

2024 – 2025

Interim Academic Report

July 1 2024 – December 31 2024

Department of Anesthesiology and Pain Medicine

Sunnybrook Health Sciences Centre

January 7 2025

PUBLICATIONS

Peer-reviewed publications:

1. **Safa B**, Trinh H, Lansdown A, **McHardy PG**, Gollish J, Kiss A, **Kaustov L**, **Choi S**. (2024) Ultrasound-guided suprainguinal fascia iliaca compartment block and early postoperative analgesia after total hip arthroplasty: a randomised controlled trial. *Br J Anaesth*:133(1):146-151
2. Heybati K, Satkunasivam R, Aminoltejari K, Thomas HS, Salles A, Coburn N, Wright FC, Gotlib Conn L, Luckenbaugh AN, Ranganathan S, Riveros C, **McCartney C**, Armstrong K, Bass B, Detsky AS, **Jerath A**, Wallis, CJD. (2024) Association between surgeon sex and days alive at home following surgery: a population-based cohort study. *Ann. Surg*:5(3):e477
3. Hamad DM, Subacius H, Thomas A, Guttman MP, Tillmann BW, **Jerath A**, Haas B, Nathens AB. (2024) A multidimensional approach to identifying high-performing trauma centers across the United States. *J Trauma Acute Care Surg*:97(1):125-133
4. Mizubuti GB, Maxwell S, Shatenko S, Braund H, Phelan R, Ho AM, Dalgarno N, Hobbs H, Szulewski A, Haji F, Arellano R (**Perez D-Empaire P**); Canadian Anesthesiology POCUS Consortium. (2024) Competencies for proficiency in basic point-of-care ultrasound in anesthesiology: national expert recommendations using Delphi methodology. *Can J Anaesth*:71(7):967-977
5. O’Gara B, Boncyk C, Meiser A, **Jerath A**, Bellgardt M, Jabaudon M, Beitler JR, Hughes CG. (2024) Volatile Anesthetic Sedation for Critically Ill Patients. *Anesthesiology*:141:163–174
6. **Brenna CTA**, Goldstein BI, Zarate CA, **Orser BA**. Repurposing General Anesthetic Drugs to Treat Depression: A New Frontier for Anesthesiologists in Neuropsychiatric Care. *Anesthesiology*:141(2):222-237 *Featured on multiple radio stations by FOX News
7. Khan S, Brenna CTA, Pendergrast J, Malinowski AK, Salvatori M, Katznelson R, **Tarshis J**. (2024) Hyperbaric oxygen therapy during pregnancy for critical anemia secondary to sickle cell disease with post-transfusion hyperhemolysis: a case report. *Hematol Rep*:16:552-558
8. Karkouti K, Callum J, Bartoszko J, Solomon C, Knaub S, Levy JH, Tanaka KA; FARES-II Study Group (**Jerath A**, **Wong S**, **Perez D-Empaire P**, **Kaustov L**). (2024) Protocol for a phase 3, randomised, active-control study of four-factor prothrombin complex concentrate versus frozen plasma in bleeding adult cardiac surgery patients requiring coagulation factor replacement: the LEX-211 (FARES-II) trial. *BMJ Open*:14(8):e091381
9. **Angle PA**, Ashok V, Liu G, Trenholm M, Montbriand J. (2024) Severe back labor pain masks a scald caused by shower hydrotherapy - A case report. *Int J Obstet Anesth*:59(103992)
10. Riveros C, Ranganathan S, Shah YB, Huang E, Xu J, Hsu E, Geng M, Hu S, Melchiodi Z, Miles BJ, Esnaola N, Klaassen Z, **Jerath A**, Wallis CJD, Satkunasivam R. Association of chronic kidney disease with postoperative outcomes: a national surgical quality improvement program (NSQIP) multi-specialty surgical cohort analysis. *BMC Nephrol*:25(1):305
11. Müller-Wirtz LM, O’Gara B, Thomas A, Gama de Abreu M, Schultz MJ, Beitler JR, **Jerath A**, Meiser A. Volatile Anesthetics for Lung- and Diaphragm-Protective Sedation: A Narrative Review. *Critical Care*:28(1):269
12. Mah A, Hallet J, **Alam F**. (2024) The need for new interdisciplinary education approaches in surgical ergonomics. *Am J Surg*:235:115578

13. Matava CT, Bordini M, Sullivan BO, Garcia-Tejedor GA, Gai N, Petroz G, Donnell CM, **Alam F**, Brazel K, Caldeira-Kulbakas M. (2024) Virtual parental presence with coaching for reducing preoperative anxiety in children: a feasibility and pilot randomized controlled trial. *Braz J Anesthesiol*:74(5):844533
14. Adams MCB, Akeju O, Prakash YS, **Orser BA**. (2024) Charting the Future of the Global Anesthesia Research Community: The Vision of the International Anesthesia Research Society. *Anesth Analg*:doi: 10.1213/ANE.0000000000007221
15. Strauss R, Kron A, Callum J, Armali C, Modi D, Notario L, **D'Empaire PP**, Tillmann BW, Pannell D, Tien H, Nathens A, Beckett A, da Luz LT. (2024) STudy to Actively WARM trauma patients (STAY WARM): a pilot study assessing the feasibility of self-warming blankets in patients requiring a massive hemorrhage protocol activation. *Eur J Trauma Emerg Surg*:50(5):2289-2294
16. Pandolfi C, Masse X, Morais AR, Ventura Y, Cigljarev, **Jerath A**. Integrating systems and design thinking in healthcare: a user-centred perspective. *IADIS International Journal on Computer Science and Information Systems* Vol. 19, No. 2, pp. 54-71 ISSN: 1646-3692
17. **Jivraj NK**, Sun E, Dunn LK, Shanthanna H. (2024) Persistent postoperative opioid use: progressing from risk identification to risk reduction. *Anesth Analg*:139(4):683-686 OCT
18. **Niazi AU, Kealey A, Choi S, Kaustov L, Tarshis J**. (2024) Improving teaching effectiveness: feedback preferences by teachers on a faculty facing dashboard. *Discover Education*: 3(192)
19. Dool T, Dhall G, Enriquez C, Deshmukh A, **Meng H**, da Costa L, Hawkes C. (2024) Spontaneous Cervical Internal Carotid Artery Vasospasm (SCICAV): It's Unique. *Can J Neurol Sci*: 28:1-2
20. Karanicolas PJ, Lin Y, McCluskey SA, **Tarshis J**, Thorpe KE, Wei A, Dixon E, Porter G, Chaudhury P, Nanji S, Ruo L, Tsang ME, Skaro A, Eeson G, Cleary S, Moulton CA, Ball CG, Hallet J, Coburn N, Serrano PE, Jayaraman S, Law C, Tandan V, Sapisochin G, Nagorney D, Quan D, Smoot R, Gallinger S, Metrakos P, Reichman TW, Jalink D, Bennett S, Sutherland F, Solano E, Molinari M, Tang ES, Warner SG, Bathe OF, Barkun J, Kendrick ML, Truty M, Roke R, Xu G, Lafreniere-Roula M, Guyatt G; HPB CONCEPT Team. (2024) Tranexamic Acid in Patients Undergoing Liver Resection: The HeLiX Randomized Clinical Trial. *JAMA*:332(13):1080-1089
21. Warkentin TE, Geerts W, Sheppard JI, Guest CB, Cohen G, **Perez d'Empaire P**, Nazy I, Arnold DM. (2024) High-dose intravenous immunoglobulin G and usual heparin anticoagulation for urgent cardiac surgery in a patient with severe autoimmune heparin-induced thrombocytopenia. *J Thromb Haemost*:16:S1538-7836(24)00687-1
22. Guerra-Farfan E, Borges FK, Bhandari M, Garcia-Sanchez Y, Nuñez JH, Mestre-Torres J, Tomas-Hernandez J, Teixidor-Serra J, Balaguer-Castro M, Castillon P, Dealbert A, De Caso Rodriguez J, Aguado HJ, Guerado E, Popova E, Tonelli AC, Balasubramanian K, Vincent J, Harvey V, Kocaqi E, Slobogean G, Devereaux PJ; Hip Attack-1 Investigators (**Choi S**). (2024) Mortality, perioperative complications and surgical timelines in hip fracture patients: Comparison of the Spanish with the non-Spanish Cohort of the HIP ATTACK-1 trial. *Injury*: 55(11):111827
23. McIsaac DI, Tandon P, Kidd G, Branje K, Hladkovic E, Hallet J, Wijeyesundera DN, Lee S, McNeely ML, Taljaard M, Gillis C; STRIVE Trial Investigators (**McCartney C, Choi S, Jerath A, Tarshis J, Orser B, Jivraj N, Kaustov L, Yee D**.); Canadian Perioperative Anesthesia Clinical Trials Group (PACT). (2024) STRIVE pilot trial: a protocol for a multicentre pragmatic internal pilot randomised controlled trial of Structured TRaining to Improve fitness in a Virtual Environment (STRIVE) before surgery. *BMJ Open*:14(11):e093710
24. Mah A, **Alam F**, Larouche J, Dandal MA, Cohen T, Hallbeck S, Norasi H, Kallocsai C, Sriram S, **Helman JD**, Hallet J. (2024) Interdisciplinary operating room ergonomics needs and priorities: a survey of operating room staff. *Ann Surg*:doi: 10.1097/SLA.0000000000006582

25. El-Boghdady 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, Bedford N, Blanco R, Bloc S, Boretsky 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, Merjavý 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, Vermeulen K, Vlassakov K, Volk T, Xu JL, Elkassabany NM. (2024) Standardizing nomenclature in regional anesthesia: an ASRA-ESRA Delphi consensus study of upper and lower limb nerve blocks. *Reg Anesth Pain Med*:49(11):782-792
26. McIsaac DI, Neilipovitz N, Bryson GL, Gagne S, Huang A, Lalu M, Lavallée LT, Moloo H, Power B, Scheede-Bergdahl C, van Walraven C, **McCartney CJL**, Taljaard M, Hladkovicz E. (2024) Home-based exercise prehabilitation to improve disease-free survival and return to intended oncologic treatment after cancer surgery in older adults with frailty: a secondary analysis of a randomized trial. *Can J Anaesth*. 71(11):1525-1534
27. Ribeiro T, Malhotra AK, Bondzi-Simpson A, Eskander A, Ahmadi N, Wright FC, McIsaac DI, Mahar A, **Jerath A**, Coburn N, Hallet J. (2024) Days at home after surgery as a perioperative outcome: scoping review and recommendations for use in health services research. *Br J Surg*:111(12):znae278
28. Yang H, Littleford J, **Orser BA**, Zaccagnini M, Umedaly H, Olsen M, Raazi M, LeDez K, Adam Law J, Giffin M, Foerster J, D'Souza B, Ali I, Dillane D, Christodoulou C, Buu N, Bryan R. (2024) The evolution and formalization of anesthesia assistant roles across Canada. *Can J Anaesth*:71(12):1627-1645
29. **Orser BA**, Wilson RC, **Jivraj N**. Strategies to increase access to physician-led anesthesia care in Canada. *Can J Anesth*:71(12):1586-1594
30. **Wiegelmann J**, **Choi S**, **McHardy PG**, Matava C, **Singer O**, **Kaustov L**, **Alam F**. (2024) Randomized control trial of a holographic needle guidance technique for thoracic epidural placement. *Reg Anesth Pain Med*:49(12):861-866 Dec
31. Pinyavat T, Riazi S, Deng J, Slessarev M, Cuthbertson BH, Ibarra Moreno CA, **Jerath A**. (2024) Malignant Hyperthermia. *Crit Care Med*:52(12):1934-1940
32. **Safa B**, **McHardy P**, **Choi S**. Ultrasound-guided suprainguinal fascia iliaca compartment block and early postoperative analgesia after total hip arthroplasty. (2024) Response to *Br J Anaesth*:133:1326-7 and 1328-9 *Br J Anaesth*:S0007-0912(24)00666-4
33. Saka N, Yamamoto N, Watanabe J, Wallis C, **Jerath A**, Someko H, Hayashi M, Kamijo K, Ariie T, Kuno T, Kato H, Mohamud H, Chang A, Satkunasivam R, Tsugawa Y. (2024) Comparison of Postoperative Outcomes Among Patients Treated by Male Versus Female Surgeons: A Systematic Review and Meta-analysis. *Ann Surg*:280(6):945-953
34. OPTIMISE II Trial Group (**Jerath A**). (2024) Cardiac output-guided haemodynamic therapy for patients undergoing major gastrointestinal surgery: OPTIMISE II randomised clinical trial. *BMJ*:387:e080439
35. Byrick R, **Orser BA**. (2024) David Richard Bevan, MA, MB, BChir (Cantab) with Distinction, MRCP (London), FRCA, RCPSC, FRCPC. *Can J Anaesth*:71(12):1786-1788
36. **Wiegelmann J**, **Choi S**, **McHardy PG**, Matava C, **Singer O**, **Kaustov L**, **Alam F**. (2024) Randomized control trial of a holographic needle guidance technique for thoracic epidural placement. *Reg Anesth Pain Med*:2;49(12):861-866

1. Khan MS, Zарmer LF, Liang J, Saroukhani S, Lucas AR, **McCartney CJL**, Chaudhry R. (2025) Evaluating multiplicity reporting in analgesic clinical trials: an analytical review. *Eur J Pain*:29(1):e4756
2. Rietchel LJ, Belfiore EBR, Sigala MEM, **Perez d'Empaire P**. (2025) Point-of-Care Ultrasound in Trauma and the Evolving Role of the Anesthesiologist: A Narrative Review of Emerging Topic Trends. *Curr Anesthesiol Rep*:15,2: <https://doi.org/10.1007/s40140-024-00682-5>
3. Mashari A, **Moreno Garijo J**, Gadotti G, Tirone D, Meineri M, Godoy A. (2024) Assessment of right ventricle function in patients with mitral repair: Case Series. *Ann Card Anaesth* (*accepted for publication*)
4. Brenna CTA, Goldstein BI, Zarate CA, **Orser BA**. Intersections of Anesthesiology and Psychiatry: Reply. *Anesthesiology* (*accepted for publication*)
5. Crozier M, McVicar J, Lorello JR, Mottiar M, Wilson CR, **Orser BA**. (2025) Females in the Canadian Physician Anesthesia workforce: a historical analysis. *Can J Anesth* (*accepted for publication*)

BOOK CHAPTERS/E-MODULES:

1. **MacLean DB, Halpern SH**. Disorders of Intermediaries of Metabolism and Malignant Hyperthermia. In: *Obstetric Anesthesia and Uncommon Disorders*. *Editors*: Gambling DR, Douglas MJ, Lim G. Cambridge University Press; 2024:273-289
2. Berger M, **Orser BA**, Evered L. The Perioperative Neurocognitive Disorders. In *Miller's Anesthesia*, 10th edition, Elsevier, 2024:2538-2550.e4. *Editors*: Gropper MA, Eriksson LI, Fleisher LA, Cohen NH, Leslie K, Johnson-Akeju O. ISBN:9780323935920
3. **Sawyer J**, Milano Carter M, Cooney MF. Interventional Pain Management. Core Curriculum for Pain Management Nursing, 4th Edition, Copyright: 2025, Elsevier. *Editors*: Turnet HN, Czarnecki ML. ISBN: 9780323794374
4. **Moreno Garijo J**, Chetrit M, Courbe A, Lamarche Y. Pericardial disease and therapeutic considerations. In: *Transesophageal Echocardiography Multimedia Manual*, 3rd edition. Éditions Informa HealthCare, 2024 (*in process*)
5. Douffle G, Cavayas A, **Perez d'Empaire P**, Soliman H, Viellard-Baron A. TEE in the Intensive Care Unit. In: *Transesophageal Echocardiography Multimedia Manual*, 3rd edition. Éditions Informa HealthCare, 2024 (*in process*)
6. McLeod G, **McCartney C**, Wildsmith T. History and Development of Local Anaesthesia. In: *Principles and Practice of Regional Anaesthesia*, 5th edition. *Editors*: McLeod GA, **McCartney CJL**, MacFarlane A. Oxford University Press (*in process*)
7. A Sadler, R Brull and **McCartney CJL**. Neurological complications of regional anaesthesia. In: *Principles and Practice of Regional Anaesthesia*, 5th edition. *Editors*: McLeod GA, **McCartney CJL**, MacFarlane A.
8. Stimpson J, McCartney CJL. Upper Limb blocks. In: *Principles and Practice of Regional Anaesthesia*, 5th edition. *Editors*: McLeod GA, **McCartney CJL**, MacFarlane A. Oxford University Press (*in process*)
9. Xu RS, **Awad IT, McCartney CJL**. Ultrasound-Guided Nerve Blocks of the Lower Limb in Atlas of Ultrasound-guided Procedures. In: Narouze SN, eds. *Interventional Pain Management* (*in process*)

INVITED LECTURES

**virtual*

1. **Dr. Angela Jerath** – Does Operator gender influence perioperative outcomes? Women in Anesthesia: Gaps and Challenges. Operating Theatre Department and the Department of Academic Development and Clinical Research of Clinica Alemana Santiago, Santiago, Chile, August 2024
2. **Dr. Beverley A. Orser** – Ketamine: You can teach an old drug new tricks! John McDonald Memorial Symposium, Ionotropic Glutamate Receptor (GLUR) Annual Meeting, August 10 - 12 2024, Toronto, ON
3. **Dr. Fahad Alam** – Immersive Virtual Environments: An overview of virtual and augmented reality in Healthcare Education - the what, why and how. Sim City Rounds, U of T Simulation, Toronto ON, September 19, 2024*
4. **Dr. Angela Jerath** – Women in Surgery. Canadian Surgery Forum, Winnipeg MA, September 25-28 2024
5. **Dr. Pablo Perez d'Empaire** – Venezuelan Society of Critical Care Medicine Webinar. POCUS in shock for critically ill patients. September 25 2024*
6. **Dr. Fahad Alam** – Teamwork: collective approach to ergonomics in the OR. Canadian Surgery Forum, Winnipeg MB, September 25-28 2024
7. **Dr. Lavarnan Sivanthan** – Opioid Management for Pain the Post Pandemic Era: The Toronto Experience. Frontiers in Pain Research Lecture Series, McGill University, Montreal QC, October 2 2024
8. **Dr. Fahad Alam** – The use of hyperbarics in managing vascular occlusions. 2024 Complications in Medical Aesthetic Collaborative, London UK, October 4-5 2024
9. **Dr. Stephen Choi** – Post-operative delirium: causes, risk factors, interventions. Ontario PeriAnesthesia Nurses Association (OPANA) Fall Symposium, October 16 2024
10. **Dr. Edgar Hockman** – An approach to hypotension in the post-operative patient. Ontario PeriAnesthesia Nurses Association (OPANA) Fall Symposium, October 16 2024
11. **Dr. Lavarnan Sivanthan** – OAT and the effects of long-term opioid therapy. Mentoring, Education and Clinical Tools for Addition, Partners in Health Integration (META:PHI) Webinar, October 16 2024*
12. **Dr. Beverley A. Orser** – Deregulation of GABA receptors after anesthesia and surgery. 2024 PND Workshop, University of Pennsylvania, Philadelphia, PA, October 17-18 2024
13. **Dr. Fahad Alam** – Holographic neuraxial anaesthesia. 2024 Burnell-Jose Anesthesia Continuing Education Conference, Adelaide, South Australia AU, October 19-20, 2024
14. **Dr. Fahad Alam** – Maximising SIM spaces in departments. *Hospital visits*: TQEH departmental meeting, Lyell McEwin Departmental meeting, Women's & Children's Hospital Education meeting, Adelaide, South Australia AU, October 19 - 20 2024
15. **Dr. Fahad Alam** – Mixed reality simulation (VR & AR) in healthcare/anesthesiology and future directions. 2024 Burnell-Jose Anesthesia Continuing Education Conference, October 19-20 2024, Adelaide, Australia (*keynote speaker*)
16. **Dr. Howard Meng** – ESP for spinal surgery: Expanding its indications. 2024 Nacienceno Congress on Regional Anesthesia and Acute Pain, October 25-26 2024, Medellin, Colombia
17. **Dr. Howard Meng** – Acute pain management of patients with burns. 2024 Nacienceno Congress on Regional Anesthesia and Acute Pain, October 25-26 2024, Medellin, Colombia
18. **Dr. Jacobo Moreno Garijo** – Lung Ultrasound vs. Chest radiography for postoperative pneumothorax detection after chest drainage removal in cardiac surgery. Anesthesia Grand Rounds, Sunnybrook Hospital, Toronto ON, October 25 2024

19. **Dr. Beverley A. Orser** – Addressing anesthesia workforce challenges in Canada. Canadian Anesthesiologists’ Society Webinar, Toronto ON, October 30 2024*
20. **Dr. Jacobo Moreno Garijo** – Echo Anatomy: 3D models & imaging correlation and 3D TEE image optimization, 3rd Barcelona 3D Perioperative TEE Course, Barcelona, Spain, October 2024 (*director and speaker*)
21. **Dr. Jacobo Moreno Garijo** - POCUS and Hemodynamic Panel Moderator. Presentation: Utility of 3D TEE and Strain. II Reunión EACTAIC España, Spanish section of the European Association of Cardiothoracic and Vascular Anaesthesia and Intensive Care, Spain, November 2024 (*moderator and invited speaker*)
22. **Dr. Jacobo Moreno Garijo** – Utility of 3D TEE and “strain” in the Cardiac Surgery operating room. II Spanish Meeting from the European Association of Cardiothoracic Anaesthesiology and Intensive Care (EACTAIC), Spain, November 13 2024
23. **Dr. Angela Jerath** – Advancing ICU care with Inhaled Anesthetics: From Pharmacology to Clinical Practice. Clinical Care Forum, Toronto, Ontario, November 19 2024
24. **Dr. Angela Jerath** – Shock and Hemodynamic Support. Critical Care Forum, Toronto, Ontario, Canada November 19 2024 (*moderator*)
25. **Dr. Jacobo Moreno Garijo** – 3D TEE in the Cardiac OR: Enhancing Precision and Patient Outcomes with Real-Time Decision-Making. Department of Anesthesiology, Yale School of Medicine, New Haven CT, December 2024
26. **Dr. Jacobo Moreno Garijo** – 3D TEE in the Cardiac OR: Enhancing Precision and Patient Outcomes with Real-Time Decision-Making. Costa Rica TEE Symposium, May 2025
27. **Dr. Jacobo Moreno Garijo** – 3D TEE in the Cardiac OR: Enhancing Precision and Patient Outcomes with Real-Time Decision-Making. European Association of Cardiothoracic Anaesthesiology and Intensive Care (EACTAIC), Milan, Italy, June 14-17 2025
28. **Dr. Jacobo Moreno Garijo** – Hypotension during lung resection: is there a problem with the right ventricle? Canadian Anesthesiologists’ Society (CAS) Annual Meeting, Newfoundland, June 20-22 2025

WORKSHOPS

**virtual*

1. **Dr. Pablo Perez d’Empaire** – Introduction to Perioperative Point of Care Ultrasound Course. American Society of Regional Anesthesia and Pain Medicine (ASRA), Nashville, September 14-15 2024
2. **Dr. Pablo Perez d’Empaire** – Perioperative point of care ultrasound. 2024 International Symposium of Ultrasound for Regional Anesthesia (ISURA) Workshop, Toronto General Hospital, Toronto ON, September 27-28 2024
3. **Dr. Pablo Perez d’Empaire** – Point of Care Ultrasound for All Anesthesiologist Workshop. 2024 ASA Annual Meeting, Philadelphia, October 21 2024
29. **Dr. Fahad Alam** – Maximising SIM spaces in departments. *Hospital visits:* TQEH departmental meeting, Lyell McEwin Departmental meeting, Women’s & Children’s Hospital Education meeting, Adelaide, South Australia AU, October 19 -20 2024
4. **Dr. Howard Meng** – Protocols: Lidocaine and ketamine pumps and infusions. Acute Pain Workshop, 2024 Nacianceno Congress on Regional Anesthesia and Acute Pain, Medellin, Colombia
5. **Dr. Carlos Eduardo Restrepo-Garces:** Instructor, 2024 International Association for the Study of Pain (IASP) World Congress, Amsterdam Netherlands, August 5-9 2024 (*a former fellow, Sunnybrook HSC*)

ABSTRACTS/POSTER PRESENTATIONS

**virtual*

1. Ciglijarev M, Morais AR, **Jerath A**, Dadashi N, Pandolfi C. Using design methodologies to explore a pre-surgical system. Awarded '*Outstanding Paper*' and invited for submission to IADIS International Journal of Computer Science and Information Systems. 16th International Conference on e-Health, Budapest, Hungary, July 13-15 2024
2. **P Angle**, C Kurtz-Landy, G Barrieau, B Pardy, Au A, Berndl A, Ospechook C, Fleming K, Sarabia M, Prescod A. Women's experiences of anesthesia care during urgent or emergent caesarean section: A qualitative study examining stressors and potential solutions. *A top 10 finish*, SRI Summer Student Poster Competition, Sunnybrook Research Institute, Toronto ON, August 14 2024
3. Lawry CA, **Martinho D**, McCarron D, Di Renna T, **Tarshis J**, **Safa B**, Flynn J, Kiss A, Kaustov L, **Choi S**, **Niazi AU**. Effect of a pre-operative internet-based educational video providing both opioid counselling and pain coping skills on post-operative opioid consumption. *2nd place*, SRI Summer Student Poster competition, Sunnybrook Research Institute, Toronto ON, August 17 2023
4. Yu M, Ariza A, Wang DS, **Kaustov L**, **Orser BA**. A novel peptide to reduce sevoflurane-mediated excess cell-surface expression of $\alpha 5\text{GABA}_A$ receptors. Society for Neuroscience, Chicago IL, October 5-9 2024
5. Brenna CTA, Wang DS, Yu M, **Kaustov L**, **Orser BA**. Modulation of GABA_A receptors in the antidepressant effect of nitrous oxide. Society for Neuroscience, Chicago IL, October 5-9 2024
6. Dimick MK, **Orser BA**, Bradley J, MacIntosh BJ, Goldstein BI. Treatment-related Effects on Inter-regional Cerebral Blood Flow Correlations in a Randomized Controlled Trial of Nitrous Oxide for Bipolar Depression. 2024 American College of Neuropsychopharmacology (**ACNP**) **Annual Meeting**, Phoenix AZ, December 8-11 2024
7. **Idestrup C**, Yang Q, Ravi B, **Choi S**, **Safa B**, Pang KS, **Jerath A**. Tranexamic acid dosing for major joint replacement surgery. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025 (*selected for oral presentation*)
8. **Shaheen S**, **Rosales HR**, Zhang C, **Erbetta I**, **Kaustov L**, **Orser BA**, **Choi S**. Redesigning the surgical pathway: optimizing PreOperative assessMent in the anesthesia clinic for adult surgical patients (PROMoTE). Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
9. **Rosales HR**, **Choi S**. Does peri-operative dexmedetomidine have an effect on depressive symptoms after cardiac surgery? A CODEX sub-study. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
10. **Shaw E**, Chapman, Cuthbertson BH, Scales D, Nardi J, Linseman B, **Jerath A**. Sedating with volatile anesthetics critically ill COVID-19 patients in ICU (SAVE-ICU trial): effects on ventilatory parameters and survival. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
11. Koitsopoulos B, Cuthbertson BH, Chapman M, McKinnon N, Slessarev M, Ganesan R, Rogers A, **Jerath A**. Analgosedative drug use in burns ICU patients after initiation of inhaled volatile based sedation. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
12. **Martinho D**, Su A, Lowry CA, McCarron A, Di Renna T, **Tarshis J**, **Safa B**, Ravi B, Flynn J, Kiss A, Kaustov L, **Choi S**, **Niazi AU**. Effect of a pre-operative internet-based educational video, providing both opioid counselling and pain coping skills, on post-operative opioid consumption (Opioids study). Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025

13. **Martinho D**, Lowry CA, McCarron A, **Paul McHardy P**, **Safa B**, **Chris Idestrup C**, **Meng H**, **McCartney C**, **Choi S**. Positioning of continuous adductor canal catheters after total knee arthroplasty. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
14. **Meng H**, Erbetta I, Khodaei S, Shaheen S, Kaustov L, Fleet A, **Choi S**. Prevention of persistent pain with Lidocaine infusions in breast cancer surgery (PLAN). Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
15. **Erbetta I**, **Kaustov L**, **Jerath A**, Haas B, Fremes S, Cohen G, Roifman I, Ko D, Harrington H, Kiss A, **McCartney CJL**, **Moreno Garijo J**. Lung Ultrasound vs. Chest radiography for postoperative pneumothorax detection after chest drainage removal in cardiac surgery. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
16. **Abramian M**, Tu A, McLaren S, Gillam H, **Kaustov L**, **Singer O**, **Choi S**, **Giacobbe P**, Chan A, Hamstra S, **Tarshis J**, **Alam F**. Improving post-COVID syndrome with hyperbaric oxygen treatments (PCS-HBOT Study). Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
17. **Angle P**, Kurtz-Landy C, **Pardy B**, Barrieau G, Berndt A, Osepchook C, Fleming K. Women's experiences of anesthesia care during urgent or emergency cesarean section: a qualitative study examining stressors and actionable solutions. Annual Sunnybrook Clinical Impact through Innovation EXPO, Toronto ON, February 3 2025
18. Yu M, Ariza A, Ju L, Wang DS, **Orser BA**. Ketamine prevents sevoflurane-induced excess cell-surface expression of α GABA_A receptors in mouse hippocampal neurons. International Anesthesia Research Society Meeting (IARS), Honolulu, Hawaii, March 20-23 2025
19. Brenna CTA, Wang DS, Yu M, **Kaustov L**, **Orser BA**. Exploring sustained effects of nitrous oxide on GABA_A receptors in mice. International Anesthesia Research Society Meeting (IARS), Honolulu, Hawaii, March 20-23 2025
20. Wang DS, Khodaei S, **Orser BA**. The lasting effects of inflammation and inhalational anesthesia on cognitive performance in mice. International Anesthesia Research Society Meeting (IARS), Honolulu, Hawaii, March 20-23 2025
21. Gupta S, Belfiore E, Matava C, **Tarshis J**, Tavares W, **Kaustov L**, Brenna CTA, May V, Da Cruz T, **Alam F**. Virtual Reality: a teaching-learning strategy for cognitive mastery in airway trauma management. International Anesthesia Research Society Meeting (IARS), Honolulu, Hawaii, March 20-23 2025
22. Thomas HS, Neu S, Hird A, Golding H, Wilton D, Saskin R, **Tarshis J**, **Alam A**, Robert K, Nam RK, Herschorn S, Matta R. Evaluating the use of hyperbaric oxygen therapy for radiation hemorrhagic cystitis in a large, population-based cohort. Annual European Association of Urology's Congress, Madrid, Spain, March 21-24 2025
23. Wiengarten BR, **Moreno Garijo J**, **Perez D'Empaire P**. The role of resuscitative perioperative transesophageal echocardiography in intraoperative cardiac arrest: a case report. 2025 Society of Cardiovascular Anesthesiologists (SCA) Annual Meeting, Montreal QC, April 26-29 2025

GRANTS AWARDED

A - applicant, **C** – collaborator, **CA** – co-applicant, **CI** – co-investigator, **CPA** – co-principal applicant, **CPI** – co-principal investigator, **CPL** – clinical principal lead, **NPA** – nominated principal applicant, **PA** – principal applicant, **PI** – principal investigator.

Project Title: Effect of perioperative duloxetine administration on opioid consumption following total knee arthroplasty

Source: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre

PI: **McCartney C.**

CI(s): **Meng H,** Tomescu S, **Choi S,** Nestor S.

Amount: \$105,000 for 2 years (April 2024 – March 2026)

Project Title: The HEROES trial: hyperbaric oxygen therapy for endometriosis-related pain: A prospective randomized study

Source: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre

PI: **Silva Restrepo M.** **co-PI:** Liu G.

CI(s): **Alam F,** Kaustov L, **Moreno J,** **Choi S,** **Tarshis J,** **Meng H,** Kung R, Skolnik E, Po L, Sriram S.

Amount: \$105,000 for 2 years (April 2024 – March 2026)

Project Title: Core domain measures for extended reality technologies for acute, recurrent, and chronic pain across the life span: A consensus conference.

Source: CIHR Planning and Dissemination Grant.

CPI(s): Stintson J, Ouellette C, **Alam F,** Rosenblum B.

CI(s): Linkiewich D, Hess CW, Logan D, Mesaroli G.

Amount: \$30,000 for 1 year (February 2024 – January 2025)

Project Title: The Op-Sleep Program: Development and implementation of a novel multi-disciplinary combined opioid management and sleep health optimization program to address the opioid crisis in patients with chronic non-cancer pain

Funder: University of Toronto Center for Study of Pain (UTCSP)

PI: Singh M.

CI(s): **Sivanathan L,** Ng K, Pappu A, Di Renna T, Bhatia A, Clarke H, **Meng H.**

Amount: \$30,000 for 1 year (January 2024 – January 2025)

Project Title: Development of a Web-based Tutorial for Teaching Regional Anesthesia for Hip Fractures Patients: A Feasibility Study

Funder: Specialty Excellence Scholarship Award. The Ottawa Hospital Anesthesia Alternate Funds Association (SESAW)

PI: Gu Y.

CI(s): **Alam F,** Boet S, Crooks S, Chandy J, Ramlogan R, Wong P.

Amount: \$30,000 for 1 year (January 2024 – January 2025)

Project Title: Immersive reality in medical education and care delivery: an innovative vision of healthcare

Funder: Education Merit Award, 2023 - 2025 Merit Award Program, Department of Anesthesiology & Pain Medicine, University of Toronto

PI: **Dr. Fahad Alam**

Amount: \$80,000 for 2 years (January 2024 – December 2025)

Project Title: Unravelling perioperative neurocognitive disorders

Funder: Merit Award, 2023 - 2025 Merit Award Program, Department of Anesthesiology & Pain Medicine, University of Toronto

PI: **Dr. Stephen Choi**

Amount: \$80,000 for 2 years (January 2024 – December 2025)

Project Title: Perioperative care models and morbidity on patient and health system outcomes (PROPEL)
Funder: Merit Award, 2023 - 2025 Merit Award Program, Department of Anesthesiology & Pain Medicine, University of Toronto
PI: Dr. Angela Jerath
Amount: \$80,000 for 2 years (January 2024 – December 2025)

Project Title: HoloSIM - Development and Validation of a Holographic Medical Crisis Training Simulator
Funder: Early Investigator Merit Award, 2023 - 2025 Merit Award Program, Department of Anesthesiology & Pain Medicine, University of Toronto (\$40,000 per annum for 2 years)
PI: Dr. Julian Wiegelmann
Amount: \$80,000 for 2 years (January 2024 – December 2025)

Project Title: Remote Immersive Virtual Reality (RIVR) Teaching: Use in Ultrasound Guided Regional Anesthesia Procedural Skills Acquisition
Funder: Education and Simulation in Anesthesia Research Grant, Canadian Anesthesiologists' Society
PI: Niazi AU.
CI(s): Wilcocks K, Moorthy A, **Choi S.**
Amount: \$10,000 for 2 years (July 2023 – June 2025)

Project Title: Lung ultrasound versus chest radiography for detection of pneumothorax after mediastinal and chest drainage removal, a pilot study
Funder: The 2023 Reichman Family Chair in Cardiovascular Research
PI: Moreno Garijo J.
CI(s): **Jerath A, McCartney C,** Haas B, Fremes S, Cohen G, Roifman I, Ko D, Linseman B, Harrington H, Kiss A.
Amount: \$30,000 for 1.5 years (May 2023 – November 2024, *no-cost extension granted until March 2025*)

Project Title: Improving Post-Covid Syndrome with Hyperbaric Oxygen Treatments (PCS-HBOT study)
Source: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre
PI: Tarshis J. CPI: Singer O.
CI(s): **Alam F,** Chan A, Choi S, Hamstra S, Giacobbe P.
Amount: \$105,000 for 2 years (April 2023 – March 2025)

Project Title: Combination therapy: Hyperbaric oxygen and PENTOCLO for treatment of osteoradionecrosis of the mandible, a pilot randomized control trial
Funder: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre
PI: Tanner K. CPI: Blanas N.
CI(s): **Safa B,** Higgins K, Eskander A, **Tarshis J, Choi S,** Kiss A.
Amount: \$105,000 for 2 years (April 2023 – March 2025)

Project Title: Ultrasound-guided percutaneous intercostal nerve cryoneurolysis for analgesia following traumatic rib fracture, a pilot randomized control trial
Funder: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre
PI: Safa B. CPI: Nathens A.
CI(s): **Meng H, Choi S.**
Amount: \$105,000 for 2 years (April 2023 – March 2025)

Project Title: A qualitative approach to understanding variation in surgeon decision-making and communication practices for elective surgical care
Funder: Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre

PI: Jerath A.

CI(s): Wallis CJD, Gotlib-Conn L, Coburn N, Wright F, Lee J, Hamidi M.

Amount: \$103,556 for 2 years (April 2023 – March 2025)

Project Title: Non-hOme Transition risk Following surgery (NOTIFY) study

Funder: CIHR Project Grant

PI(s): Mclsaac DII, Kidd GD, Wijeyesundera DN, Flexman AM, Garland A, Hallet J, Wong CL, Kobewka DM, Van Walraven C.

CI(s): Khadaroo R, Hladkowicz E, Lee SM, Lalu MM, Mbadjeu H, Arnaud R, Ladha K, Aucoin SD, Boet S, Bryson GL, Carrier FM, Chesney T, Forster AJ, Abdellatif S, Alkadri J, Ma G, Gagné S, Grudzinski AL, Holroyd-Leduc JM, Huang AR, **Jerath A**, Moloo H, Power BE, Mclsaac S, Auer RAC, Beattie WS, Mayson KV, Talarico RF, Huang S, Reich K, Martel G, Lavallée LT, Ke XC, Beckerleg W, Taljaard M, Sutherland JM, Tanuseputro P, Backman C, Breau RH.

Amount: \$378,676 over 3 years (March 2023 – February 2026)

Project Title: A Training Platform in Pragmatic Registry-Based Trials: Connecting Canada's Health, Data, and Biomanufacturing Sectors

Funder: Canadian Institute of Health Research (CIHR) Training Grant: Clinical Trials Training Platforms

NPA: Garg A.

CPA(s): Clemens KK, Fowler RA, **Jerath A**, Lee DS, Katz A, McAlister FA, Presseau J, Sontrop JM, Schull MJ, Swartz R.

CA(s): Basile E, Bhatia RS, Dixon S, Jean-Francois Ethier JF, Gagnier JJ, Garrison SR, Grimshaw JM, Hohl CM, Ivers NM, Jairath V, James MT, Katz A, Krzyzanowska MK, Leblanc A, McGrail KM, McIntyre LA, Mittmann N, Naylor K, Presseau J, Spence J, Taljaard M, Tangri N, Udell JA, Weijer CE, et al.

Amount: \$3,479,320 for 3 years (September 2022 – August 2025)

Project Title: Perioperative vitamin C to reduce persistent pain after total knee arthroplasty (PROVISION): a pilot randomized controlled trial

Funder: Arthritis Society Canada, IMHA Mandate Areas, Myalgic Encephalomyelitis, Pain, and Oral Health Priority Announcement

PI: Mundi R; **CPI:** Khan J.

CA(s): Chaudhry H, Wolfstadt J, Clarke H, **Choi S**, Backstein D, Siddiqui N, Flamer D, Tomlinson G, Miles S, Dana E.

Amount: \$100,000 for 1 year (February 2023 – January 2024)

Project Title: Perioperative vitamin C to reduce persistent pain after total knee arthroplasty (PROVISION): a pilot randomized controlled trial

Funder: Arthritis Society Canada, Strategic Operating Grant

PI: James Khan; **CPI(s):** Chaudhry H, Mundi R, Wolfstadt J.

CA(s): Clarke H, **Choi S**, Backstein D, Siddiqui N, Flamer D, Tomlinson G, Miles S, Dana E.

Amount: \$408,843 for 3 years (January 2023 – December 2025)

Project Title: EEG and the adaptive reconfiguration index to predict recovery after traumatic brain injury

Funder: Kimel-Schatzky Traumatic Brain Injury Research and Innovation Funds, Tory Trauma program, Sunnybrook Research Institute

CPIs: Jirsch J, Chapman M.

CIs: Blain-Moraes S, Cuthbertson B, Scales D, Lim A, Khosravani H, Slessarev M, Mantia J.

CPL: **Jerath A.**

Amount: \$250,000 for 2 years (January 2023 – January 2025)

Project Title: FAST Walk (Functional Assessment for Surgery by a Timed Walk) Study: A multicentre prospective cohort study of the six-minute walk test for improving preoperative risk stratification for major non-cardiac surgery

Funder: PSI Foundation Health Research Grant

PA: Wijeyesundera DN. **CPA(s):** Mclsaac DI, **Jerath A**, Kennedy E

CA(s): Khadaroo R, Alibhai S, Bartoszko J, Chesney T, **Choi S**, Crampton N, Cuthbertson B, Del Giudice L, Gomez Jaramillo D, Granton J, Karanicolas P, Ladha KS, Lebovic G, McCluskey S, Parotto M, Perlas A, Puts M, Salbach N, Santa Mina D, Siddiqui N, Stephenson A, VanVlymen J, Wijeyesundera H, Wong K, Avramescu S, van Klei W, Lapierre D, El-Beheiry.

C: Racz E, Wilmshurst L.

Amount: \$249,500 for 3 years (January 2023 – December 2025)

Project Title: The anesthesia for Lower limb revascularization to optimize functional outcomes (ALOFT) Trial: a pilot multicenter randomized trial

Funder: Canadian Institute of Health Research (CIHR) Project Grant

PI(s): Mclsaac DI, **Jerath A**, Kidd GD, Saha T, Roberts DJ, Taljaard M, Wijeyesundera DN.

CI(s): Boet S, Carrier FM, Flexman AM, Lalu MM, McCartney CJL, Nagpal S, Thavorn K, Bragg S, Dubois DG, Grudzinski AL, Lee SM, McKeen DM, Parotto M, Uppal V, Bryson GL, Fergusson DA, Kayssi A, MacDonald DBS, McCluskev SA, Nagpal S, Spence J, Van Walraven C, de Mestral C.

Amount: \$202,725 for 2.5 years (October 2022 – March 2025)

Project Title: Comprehensive health assessment for my plan: initial implementation study (CHAMP implementation study)

Funder: Canadian Institute of Health Research (CIHR) Project Grant

PI(s): Puts MT, Alibhai SM, Chesney T, Munteanu C.

CI(s): Brar MS, Chadi SA, **Choi S**, Donison V, Dumchin N, Emmenegger U, Goldstein DP, Haase K, Kulkarni GS, Mehta R, Papadacos JK, Perlis N, Queresby F, Wijeyesundera DN, Wong CL, Yeung JC.

Amount: \$229,500 for 2 years 6 months (October 2022 – March 2025)

Project Title: Lung and diaphragm protection in acute hypoxemic respiratory failure: The LANDMARK II plot and feasibility randomized clinical trial

Funder: Canadian Institute of Health Research (CIHR) Project Grant

PI(s): Goligher EC, Fan E.

CI(s): Bagshaw SM, Binnie A, Brochard LJ, Burry LD, Cuthbertson BH, Del Sorbo L, Dianti J, Dos Santos CC, Downar J, Ferguson ND, Fowler RA, Gelinac C, Heath A, Herridge MS, **Jerath A**, Lawler PR, Long MG, Marshall JC, Maslove D, Munshi L, Razak F, Reid WD, Rochweg BN, Sklar MC, Slutsky AS, Telias IG, Tomlinson GA, Tsang JLY, Urner MA, Verma A, Wong J, Yarnell CJ, Seely A, Juni P, Slutsky A, Yan T, da Costa B, Reynolds S, Zarychanski R.

Amount: \$339,600 for 2 years (October 2022 – September 2024)

Project Title: Advancing Brain Outcomes in pediatric critically ill patients sedated with Volatile Anesthetic Agents: A pilot multicentre randomized controlled trial (ABOVE Trial)

Funder: Canadian Institute of Health Research (CIHR) Project Grant

NPA: **Jerath A.**

CPA(s): McKinnon NKA, Ganesan R, Slessarev M, Cuthbertson BC.

CA(s): Buckley L, Fraser D, Ogilvie J, Burry L, Gilfoyle E, **Orser BA**, Cuninghame S, Kaneshwaran K, Pinto R, Duerden E, Mueller M, Seto W.

Amount: \$1,121,997 for 3 years (September 2022 – August 2025)

Project Title: The use of biometric monitoring and machine learning to improve Preoperative risk stratification in major non-cardiac surgery.

CPI(s): Jerath A, Wallis CJD.

Funder: McCain Centre for Urological Innovation and Education

Amount: \$100,000 for 3 years (July 2022 – June 2025)

Project Title: Exploring validity evidence for the use of immersive virtual environments for formative and summative assessment purposes

Funder: The Edward J. Stemmler, MD Medical Education Research Fund of the National Board of Medical Examiners (NBME)

PI(s): Tavares W, Alam F.

CI(s): Matava C, Kapralos B, Brydges R, Dubrowksi A.

Amount: \$US 111,723 for 2 years (January 2022 – December 2024)

Project Title: Redesigning the surgical pathway: optimizing preoperative assessment in anesthesia clinic for adults surgical patients (*PROMoTE trial*)

Funder: Anesthesia Patient Safety Foundation (*designated as the APSF/ASA President Award*)

PI: Choi S.

CI(s): Huang J, Orser BA, Liu B.

Amount: US \$150,000 for 2 years (January 2022 – December 2023, *no-cost extension granted until December 2025*)

Project Title: FAST Walk (Functional Assessment for Surgery by a Timed Walk) Study: A Multicentre Prospective Cohort Study of the Six-Minute Walk Test for Improving Preoperative Risk Stratification for Major Non-Cardiac Surgery

Funder: Canadian Institute of Health Research (CIHR) Project Grant

PI(s): Wijeyesundera DN, Jüni P, Khadaroo R, McIsaac D.

CI(s): Alibhai S, Bagry H, Bartoszko J, Bruce E, Chesney T, Choi S, Crampton N, Cuthbertson B, Del Giudice L, Ferguson-Pell M, Gomez Jaramillo D, Granton J, Guiang C, Jacobsohn E, **Jerath A**, Karanicolas P, Kennedy E, Ladha KS, Lebovic G, MacDonald D, MacDonell S, McCluskey S, Parotto M, Perlas A, Puts M, Russell S, Salbach N, Santa Mina D, Siddiqui N, Stephenson A, Thoreifson M, VanVlymen J, Wijeyesundera H, Wong K, Wright F.

C(s): Carmichael G, Depoe M.

Amount: \$1,410,813 for 4 years (October 2021 – March 2025)

Project Title: A mixed methods study to evaluate functional recovery, care needs, and caregiver needs in older adults undergoing surgery: The Frail sub-study of the Fit After Surgery study

Funder: Canadian Institute of Health Research (CIHR) Project Grant

PI(s): Puts MT, Haase K, Wijeyesundera DN, Alibhai S, McIsaac D.

CI(s): Bennie F, Chesney T, Choi PTL, Crampton N, Davis M, Del Giudice L, Donison V, Dumchin N, Gregory AJ, Jacobsohn E, **Jerath A**, Kuluski KH, Ladha K, Lebovic G, Lorello GR, MacDonald DBS, MacDonell SY, Mazer D, McGilton KS, McCluskey SA, Parotto M, Siddiqui NT, Stephens A, Stephens D, VanVlymen J, Weller B.

Amount: \$424,575 for 3 years (October 2021 – December 2024)

Project Title: Prevention of persistent pain with Lidocaine infusions in breast cancer surgery (PLAN): a multicentre randomized controlled trial

Funder: Canadian Institute of Health Research (CIHR)

PI(s): Khan JS, Gilron I.

CI(s): Avramescu S, Brull R, Brulotte V, Buckley DN, Busse JW, **Choi S**, Clarke HA, Devereaux PJ, Dillane D, Friedman Z, Hah JM, Hung L, Karkouti K, Ladha K, Lim DW, Look Hong N, MacDonell SY, Mackey SC, Miles S, Paul JE, Richebe PGN, Sessler DI, Shanthanna H, Siddiqui N, Tomlinson GA, Wang L, Turan A, Usichenko T, Wang L, Wright F.
Amount: \$1,285,000 for 4 years (October 2020 – September 2024)

Project Title: Virtual Reality as a tool to reduce pre-procedure anxiety prior ECT via enhancing patient education (PERFECT-VR)

Funder: Physicians Service's Incorporated Foundation, Health Services Research Grant (PSI Foundation)

PI(s): **Alam F**, Giacobbe P.

CI(s): **Choi S**, Rapoport M, Herrmann N, **Kaustov L**, Matava M.

Amount: \$250,000 for 3 years (September 2020 – August 2023, *no-cost extension granted until August 2025*)

Title: Targeting GABA-A receptors to mitigate postanesthetic cognitive deficits

Funder: Canadian Institute of Health Research (CIHR Foundation Grant)

PI: **Orser BA**.

Amount: \$3,579,083 for 7 years (July 2017 – March 2024, *no-cost extension granted until March 2027*)

AWARDS/GRANTS TO TRAINEES

1. Chloe A. Lowry (summer student in the Department of Anesthesia, Sunnybrook HSC) – **2024 SRI Summer Student Award**, supervisor **Dr. Ahtsham U. Niazi**
Amount: \$3,500 (May 2024 – August 2024)
2. Welna He (summer student in Dr. Beveley A. Orser laboratory) – **Undergraduate Research Opportunity Program Award**, Department of Physiology, University of Toronto, May – August 2024
3. Dr. Connor TA. Brenna (PhD candidate) – **2023-2024 CIHR Vanier Canada Graduate Scholarship (Vanier CGS) – Doctoral Research Award** to carry out his project '*Targeting $\alpha 5$ GABA Receptors to treat depression with Nitrous Oxide.*' in the laboratory of **Dr. Beverley A. Orser** laboratory
Amount: \$150,000 for 3 years (September 2024 – August 2027)
4. Dr. Connor TA. Brenna (PhD candidate) – **2024 Alan W. Conn Graduate Award**, Department of Anesthesiology and Pain Medicine, Temerty Faculty of Medicine, University of Toronto to carry out his project '*Do $\alpha 5$ GABA_A Receptors Mediate the Antidepressant Properties of Nitrous Oxide?*' in the laboratory of **Dr. Beverley A. Orser**
Amount: \$4,000
5. Dr. Connor TA. Brenna (PhD candidate) – **2024 Society for Neuroscience Awards**, Trainee Professional Development Award (**Dr. Beverley A. Orser** Laboratory)
Amount: US \$1,000
6. Connor Brenna (PhD candidate) – **Ministry of Health Clinician Investigator Program Salary Support Grant** to carry out his project '*Do $\alpha 5$ GABA_A Receptors Mediate the Antidepressant Properties of Nitrous Oxide?*' in the laboratory of **Dr. Beverley A. Orser**
Amount: \$83,355.10 (September 2024 – August 2025)
7. Dr. Connor TA. Brenna (PhD candidate) – **2024-2025 Weber Award**, Department of Physiology, University of Toronto, to carry out his project '*Do $\alpha 5$ GABA_A Receptors Mediate the Antidepressant Properties of Nitrous Oxide?*' in the laboratory of **Dr. Beverley A. Orser**

- Amount: \$5,000 (September 2024 – August 2025)
8. Omer Syed (MSc candidate) – **2024-2025 Weber Award**, Department of Anesthesiology & Pain Medicine and Department of Psychiatry, University of Toronto, supervisors Drs. Peter Giacobbe and **Fahad Alam**
Amount: \$5,000 (September 2024 – August 2025)
 9. Howell Yi Hao Fang (MSc candidate) – **2024-2025 Ontario Graduate Scholarship** to carry out his project ‘*GABA_A receptors and surgery.*’ in **Dr. Beverley A. Orser** laboratory
Amount: \$10,000
 10. Omer Syed (MSc candidate) – **2024-2025 CIHR Canada Graduate Scholarships - Master's Award**, Departments of Anesthesia and Psychiatry, supervisors Drs. Peter Giacobbe and **Fahad Alam**
Amount: \$27,000
 11. MeiFeng Yu (MSc candidate) – **2024 – 2025 Ontario Graduate Scholarship** to carry out her project ‘*The effect of ifenprodil on the surface expression of α 5GABA γ amino butyric acid receptors in cultured hippocampal neurons*’ in **Dr. Beverley A. Orser** laboratory
Amount: \$10,000
 12. Hannah R. Rosales (MSc candidate in the Department of Anesthesiology and Pain Medicine, Sunnybrook HSC) – **2024 – 2025 Institute of Medical Science Open Fellowship Award**, University of Toronto, supervisor **Dr. Stephen Choi**
Amount: \$5,000
 13. Omer Syed (MSc candidate) – **2024 – 2025 Institute of Medical Science Open Fellowship Award**, University of Toronto to supervisors Drs. Peter Giacobbe and **Fahad Alam**
Amount: \$5,000
 14. Dr. Connor AT. Brenna (PhD candidate) – **2024 – 2026 Ontario’s Anesthesiologists – 2024 CAS Residents’ Research Grant** to carry out his project ‘*Do α 5GABA_A Receptors Mediate the Antidepressant Properties of Nitrous Oxide?*’ in **Dr. Beverley A. Orser** laboratory
Amount: \$10,000

AWARDS/PRIZES

1. **Dr. Fahad Alam** – 2023-2025 Education Merit Award (\$40,000 per annum for 2 years), 2023-2025 Merit Award Program, University of Toronto Anesthesia Merit Award, Department of Anesthesia, Temerty Faculty of Medicine
2. **Dr. Stephen Choi** – 2023-2025 Research Merit Award (\$40,000 per annum for 2 years), 2023-2025 Merit Award Program, University of Toronto Anesthesia Merit Award, Department of Anesthesia, Temerty Faculty of Medicine
3. **Dr. Angela Jerath** – 2023-2025 Research Merit Award (\$40,000 per annum for 2 years), 2023-2025 Merit Award Program, University of Toronto Anesthesia Merit Award, Department of Anesthesia, Temerty Faculty of Medicine
4. **Dr. Ahtsham U. Niazi** – 2023-2025 Commendation Award for his project “*Remote Immersive Virtual Reality (RIVR) Teaching: Use in Ultrasound Guided Regional Anesthesia Procedural Skills Acquisition.*” 2023-2025 Merit

Award Program, University of Toronto Anesthesia Merit Award, Department of Anesthesia, Temerty Faculty of Medicine

5. **Dr. Julian Wiegelmann** – 2023-2025 Early Investigator Merit Award (\$40,000 per annum for 2 years), 2023 - 2025 Merit Award Program, University of Toronto Anesthesia Merit Award, Department of Anesthesia & Pain Medicine, Temerty Faculty of Medicine
6. **Dr. Angela Jerath** – Tier 2 Canada Research Chair (CRC) in Acute Care Health technology and Practice Innovation, effective April 1 2024
7. **Dr. Chris Idestrup** and **Dr. Angela Jerath** – Nominated by the Sunnybrook Innovation Fund Sub-Committee for the 2024 IFPOC Showcase and Awards for the project entitled '*Tranexamic acid dosing for major joint replacement surgery.*'

APPOINTMENTS/HONORS (selected)

1. **Dr. Beverley A. Orser** – Immediate Past Chair, International Anesthesia Research Society (IARS), 2024 – 2025
2. **Drs. Jacobo Garijo Moreno** – Member, 2024-2025 Canadian Cardiovascular and Thoracic Executive Committee of the Canadian Anesthesiologists' Society
3. **Dr. Pablo Perez D'Empaire** – Member, 2024-2025 Canadian Cardiovascular and Thoracic Executive Committee of the Canadian Anesthesiologists' Society
4. **Dr. Beverley A. Orser** – Advisory Board Member to Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE), Multicenter Perioperative Outcomes Group (MPOG), effective May 2024
5. **Dr. Fahad Alam** – Education Scholar II, 2024 Education Research Appointee, Sunnybrook Hub for Applied Research in Education (SHARE), Sunnybrook Health Sciences Centre, effective June 2024
6. **Dr. Fahad Alam** – Co-chair for the Program Committee, the Society of Surgical Ergonomics Conference, 2024-present
7. **Dr. Pablo Perez D'Empaire:** A POCUS Co-Lead, the Cardiovascular and Thoracic (CVT) Section, Canadian Anesthesiologists' Society, effective September 2024
8. **Dr. Fahad Alam** – The Burnell-Jose Visiting Professor Scientific Conference, the South Australian and Northern Territory branch of the Australian and New Zealand College of Anaesthetists (ANZCA) Continuing Education Program and Australian Society of Anaesthetists (ASA), October 2024
9. **Dr. Fahad Alam** – Letter of recognition a letter of recognition for his impactful contribution to the Canadian Anesthesiologists' Society (CAS) Members' education and experience. The session, "*Guardians of Safety: Decoding the Reality of Operating Room Ergonomics and Conquering Challenges*", supported the 2024 CAS's commitment to innovative education and focused on improving operating room ergonomics, addressing key challenges, and enhancing professional experience within the anesthesia community
10. **Dr. Fahad Alam** - Adjudicator, The Ontario Research Fund – College Fund (ORF-CF) Program, December 2024
11. **Dr. Jacobo Moreno Garijo** – Member, the Society of Cardiovascular Anesthesiologists Echo Planning committee, effective December 2024
12. **Dr. Pablo Perez d'Empaire** – Appointed member. Adult Ultrasound Committee. Society of Critical Care Medicine, Illinois, USA, January 2024 – present
13. **Dr. Beverley A. Orser** – Member, Collaborative Advisory Group for General and Family Practice Anesthesia (CAGA), 2023 – present

14. **Dr. Alayne Kealey** – Member, Faculty Council, Temerty Faculty of Medicine, July 2023 – present
15. **Dr. Pablo Perez d’Empaire** – Appointed Member and Local Mentor of the American Society of Anesthesiology’s Point-of-Care Ultrasound (POCUS) Certificate Program, July 2023 – present
16. **Dr. Alayne Kealey** – Member, Faculty of Medicine Appeals Committee, Temerty Faculty of Medicine, July 2023 – present
17. **Dr. Pablo Perez d’Empaire** – Appointed Member. Annual Meeting Scientific Program Committee, Canadian Anesthesiology Society, May 2023 – present
18. **Dr. Fahad Alam** – Executive Member of the Program Committee, Canadian Anesthesiologists’ Society Annual Conference, 2023 – present
19. **Dr. Ahtsham U. Niazi** – Associate Editor, Regional Anesthesia & Pain Medicine (RAPM), April 2023 – present
20. **Dr. Fahad Alam** – Chair, Continuing Education and Professional Development, Canadian Anesthesiologists’ Society, September 2022 – present
21. **Dr. Doreen Yee** – Chair, The Canadian Anesthesia Research Foundation (CARF), 2022 – present
22. **Dr. Jacobo Garijo Moreno** – Mentor, Anesthesia Assistants training for ultrasound guided radial arterial line insertion, and Delegated Controlled Act and Medical Directive application. Sunnybrook HSC, 2022 – present
23. **Dr. Jacobo Garijo Moreno** – Course Director, 3D TEE Course. Barcelona, Spain, 2022 – present
24. **Dr. Stephen Choi** – University of Toronto Representative, Association of Canadian Universities’ Departments of Anesthesia Research Committee, 2022 – present
25. **Dr. Beverley A. Orser** – Member, College of Reviewers, Canadian Institutes of Health Research, May 2022 - present
26. **Dr. Fahad Alam** – Oral examiner and the written test committee member, The Royal College of Physicians and Surgeons of Canada, September 2021 – present
27. **Dr. Fahad Alam** – Medical and Research Director, Sunnybrook Canadian Simulation Centre, Sunnybrook Health Sciences Centre, January 2021 – present
28. **Dr. Jordan Tarshis** – Chair, Simulation Accreditation Integration Working Group, RCPSC
29. **Dr. Jordan Tarshis** – Member, Continued Professional Development (CPD) Accreditation Committee, RCPSC
30. **Dr. Jordan Tarshis** – Member, Corporate Accreditation Committee, RCPSC
31. **Dr. Angela Jerath** – Member, Steering Subcommittee, Academic Health Sciences Centres (AHSC) AFP Innovation Fund, Sunnybrook Health Sciences Centre, July 2021 – present
32. **Dr. Alayne Kealey** – Co-Chair, Anesthesiology Examination Board, RCPSC, June 2021 – present
33. **Dr. Alayne Kealey** – Member, Anesthesiology Specialty Committee, RCPSC, June 2021 – present
34. **Dr. Beverley A. Orser** – Elected Representative, Collaborative Advisory Group for General and Family Practice Anesthesia on behalf of the 17 Chair of the Association of Canadian University Departments of Anesthesia (ACUDA), March 2021 – present
35. **Dr. Beverley A. Orser** – Member, Temerty Entrepreneur-in-Residence Advisory Committee, University of Toronto, 2021 – present
36. **Dr. Beverley A. Orser** – Member, Foundations for Anesthesia Education and Research (FAER) Nominations Committee, February 2021 – present
37. **Dr. Angela Jerath** – Co-director, Pragmatic Clinical Trial course, Institute of Health Policy, Management and Evaluation, University of Toronto, January 2021 – present
38. **Dr. Beverley A. Orser** – Member, Centre for Addiction and Mental Health (CAMH) Discovery Fund External Advisory Committee, September 2020 – present

39. **Dr. Beverley A. Orser** – Member, External Review Committee Toronto Academic Pain Management Institute, 2020 – present
40. **Dr. Beverley A. Orser** – Member, Executive Committee Executive Committee C-QuIPS, 2020 – present
41. **Dr. Beverley A. Orser** – Co-Chair, Clinical Chairs, Temerty Faculty of Medicine, University of Toronto, 2020 – present
42. **Dr. Beverley A. Orser** – Member, Clinical Relations Full Committee, Temerty Faculty of Medicine, University of Toronto, 2020 – present
43. **Dr. Beverley A. Orser** – Chair, Selection Advisory Committee, Department of Family & Community Medicine, University of Toronto, 2020 – present
44. **Dr. Jacobo Moreno Garijo** – Course Director, 3D TEE Course, Toronto, Canada, 2019 – present

MEDIA

1. **Dr. Beverley A. Orser**: ‘No laughing matter: Laughing gas for treating depression’. Canadian HealthcareNetwork: <https://canadianhealthcarenetwork.ca/no-laughing-matter-laughing-gas-treating-depression>, July 16 2024
2. **Dr. Angela Jerath**: ‘Do women make better doctors than men?’ The Economist. August 7 2024: <https://www.economist.com/science-and-technology/2024/08/07/do-women-make-better-doctors-than-men>
3. **Dr. Ahtsham U. Niazi**: ‘The research marks you forever: SRI students showcase their summer research projects’. Sunnybrook Research Institute, August 21 2024: <https://sunnybrook.ca/research/media/item.asp?c=2&i=3741&f=sri-students-showcase-summer-research-projects-2024>
4. **Dr. Beverley A. Orser**: ‘Celebrating Women in Anesthesia’. Celebrating Women in Medicine month 2024, IARS, September 9, 2024: <https://iars.org/wim2024/>
5. **Dr. Stephen Choi**: ‘Dr. Stephen Choi was featured in Postoperative Delirium Common in Patients with preexisting cognitive impairment on Anesthesiology news’. Department of Anesthesiology & Pain Medicine Newsletter, University of Toronto, September 20, 2024: <https://mailchi.mp/81652d6ae1a2/department-of-anesthesiology-pain-medicines-sept-newsletter>
6. **Dr. Stephen Choi**: ‘Postoperative delirium common in patients with preexisting cognitive impairment’. Anesthesiology News, September 23 2024: https://www.anesthesiologynews.com/Clinical-Anesthesiology/Article/09-24/Postoperative-Delirium-Common-in-Patients-With-Preexisting-Cognitive-Impairment/74705?sub=CEF1B1902F7D62C54EFF2C106299AF312B7D49FC97280687AA39E5D92539691&tken=73E57958351834C77AA8ECBEAD399D764747DA3F93C12BD1A9117E14C54D5&enl=true&gid=&utm_source=enl&utm_campaign=20240923&utm_content=1&pos=1&utm_medium=title
7. **Dr. Marcos Silva Restrepo**: ‘Two Sunnybrook physicians awarded Canadian Armed Forces Operational Service Medal- EXPEDITION’. Sunnybrook News, September 27 2024: <https://sunnybrook.ca/media/item.asp?c=1&i=3759&f=two-sunnybrook-physicians-awarded-canadian-armed-forces-operational-service-medal>
8. **Dr. Angela Jerath**: ‘Three Sunnybrook scientists awarded Canada Research Chairs’. SRI News & Media, November 14 2024: <https://sunnybrook.ca/education/media/item.asp?c=2&i=3783&f=sunnybrook-scientists-awarded-canada-research-chairs-nov-2024>
9. **Dr. Angela Jerath**: ‘Canada Research Chairs’: <https://www.chairs-chaieres.gc.ca/chairholders-titulaires/profile-eng.aspx?profileid=5984>

10. **Dr. Angela Jerath:** 'Dr. Angela Jerath awarded Tier 2 Canada Research Chair'. Anesthesiology & Pain Medicine Faculty News, November 27 2024: <https://anesthesia.utoronto.ca/news/dr-angela-jerath-awarded-tier-2-canada-research-chair>
11. **Drs. Jacobo Garijo Moreno and Pablo Perez D'Empaire:** 'Meet the 2024-2025 CVT Executive Team'. CAS Anesthesia News, December 2024: <https://www.cas.ca/CASAssets/Documents/Anesthesia-News/CASNewsletterWinter2024.pdf>