC10487956.
 21. Ostertag C, Friedman TN, Keough MB, **Kerr BJ**, Sankar T. Heightened presence of inflammatory mediators in the cerebrospinal fluid of patients with trigeminal neuralgia. *Pain Rep.* 2023 Dec 19;8(6):e11117. doi: 10.1097/PR9.0000000000001117. PMID: 38125050; PMCID: PMC10732488.
 22. Noble RMN, Kirschenman R, Wiedemeyer A, Patel V, Rachid JJ, Zemp RJ, Davidge ST, **Bourque SL**. Use of Photoacoustic Imaging to Study the Effects of Anemia on Placental Oxygen Saturation in Normoxic and Hypoxic Conditions. *Reprod Sci.* 2024 Apr;31(4):966-974. doi: 10.1007/s43032-023-01395-6. Epub 2023 Nov 27. PMID: 38012522.
 23. Noble RMN, Holody CD, Woodman AG, Nie C, Liu SN, Young D, Wiedemeyer A, Soni S, Dyck JRB, Graf D, Eckersley LG, Dufour A, **Bourque SL**. Perinatal iron restriction is associated with changes in neonatal cardiac function and structure in a sex-dependent manner. *Clin Sci (Lond).* 2023 Aug 14;137(15):1115-1130. doi: 10.1042/CS20230594. PMID: 37463130.
 24. El-Andari R, **Sidhu S**, Wang W. Massive septic pulmonary embolism from infective endocarditis obstructing the right pulmonary artery: a case report. *Future Cardiol.* 2023 Nov;19(14):679-683. doi: 10.2217/fca-2023-0101. Epub 2023 Dec 7. PMID: 38059471.
 25. Potvin CA, **Ip VHY**. Regional Anesthesia for Athletes Undergoing Upper Extremity Procedures: Techniques and Considerations. *Anesthesiol Clin.* 2024 Jun;42(2):203-217. doi:

- 10.1016/j.anclin.2023.11.006. PMID: 38705671.
26. Wang F, **Lucchinetti E**, Lou PH, Hatami S, Chakravarty A, Hersberger M, Freed DH, **Zaugg M**. Optimizing resuscitation of the donation after circulatory death heart by mitochondrial protection in a female porcine model. *Anesthesiology*. 2024 May 23. doi: 10.1097/ALN.0000000000005093. Epub ahead of print. PMID:38780996.
 27. Linkiewich D, Dib KC, Forgeron PA, **Dick BD**, McMurtry CM. Roadmap to the 'Chronic Pain GPS for Adolescents' Intervention: Content and Design Considerations for a Group Peer Support Intervention. *Clin J Pain*. 2024 May 1;40(5):288-298. doi: 10.1097/AJP.0000000000001201. PMID: 38303597.
 28. **Dillane D**, Ramadi A, Nathanail S, **Dick BD**, Bostick G, Chan K, Douglas C, Goplen G, Green J, Halliday S, Hellec B, Rashid S, Scharfenberger A, Woolsey G, Beaupre LA, Pedersen ME. Correction: Elective surgery in ankle and foot disorders-best practices for management of pain: a guideline for clinicians. *Can J Anaesth*. 2024 Feb;71(2):306. doi: 10.1007/s12630-023-02679-w. Epub 2023 Dec 19. Erratum for: *Can J Anaesth*. 2022 Aug;69(8):1053-1067. doi:10.1007/s12630-022-02267-4. PMID: 38114874.
 29. Rajae AN, Olson DW, Freelove D, Velupillai N, Buro K, Sondekoppam RV, **Özelsel TJ**. Comparison of the Quality of Recovery-15 score in patients undergoing oncoplastic breast-conserving surgery under monitored anesthesia care versus general anesthesia: a prospective quality improvement study. *Can J Anaesth*. 2023 Dec;70(12):1928-1938. English. doi: 10.1007/s12630-023-02567-3. Epub 2023 Sep 25. PMID: 37749365.
 30. Krebs BK, Rachor GS, Yamamoto SS, **Dick BD**, Brown CA, Asmundson GJG, Straub S, Els C, Jackson TD, Bremault-Philips S, Voaklander D, Stastny J, Berry T, & Gross DP. (2024). Multiple Psychiatric Diagnoses and Return-to-work Following Posttraumatic Stress Injury Rehabilitation. *Journal of Vocational Rehabilitation* 60 (3), 363 – 377. doi: 10.3233/JVR-230063
 31. Soltani S, Killackey T, Birnie KA, Brennenstuhl S, Kopala-Sibley DC, Choiniere M, Pagé MG, Dassieu L, Lacasse A, Laloo C, Poulin P, Ingelmo P, Ali S, Battaglia M, Campbell F, Smith A, Benayon M, Jordan I, Marianayagam J, Harris L, Mohabir V, Stinson J, Noel M; **COVID Child Pain Team (Dick BD)**. Pain, mental health and healthcare utilization: Impact of the COVID-19 pandemic on youth with chronic pain, parents and siblings. *Eur J Pain*. 2023 Nov;27(10):1249-1265. doi: 10.1002/ejp.2157. Epub 2023 Jul 12. PMID: 37435883
 32. Lee S, Jordan A, Walker N, Nauman H, **Dick BD**, McMurtry CM (2023). Learning, Hope, and Empowerment: A Reflexive Thematic Analysis of Feedback on a Group Intervention for Parents of Youth with Chronic Pain. *The Clinical Journal of Pain* 39(11):p 611-619, November 2023. | DOI: 10.1097/AJP.0000000000001150.
 33. Moray A, Mugaba PM, Joynt C, McBrien A, Eckersley LG, Phillipos E, **Holinski P**, Ryerson L, Coe JY, Chandra S, Wong B, Derbyshire M, Lefebvre M, Al Aklabi M, Hornberger LK. Predicting High-Risk Fetal Cardiac Disease Anticipated to Need Immediate Postnatal Stabilization and Intervention with Planned Pediatric Cardiac Operating Room Delivery. *J Am Heart Assoc*. 2024 Mar 19;13(6):e031184. doi: 10.1161/JAHA.123.031184. Epub 2024 Mar 18. PMID: 38497437; PMCID: PMC11010008.
 34. El-Andari R, Zibdawi R, **Holinski P**, Koller J, Joynt C, Khoo N, Lequier L, El-Hakim H, Al Aklabi M. Congenital Tracheal Stenosis Patients Undergoing Modified Slide Tracheoplasty: Single-Centre Technique and Long-Term Morbidity and Mortality. *CJC Pediatr Congenit Heart*

- Dis. 2023 Oct 13;3(1):24-32. doi: 10.1016/j.cjpcp.2023.10.003. PMID: 38544878; PMCID: PMC10964263.
35. Mizubuti GB, Maxwell S, Shatenko S, Braund H, Phelan R, Ho AM, Dalgarno N, Hobbs H, Szulewski A, Haji F, Arellano R; and the **Canadian Anesthesiology POCUS Consortium (Sidhu S)**. Competencies for proficiency in basic point-of-care ultrasound in anesthesiology: national expert recommendations using Delphi methodology. *Can J Anaesth*. 2024 Apr 17. English. doi: 10.1007/s12630-024-02746-w. Epub ahead of print. PMID: 38632162.
36. Schindle M, **Berger L**. Early Long-Acting Buprenorphine for Opioid Use Disorder in the Setting of Acute Pain. *J Addict Med*. 2024 Jun 3. doi: 10.1097/ADM.0000000000001333. Epub ahead of print. PMID: 38829025.
37. Khan JS, Gilron I, Devereaux PJ, Clarke H, Ayach N, Tomlinson G, Quan ML, Ladha KS, Choi S, Munro A, Brull R, Lim DW, Avramescu S, Richebé P, Hodgson N, Paul J, McIsaac DI, **Derzi S**, Zbitnew GL, Easson AM, Siddiqui NT, Miles SJ, Karkouti K; PLAN Trial Investigators. Prevention of persistent pain with lidocaine infusions in breast cancer surgery (PLAN): study protocol for a multicenter randomized controlled trial. *Trials*. 2024 May 22;25(1):337. doi: 10.1186/s13063-024-08151-4. PMID: 38773653; PMCID: PMC11110187.
38. **Derzi SH**, Dewidar O, Sabri H, Tran D, Wells GA. Antithrombotic therapy for durable left ventricular assist devices: protocol for a living systematic review with indirect comparison/network meta-analysis. *BMJ Open*. 2024 Jun 25;14(6):e080110. doi: 10.1136/bmjopen-2023-080110. PMID: 38925683; PMCID: PMC11202742.
39. **Gragasin FS**, Phaterpekar N, Glasgow D, Sun HL. Successful Ultrasound-Guided Spinal Anesthesia in a Patient With Severe Hemophilia A Undergoing Total Hip Arthroplasty. *J Hematol*. 2023 Dec;12(6):268-271. doi: 10.14740/jh1188. Epub 2023 Dec 28. PMID: 38188475; PMCID: PMC10769643.



GRAND ROUNDS 2023-24

Date	Presenter	Title
September 15th	John Saieed	Practice Guideline updates for the Management of the Difficult Airway
September 22nd	Stuart Rose	Debriefing clinical events - feeling better while we do better
October 6th	Yishi Sun	ERAS 2021 Update for Bariatric Surgery and Latest Literature on GLP-1 Agonists in Gastric Emptying
October 20th	Vijay Daniels	Entrustable Professional Activities and Feedback - the Good, the Bad, and the Ugly
October 27th	Zohreh Moazzeni	Perioperative glycemic management in diabetic patients
November 24th	Brigitta Riley	Global Anesthesia
December 1st	Montana Johnson	Anterior Mediastinal Mass
December 15th	Sunny Fong	Pulmonary Hypertension and the Forgotten Ventricle
January 5th	Francesca Seal	Motorsports Medicine
January 19th	Jaasmit Khurana	Clearing the Smoke...A Comprehensive Review of Perioperative Cannabis Use
February 2nd	Shannon Ruzycski	EDI and Anti-Racism: An Introduction for Anesthesiologists
February 16th	Ty Deacon	Mental Health and Well-being; How Are We Doing and What Can We Do Better?
February 23rd	Kieran Ganton Thomas Jeerakathil	Where the Rubber meets the Road: Stroke Ambulance, Stroke Care, and the Anesthesiologist
March 1st	Wen Yu	NAP 7 and the Obstetric Cardiac Arrest
March 15th	Dana Boe	Inhaled Anesthetics and Green Anesthesia: Time to Ditch the Des
April 5th	Jon Barnard	Geriatric Anesthesia- an update. New facts and old folks
April 26th	Rodger Craig	Breathe easy: Considerations and management in airway emergencies for "neck breathers"
May 17th	Quinn McLellan	To bleed, or not to bleed Perioperative management of chronic anticoagulants
May 24th	Rebecca Entz	Grown: A review of adult congenital heart disease for non-cardiac anesthetists
June 14th	Curtis Woolfe	A top up for Epidural Neuraxial Anesthesia in Obstetrical Care
June 28th	Pieter Hanekom	Anesthetic implications of performance enhancing drugs



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