



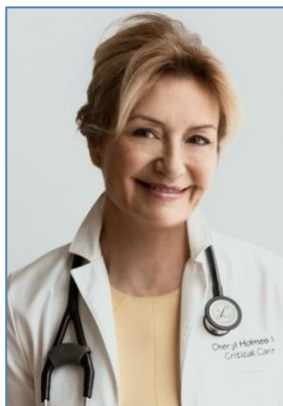
## Department of Medicine 2024 Annual Report Division of Critical Care

### Divisional Overview:

The UBC Division of Critical Care Medicine is multi-disciplinary in nature with 61 faculty members and 32 Associate, Affiliate and Joint appointment members. Five new members joined the division in 2024. Our members are multidisciplinary clinicians, scientists, leaders, and educators who advocate for the diverse critically ill patients and populations of British Columbia and beyond in a way that is respectful, inclusive, timely, and sustainable.

**Our Vision is *Extraordinary Critical Care through innovation, education, collaboration, and advocacy.***

**Division Head: Dr. Cheryl Holmes**, Clinical Professor and Head of the UBC Department of Medicine's Division of Critical Care.



Dr. Holmes is dedicated to supporting the members of the Division of Critical Care in realizing our collective vision of *Extraordinary Critical Care*.

Dr. Holmes' academic interests include promoting learner and faculty wellbeing, fostering inclusive and accessible learning and working environments, and social accountability of faculties of medicine.

### Favourite Leadership Quote:

*"This is my community, and I love them. I will do whatever I can to support them to do their work"* – **Dr. Vinay Dhingra**, Clinical Professor and Senior Medical Director, Vancouver Acute.

### Division Successes

- Recognition of rural clinical needs has led to collaboration and planning of novel education programs and new initiatives set to launch in 2025.

### Division Challenges

- Ongoing funding support for early and mid-career investigators

## Divisional Awards & Recognition:

### Awards in 2024:

Dr. Don Burke - Department of Medicine 2024 Master Teacher award, *"in recognition of a faculty member who makes outstanding contributions to the learning environment and who excel at teaching"*.

Dr. Dave Sweet: Award for Academic Half-day Teaching Excellence: *"Really great to work with. Very supportive in terms of career planning and development"*.

Dr. Don Griesdale: Award for Clinical Teaching Excellence: *"A fantastic intensivist to learn from. He is approachable, thoughtful, and provides excellent clinical and procedural teaching"*.

Dr. Sonny Thiara: Award for Outstanding Mentorship: *"Excellent mentor and staff. Someone we all look up to and hope to emulate"*.

Dr. Naisan Garraway was awarded the VCHRI Innovation and translational research award in 2024 for the study titled "The CAN-BLEED score: A novel tool for risk stratification of traumatic hemorrhage".

## Highlights & Achievements

Dr. Najib Ayas appointed as Associate Head, Research with the Department of Medicine

Dr. Myp Sekhon continued 2nd year funding for UBC Cluster grant on Collaborative Entity

for ceREBrovascular Ischemia (CEREBRI) project.

The project also hosted a Resuscitation Sciences Symposium on May 28<sup>th</sup>, 2024 that included nearly 400 attendees.

The symposium garnered tremendous feedback including one attendee describing "it was the best critical care education I have been to in the past 10 years".



Dr. Jim Russell serves as Co-Lead, Pillar 1, Biomedical Research of \$20M CIHR-funded Long COVID Web (LCW).

Dr. Angela Babuk delivers Critical Care Lecture Series at Aliabad Teaching Hospital, Kabul, Afghanistan

### Leadership:

Through the dedicated leadership of Dr. Sonny Thiara and Dr. Julian Barnbrook, the **Fort St. John Intensive Care Unit (ICU)** was officially opened on October 21, 2024. Dr. Aman Montazeri, an internist (in green scrubs), was approved for a Return of Service Ministry-funded position to provide healthcare services in Northern Health at Fort St. John, a critical area of need. The last time the ICU was operational as a fully closed unit that maintained the isolation of sick patients was in 2018. However, it remained operational for only three months, functioning intermittently as a transition unit for patient transfers and had been permanently closed in August 2023.



**Critical Care BC** enjoys another great year under the leadership of Dr. Hussein Kanji, Provincial Medical Director Critical Care BC and the appointment of:



- Dr. Adam Thomas, Medical Lead – Knowledge Translation
- Dr. Mypinder Sekhon Medical Lead – Research Networks
- Dr. Anish Mitra, Medical Lead – Clinical Quality

## Education:

Dr. Kali Roman and Emma Schon appointed as Co-Program Directors of the UBC Critical Care



Medicine Program, effective January 1, 2025. Both Dr. Romano and Dr. Schon are distinguished alumni of the UBC Critical Care Training Program and serve as attending physicians at Vancouver Coastal Health. As we welcome Drs. Romano and Schon, we also want to express our profound gratitude to Dr. Myp Sekhon, who has led the program with distinction for the past seven years. His visionary leadership and dedication have left an enduring legacy, and we wish him continued success as he focuses on his research endeavors.

### Program Updates

In preparation for the RCPSC Accreditation scheduled in 2028, the Adult CCM training program will undergo a PGME Internal Review scheduled April 24<sup>th</sup>, 2025 to review program documents and other accreditation materials.

### Fellows Accomplishments

Successful graduation of four fellows (Vanessa Giesbrecht, Eoin McFadden, Ian Pitcher and Marnie Goodwin-Wilson) who have completed the training program on June 30, 2024.

### Education Program Directors for Vancouver General Hospital ICU

Dr. David Sweet (Undergrad PD: Julia Cheung- admin

Dr. Kali Romano (Undergrad PD): Julia Cheung- admin

Dr. Kali Romano, Dr. Emma Schon (Co-PD, CCM Fellowship): Ana Palomino- admin

Dr. Sonny Thiara (International Clinical Fellowship Director): Ana Palomino – admin

### Education Program Directors for St. Paul's Hospital ICU

Drs. R. MacRedmond/D Sirounis (Undergrad PD): Kaitlyn Mahoney - admin

Dr. R. MacRedmond (PD, CCM Fellowship SPH Site): Kaitlyn Mahoney - admin

Dr. D. Sirounis (PD, International CCM Fellowship SPH Site): Kaitlyn Mahoney – admin

### Education Program Director for Surrey Memorial Hospital ICU

Dr. Bik Man

### Education Program Director for Royal Columbian Hospital ICU

Dr. Derek Gunning

### Division of Critical Care Medicine Education Awards

Award for Academic Half-day Teaching Excellence: Dr. David Sweet

Award for Clinical Teaching Excellence: Dr. Don Griesdale

Award for Outstanding Mentorship: Dr. Sonny Thiara



## Clinical:

Dr. Gary Misselbrook leads the development of a Critical Care Recovery Program for survivors of severe critical illness with University Hospital of Northern British Columbia. The program is the first of its kind in BC and aims to address the significant impact of critical illness on the psychological, physical and cognitive health of survivors. In-person and virtual options are available to allow for the unique geographical challenges of our region thereby improving access to healthcare for patients in rural communities. Relatives and caregivers are warmly invited and encouraged to attend appointments to discuss their experiences after hospital discharge. Additional details can be found [here](#).



Dr. Scot Mountain helped launch Rural Outreach for Critical Care and Internal Medicine (ROCCi) project in October. The primary mandate of ROCCi is to support rural providers who are without in house access to specialist services when caring for internal medicine or critically ill patients. The guiding principle behind all RTVS virtual support pathways is a "How Can I Help?" attitude with supportive, non-judgemental and culturally sensitive care available without delay. For more information, please visit the ROCCi page on the [RTVS website](#).



## Research:

The Division's research spans broadly from basic science research to clinical trials and quality improvement. Members' area of focus include sepsis, infection biomarkers, ventilation technologies, patient safety, COVID-19 and improvements in rural care.

- >\$2.5M in research grants
- >70 publications

## Selected publications:

1. **Thiara S**, Willms AJ, Tran A, **Mitra AR**, **Sekhon M**, **Hoiland R**, **Griesdale D**. Prognostic factors associated with intracranial hemorrhage and ischemic stroke during venovenous extracorporeal membrane oxygenation: A systematic review. **Critical Care Medicine**. 2024. <https://doi.org/10.1097/CCM.0000000000006520>.
2. Rego K, Orlando E, Archambault P, Geagea A, **Mitra AR**, ..., Tsang J. Developing a toolkit for building a community hospital clinical research program. **Canadian Journal of Anesthesia**. Dec 2024. <https://doi.org/10.1007/s12630-024-02883-2>.
3. Perkins GD, Neumar R, Hsu CH, Hirsch KG, Aneman A, Becker LB, Couper K, Callaway CW, Hoedemaekers CWE, Lim SL, Meurer W, Olasveengen T, **Sekhon MS**, Skrifvars M, Soar J, Tsai MS, Vengamma B, Nolan JP; International Liaison Committee on Resuscitation. Improving Outcomes After Post-Cardiac Arrest Brain Injury: A Scientific Statement From the International Liaison Committee on Resuscitation. **Resuscitation**. 2024 Aug;201:110196. doi: 10.1016/j.resuscitation.2024.110196. Epub 2024 Jun 27. PMID: 38932555.
4. Lee A, **Romano K**, Tansley G, Al-Khaboori S, **Thiara S**, **Garraway N**, **Finlayson G**, **Kanji HD**, **Isac G**, Ta KL, Sidhu A, Carolan M, Triana E, Summers C, Joos E, Ball CG, **Hameed SM**. Extracorporeal life support in trauma: Indications and techniques. *J Trauma Acute Care Surg*. 2024 Jan 1;96(1):145-155. doi: 10.1097/TA.0000000000004043. 2024, Jan. PMID: 37822113.
5. McFadden E, **Ronco JJ**, **Finlayson G**, Hadjivassiliou A, Ho S, Klass D, Legiehn G, Machan L, Parhar D, **Romano K**, **Thiara S**. Transvenous catheter-directed embolectomy for pulmonary embolism. **Can J Anaesth**. 2024 Aug;71(8):1163-1164. doi: 10.1007/s12630-024-02797-z. Epub 2024 Jul 10. PMID: 38987496.
6. Turgeon AF, Fergusson DA, Clayton L, Patton MP, Neveu X, Walsh TS, Docherty A, Malbouisson LM, Pili-Floury S, English SW, Zarychanski R, Moore L, Bonaventure PL, Laroche V, Verret M, Scales DC, Adhikari NKJ, Greenbaum J, Kramer A, Rey VG, Ball I, Khwaja K, Wise M, Harvey D, Lamontagne F, Chabanne R, Algird A, Krueper S, Pottecher J, Zeiler F, Rhodes J, Rigamonti A, Burns KEA, Marshall J, **Griesdale DE**, Sisonetto LS, Kutsogiannis DJ, Roger C, Green R, **Boyd JG**, Wright J, Charbonney E, Nair P, Astles T, Sy E, Hébert PC, Chassé M, Gomez A, Ramsay T, Taljaard M, Fox-Robichaud A, Tinmouth A, St-Onge M, Costerousse O, Lauzier F; HEMOTION Trial Investigators on behalf of the Canadian Critical Care Trials Group, the Canadian Perioperative

Anesthesia Clinical Trials Group, and the Canadian Traumatic Brain Injury Research Consortium. Liberal or Restrictive Transfusion Strategy in Patients with Traumatic Brain Injury. **N Engl J Med**. 2024 Jun 13. doi: 10.1056/NEJMoa2404360. Epub ahead of print. PMID: 38869931.

7. Cook D, Deane A, Lauzier F, Zytaruk N, Guyatt G, Saunders L, Hardie M, Heels- Ansdell D, Alhazzani W, Marshall J, Muscedere J, Myburgh J, English S, Arabi YM, Ostermann M, Knowles S, Hammond N, Byrne KM, Chapman M, Venkatesh B, Young P, Rajbhandari D, Poole A, Al-Fares A, Reis G, Johnson D, Iqbal M, Hall R, Meade M, Hand L, Duan E, Clarke F, Dionne JC, Tsang JLY, Rochweg B, Karachi T, Lamontagne F, D'Aragon F, St Arnaud C, Reeve B, Geagea A, Niven D, Vazquez-Grande G, Zarychanski R, **Ovakim D**, Wood G, Burns KEA, Goffi A, Wilcox ME, **Henderson W, Forrest D**, Fowler R, Adhikari NKJ, Ball I, Mele T, Binnie A, Trop S, Mehta S, Morgan I, Loubani O, Vanstone M, Fiest K, Charbonney E, Cavayas YA, Archambault P, Rewa OG, Lau V, Kristof AS, Khwaja K, Williamson D, Kanji S, Sy E, Dennis B, **Reynolds S**, Marquis F, Lellouche F, Rahman A, Hosek P, Barletta JF, Cirrone R, Tutschka M, Xie F, Billot L, Thabane L, Finfer S; REVISE Investigators. Stress Ulcer Prophylaxis during Invasive Mechanical Ventilation. **N Engl J Med**. 2024 Jul 4;391(1):9-20. doi: 10.1056/NEJMoa2404245. Epub 2024 Jun 14. PMID: 38875111
8. Muscedere J, Bagshaw SM, Kho M, Mehta S, Cook DJ, **Boyd JG**, Sibley S, Wang HT, Archambault PM, Albert M, Rewa OG, Ball I, Norman PA, Day AG, Hunt M, Loubani O, Mele T, Sarti AJ, Shahin J; Canadian Critical Care Trials Group. Frailty, Outcomes, Recovery and Care Steps of Critically Ill Patients (FORECAST): a prospective, multi-centre, cohort study. **Intensive Care Med**. 2024 Jul;50(7):1064-1074. doi: 10.1007/s00134-024-07404-9. Epub 2024 May 15. PMID: 38748266; PMCID: PMC11245420.
9. Tran KC, Asfar P, Cheng M, Demiselle J, Singer J, Lee T, **Sweet D, Boyd J, Walley K, Haljan G**, Sharif O, Geri G, Auchabie J, Quenot JP, Lee TC, Tsang J, Meziani F, Lamontagne F, Dubee V, Lasocki S, **Ovakim D**, Wood G, Turgeon A, Cohen Y, Lebas E, Goudelin M, Forrest D, Teale A, Mira JP, Fowler R, Daneman N, Adhikari NKJ, Gousseff M, Leroy P, Plantefevre G, Rispal P, Courtois R, Winston B, **Reynolds S**, Birks P, Bienvenu B, Tadie JM, Talarmin JP, Ansart S, **Russell JA**; ARBs CORONA II Team. Effects of Losartan on Patients Hospitalized for Acute COVID-19: A Randomized Controlled Trial. **Clin Infect Dis**. 2024 Sep 26;79(3):615-625. doi: 10.1093/cid/ciae306. PMID: 39325643; PMCID: PMC11426262.
10. Vickers P, Adamo L, Alfano M, Clark C, Cresto E, Cui H, Dang H, Dellsén F, Dupin N, Gradowski L, Graf S, Guevara A, Hallap M, Hamilton J, Hardey M, Helm P, Landrum A, Levy N, Machery E, Mills S, Muller S, Sheppard J, N K S, Slater M, Stegenga J, Strandin H, Stuart MT, **Sweet D**, Tasdan U, Taylor H, Towler O, Tulodziecki D, Tworek H, Wallbank R, Wiltsche H, Mitchell Finnigan S. Development of a novel methodology for ascertaining scientific opinion and extent of agreement. **PLoS One**. 2024 Dec 6;19(12):e0313541. doi: 10.1371/journal.pone.0313541. PMID: 39642116; PMCID: PMC11623554.

11. **Haljan G**, Lee T, McCarthy A, Cowan J, Tsang J, Lelouche F, Turgeon AF, Archambault P, Lamontagne F, Fowler R, Yoon J, Daley P, Cheng MP, Vinh DC, Lee TC, Tran KC, Winston BW, Kong HJ, **Boyd JH**, **Walley KR**, McGeer A, Maslove DM, Marshall JC, Singer J, Jain F, **Russell JA**. Complex Thrombo-Inflammatory Responses versus Outcomes of Non-COVID-19 Community-Acquired Pneumonia and COVID-19. **J Innate Immun**. 2024;16(1):529-552. doi: 10.1159/000542420. Epub 2024 Dec 3. PMID: 39626643; PMCID: PMC11614459.
12. Burns KEA, Wong J, Rizvi L, Lafreniere-Roula M, Thorpe K, Devlin JW, Cook DJ, Seely A, **Dodek PM**, Tanios M, Piraino T, Gouskos A, Kiedrowski KC, Kay P, Mitchell S, Merner GW, Mayette M, D'Aragon F, Lamontagne F, Rochwerg B, Turgeon A, Sia YT, Charbonney E, Aslanian P, Criner GJ, Hyzy RC, Beitler JR, Kassis EB, Kutsogiannis DJ, Meade MO, Liebler J, Iyer-Kumar S, Tsang J, Cirone R, Shanholtz C, Hill NS; Canadian Critical Care Trials Group. Frequency of Screening and Spontaneous Breathing Trial Techniques: A Randomized Clinical Trial. **JAMA**. 2024 Dec 3;332(21):1808-1821. doi: 10.1001/jama.2024.20631. PMID: 39382222; PMCID: PMC11581551.
13. Ghaseminejad F, Rich KE, Rosenbaum D, Rydz E, Palepu A, **Dodek P**, Salmon A, Leitch HA, Townson A, Lacaille D, Varshney VP, Khan NA. Differences in Physician Burnout by Specialty: A Cross-Sectional Survey. **Perm J**. 2024 Sep 16;28(3):58-68. doi: 10.7812/TPP/24.040. Epub 2024 Jun 19. PMID: 38980769; PMCID: PMC11404628.
14. Gohari A, Baumann B, Jen R, **Ayas N**. Sleep Deficiency: Epidemiology and Effects. **Sleep Med Clin**. 2024 Dec;19(4):509-518. doi: 10.1016/j.jsmc.2024.07.001. PMID: 39455173.
15. BALANCE Investigators, for the Canadian Critical Care Trials Group, the Association of Medical Microbiology and Infectious Disease Canada Clinical Research Network, the Australian and New Zealand Intensive Care Society Clinical Trials Group, and the Australasian Society for Infectious Diseases Clinical Research Network; Daneman N, Rishu A, Pinto R, Rogers BA, Shehabi Y, Parke R, Cook D, Arabi Y, Muscedere J, **Reynolds S**, Hall R, Dwivedi DB, McArthur C, McGuinness S, Yahav D, Coburn B, Geagea A, Das P, Shin P, Detsky M, Morris A, Fralick M, Powis JE, Kandel C, Sligl W, Bagshaw SM, Singhal N, Belley-Cote E, Whitlock R, Khwaja K, Morpeth S, Kazemi A, Williams A, MacFadden DR, McIntyre L, Tsang J, Lamontagne F, Carignan A, Marshall J, Friedrich JO, Cirone R, Downing M, Graham C, Davis J, Duan E, Neary J, Evans G, Alraddadi B, Al Johani S, Martin C, Elsayed S, Ball I, Lauzier F, Turgeon A, Stelfox HT, Conly J, McDonald EG, Lee TC, Sullivan R, Grant J, Kagan I, Young P, Lawrence C, O'Callaghan K, Eustace M, Choong K, Aslanian P, Buehner U, Havey T, Binnie A, Prazak J, Reeve B, Litton E, Lothar S, Kumar A, Zarychanski R, Hoffman T, Paterson D, Daley P, Commons RJ, Charbonney E, Naud JF, Roberts S, Tiruvoipati R, Gupta S, Wood G, Shum O, Miyakis S, **Dodek P**, Kwok C, Fowler RA; The BALANCE Investigators, for the Canadian Critical Care Trials Group, the Association of Medical Microbiology and Infectious Disease Canada Clinical Research Network, the Australian and New Zealand Intensive Care Society Clinical Trials Group, and the Australasian Society for Infectious Diseases Clinical Research Network. Antibiotic Treatment for 7 versus 14 Days in Patients with Bloodstream Infections. **N Engl J Med**. 2025 Mar 13;392(11):1065-1078. doi: 10.1056/NEJMoa2404991. Epub 2024 Nov 20. PMID: 39565030.