

Department of Anesthesiology & Pain Medicine
Publications July 1st 2024 – June 30th 2025

1. Kibalnyk Y, Afanasiev E, Noble RMN, Watson AES, Poverennaya I, Dittmann NL, Alexiou M, Goodkey K, Greenwell AA, Ussher JR, Adameyko I, Massey J, Graf D, **Bourque SL**, Stratton JA, Voronova A. The chromatin regulator Ankrd11 controls cardiac neural crest cell-mediated outflow tract remodeling and heart function. *Nat Commun*. 2024 Jul 1;15(1):4632. doi: 10.1038/s41467-024-48955-1. PMID:38951500; PMCID: PMC11217281.
2. Noble RMN, Soni S, Liu SN, Rachid JJ, Mast HE, Wiedemeyer A, Holody CD, Mah R, Woodman AG, Ferdaoussi M, Lemieux H, Dyck JRB, **Bourque SL**. Maternal ketone supplementation throughout gestation improves neonatal cardiac dysfunction caused by perinatal iron deficiency. *Clin Sci (Lond)*. 2024 Oct 2;138(19):1249-1264. doi: 10.1042/CS20241386. PMID: 39288030.
3. Nouredine N, Holtzhauer G, Wawrzyniak P, Srikanthan P, Krämer SD, Rogler G, **Lucchinetti E, Zaugg M**, Hersberger M. Size of lipid emulsion droplets influences metabolism in human CD4⁺ T cells. *Biochem Biophys Res Commun*. 2024 Nov 12;733:150680. doi: 10.1016/j.bbrc.2024.150680. Epub 2024 Sep 10. PMID: 39278094.
4. Spence J, Devereaux PJ, Lee SF, D'Aragon F, Avidan MS, Whitlock RP, Mazer CD, Rousseau-Saine N, Rajamohan RR, Pryor KO, Klein R, Tan E, Cameron MJ, Di Sante E, DeBorba E, Mustard ME, Couture EJ, Zamper RPC, Law MWY, Djaiani G, Saha T, Choi S, Hedlin P, Pikaluk DR, **Lam W**, Deschamps A, Ramasundarahettige CF, Vincent J, McIntyre WF, Oczkowski SJW, Dulong BJ, Beaver C, Kloppenburg SA, Lamy A, Jacobsohn E, Belley-Côté EP; B-Free Investigators and the Canadian Perioperative Anesthesia Clinical Trials Group. Benzodiazepine-Free Cardiac Anesthesia for Reduction of Postoperative Delirium: A Cluster Randomized Crossover Trial. *JAMA Surg*. 2025 Mar 1;160(3):286-294. doi: 10.1001/jamasurg.2024.6602. Erratum in: *JAMA Surg*. 2025 May 1;160(5):604. doi: 10.1001/jamasurg.2025.0799. PMID: 39878960; PMCID: PMC11780505.
5. Lamothe SM, Das D, Wong AA, Hao Y, Maguire AD, **Kerr BJ**, Baronas VA, Kurata HT. Regulation of Kv1.2 Redox-Sensitive Gating by the Transmembrane Lectin LMAN2. *Function (Oxf)*. 2024 Nov 20;5(6):zqae041. doi: 10.1093/function/zqae041. PMID: 39264045; PMCID: PMC11577617.
6. 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 Sep 1;141(3):524-540. doi: 10.1097/ALN.0000000000005093. PMID: 38780996.
7. Holody CD, Woodman AG, Nie C, Liu SN, Young D, Wiedemeyer A, Carpenter R, Noble RMN, Graf D, Dufour A, Lemieux H, **Bourque SL**. Perinatal iron deficiency alters the cardiac proteome and mitochondrial function in neonatal offspring. *Am J Physiol Heart Circ Physiol*. 2025 Jan 1;328(1):H101-H112. doi: 10.1152/ajpheart.00412.2024. Epub 2024 Nov 21. PMID: 39570196.

8. Krebs BK, Brehon K, Miciak M, **Dick BD**, Brémault-Phillips SC, Straube S, Gross DP. Evaluating Effectiveness of Telerehabilitation Among Workers Admitted to a Posttraumatic Stress Injury Rehabilitation Program. *J Occup Rehabil.* 2025 Mar 10. doi: 10.1007/s10926-025-10285-4. Epub ahead of print. PMID: 40064793.
9. 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. The evolution and formalization of anesthesia assistant roles across Canada. *Can J Anaesth.* 2024 Dec;71(12):1627-1645. English. doi: 10.1007/s12630-024-02812-3. Epub 2024 Sep 10. PMID: 39256302.
10. Ho MFS, Farkas O, Faria AV, Plemel JR, **Kerr BJ**. A recent history of immune cell sex differences in the peripheral nervous system in persistent pain states. *Brain Behav Immun.* 2025 May 8;128:766-775. doi: 10.1016/j.bbi.2025.05.004. Epub ahead of print. PMID: 40345628.
11. Maguire AD, Lamothe SM, Yousuf MS, Goss K, Rao J, Tenorio G, Kaulagari SR, Hazlehurst L, Plemel JR, Taylor AMW, Kurata HT, Simmen T, **Kerr BJ**. Inhibition of Endoplasmic Reticulum Oxidoreductin 1 Modulates Neuronal Excitability and Nociceptive Sensitivity in Mice. *Anesthesiology.* 2025 Jul 1;143(1):168-190. doi: 10.1097/ALN.0000000000005453. Epub 2025 Mar 19. PMID: 40106735; PMCID:PMC12151777.
12. Granzer-Corno L, Rana R, **Dick BD**, Sankar T. Different Scale, Different Pain? Discordant Pain Measurements After Surgery for Trigeminal Neuralgia. *World Neurosurg.* 2025 Feb;194:123481. doi: 10.1016/j.wneu.2024.11.064. Epub 2024 Dec 6. PMID: 39577641.
13. Friedman TN, Lamothe SM, Maguire AD, Hammond T, Tenorio G, Hilton BJ, Plemel JR, Kurata HT, **Kerr BJ**. Plasticity of Mouse Dorsal Root Ganglion Neurons by Innate Immune Activation Is Influenced by Electrophysiological Activity. *J Neurochem.* 2025 Jan;169(1):e16292. doi: 10.1111/jnc.16292. PMID: 39725852; PMCID: PMC11671441.
14. Hammond BP, Zia S, Hahn E, Kapustina M, Lange T, Friesen S, Manek R, Lee KV, Castellanos-Molina A, Bretheau F, Cembrowski MS, **Kerr BJ**, Lacroix S, Plemel JR. CSF1R ligands promote microglial proliferation but are not the sole regulators of developmental microglial proliferation. *Development.* 2025 Oct 15;152(20):dev204610. doi: 10.1242/dev.204610. Epub 2025 Jun 3. PMID: 40387575; PMCID: PMC12188242.
15. Hong I, Bigam KD, McConnell BM, **Özelsel TJP**, Sondekoppam RV. Sevoflurane and its metabolic byproduct compound A induce nephrotoxicity: a systematic review and meta-analysis of animal studies. *Med Gas Res.* 2025 Jun 1;15(2):254-265. doi: 10.4103/mgr.MEDGASRES-D-24-00080. Epub 2025 Jan 18. PMID: 39829162; PMCID: PMC11918462.
16. Adderley J, Pidborochynski T, Buchholz H, **Holinski P**, Anand V, De Villiers Jonker I, Freed DH, Al-Aklabi M, Conway J. Risk factors for thromboembolic events in pediatric patients with ventricular assist devices. *JTCVS Open.* 2024 May 24;20:132-140. doi:10.1016/j.xjon.2024.05.007. PMID: 39296449; PMCID: PMC11405981.

17. **Lucchinetti E**, Lou PH, Chakravarty A, Marcolla CS, Pauline ML, Wizzard PR, Field CJ, Wine E, Hersberger M, Wales PW, Turner JM, Krämer SD, **Zaugg M**. The Novel Lipid Emulsion Vegaven Is Well Tolerated and Elicits Distinct Biological Actions Compared With a Mixed-Oil Lipid Emulsion Containing Fish Oil: A Parenteral Nutrition Trial in Piglets. *J Nutr*. 2025 Mar;155(3):703-718. doi:10.1016/j.tjnut.2024.10.047. Epub 2024 Nov 4. PMID: 39505265; PMCID: PMC11934249.
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. Conway J, Pidborochynski T, Ly D, Mowat L, Freed DH, De Villiers Jonker I, Al-Aklabi M, **Holinski P**, Anand V, Buchholz H. First North American experience with the Berlin Heart EXCOR Active driver. *J Heart Lung Transplant*. 2024 Nov;43(11):1861-1863. doi:10.1016/j.healun.2024.08.005. Epub 2024 Aug 10. PMID: 39134164.
20. Mast HE, Blier PU, Đorđević M, Savković U, Holody CD, **Bourque SL**, Lemieux H. Selection for Late Reproduction Leads to Loss of Complex I Mitochondrial Capacity and Associated Increased Longevity in Seed Beetles. *J Gerontol A Biol Sci Med Sci*. 2024 Nov 1;79(11):glae208. doi: 10.1093/gerona/glae208. PMID:39158488; PMCID: PMC11497162.
21. Isaac A, Menach O, Rotich G, Callaghan A, Isaac DM, Wiedermann J, **Holinski P**, Anton N, Propst E, Ngoitsi H. Posterior Graft Laryngotracheal Reconstruction for Bilateral Vocal Cord Paralysis in a Resource-Limited Setting: Building a Replicable Airway Reconstruction Program in Eldoret, Kenya. *J Otolaryngol Head Neck Surg*. 2025 Jan-Dec;54:19160216251345468. doi: 10.1177/19160216251345468. Epub 2025 Jun 17. PMID: 40528278; PMCID: PMC12174730.
22. **Dillane D, Harnett C**. New evidence amid old assumptions for thromboembolic risk after total knee arthroplasty: a twist in the story. *Can J Anaesth*. 2025 Jun;72(6):871-876. English. doi: 10.1007/s12630-025-02958-8. Epub 2025 May 28. PMID: 40437174.
23. Rajendran AP, Meenakshi Sundaram DN, Morales LC, Kucharski C, Nasrullah M, Bulut B, Tsisar PM, Maguire AD, **Kerr BJ**, Uludağ H. Lipid-Modified PEI Derivative-Based Binary/Ternary Polyplex Formulations for the Delivery of pDNA and mRNA in Primary Cells. *Biomacromolecules*. 2025 Apr 14;26(4):2733-2749. doi:10.1021/acs.biomac.5c00169. Epub 2025 Mar 27. PMID: 40148262.
24. Yang H, Littleford J, Orser BA, Umedaly H, Olsen M, Raazi M, LeDez K, Law JA, Giffin M, D'Souza B, **Dillane D**, Christodoulou C, Buu N, Bryan R. In Reply: Comment on: The evolution and formalization of anesthesia assistant roles across Canada. *Can J Anaesth*. 2025 Jun 16. doi: 10.1007/s12630-025-02989-1. Epub ahead of print. PMID: 40524118.
25. Yang H, Littleford J, Orser BA, Zaccagnini M, Umedaly H, Olsen M, Raazi M, LeDez K, Law JA, Giffin M, Foerster J, D'Souza B, Ali I, **Dillane D**, Christodoulou C, Buu N, Bryan R. In reply: Comment on: The evolution and formalization of anesthesia assistant roles across

Canada. *Can J Anaesth*. 2025 Feb;72(2):371-372. doi: 10.1007/s12630-025-02914-6. Epub 2025 Feb 6. PMID:39910012.

26. El-Andari R, Kang JJ, **Sidhu S**, Cwinn M, **Green J**, **Ma ML**, Mathew A, Tyrrell BD, Welsh RC, Nagendran J. Transcarotid transcatheter aortic valve replacement utilizing monitored anesthesia care: a case report. *Future Cardiol*. 2024;20(9):447-451. doi: 10.1080/14796678.2024.2378648. Epub 2024 Sep 23. PMID: 39311081; PMCID: PMC11485771.
27. Bayliss RA, **Bird R**, Turner J, Chatterjee D, Lockey DJ. Haemodynamic response to pre-hospital emergency anaesthesia in trauma patients within an urban helicopter emergency medical service. *Eur J Trauma Emerg Surg*. 2024 Jun;50(3):987-994. doi: 10.1007/s00068-024-02463-5. Epub 2024 Feb 1. PMID: 38300282.
28. Kocierz L, Bird F, Dobbie A, **Bird R** et al. Prehospital paediatric trauma: equipping prehospital providers to deliver high-quality care. *Archives of Disease in Childhood* Published Online First: 31 March 2025. doi: 10.1136/archdischild-2024-328229
29. Fabes J, **Milne A**, Wells M, Sarna A, Neun M, Spiro M. Association Between Higher Intraoperative Oxygen Exposure and Worse Patient and Organ Outcomes in Liver Transplantation. *Exp Clin Transplant*. 2025 Apr;23(4):269-277. doi: 10.6002/ect.2024.0296. PMID: 40396707.
30. de Valence, T., **Milne, A**. Applying Advanced Hemodynamic Monitoring Techniques to Clarify the Complexities of Circulatory Collapse after Major Trauma. *Curr Anesthesiol Rep* 15, 13 (2025). <https://doi.org/10.1007/s40140-024-00677-2>
31. Forgeron, P. A., Stinson, J., Birnie, K., Finley, G. A., Jordan, A., Qualter, P., **Dick, B.D.** (2024). The Influence of Loneliness on Pain Outcomes for Adolescents: A Cross-Sectional Survey. *Canadian Journal of Pain*, 8(1). <https://doi.org/10.1080/24740527.2024.2404615> 2024-
32. 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
33. Linkiewicz D, Dib KC, Forgeron PA, **Dick BD**, McMurtry CM. (2024). 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.
34. Schindle M, **Berger L**. Early Long-Acting Buprenorphine for Opioid Use Disorder in the Setting of Acute Pain. *J Addict Med*. 2024 Sep-Oct 01;18(5):608-609. doi: 10.1097/ADM.0000000000001333. Epub 2024 May 31. PMID: 38829025.

35. Quinanilha M, Aylward B, Feng P, **Fielding A**. Operative team critical incident debriefing in a community hospital: a mixed methods study. *Can J Anaesth*. 2025 May;72(5):857-859. doi: 10.1007/s12630-025-02936-0. Epub 2025 May 12. PMID:40355800.