

# division of CRITICAL CARE MEDICINE



Dr. Cheryl Holmes  
Division Head

## DIVISION OVERVIEW

Dr. Cheryl Holmes, Clinical Professor and Head of the UBC Division of Critical Care Medicine also serves as Associate Dean, Undergraduate Medical Education at UBC. Dr. Holmes trained in Internal Medicine and Critical Care Medicine at UBC and practiced critical care medicine at Kelowna General Hospital (KGH) until 2018 where she was involved in the clinical education of medical students, residents, and fellows in the ICU.

As Head of the UBC Division of Critical Care Medicine, Dr. Holmes is responsible for supporting the strategic vision of the division and the Department of Medicine. Dr. Holmes' academic interests are in the hidden curriculum, the patient voice in the learning environment, advancing equity, decolonization, and diversity in medical education and leadership.

The UBC Division of Critical Care Medicine is multi-disciplinary in nature with 57 faculty members and 27 Associate and Joint appointment members. 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. The division's vision is: Extraordinary Critical Care through innovation, education, collaboration, and advocacy.



## KEY SUCCESSES

- The UBC Division of Critical Care Medicine embarked on a strategic planning process with the assistance of the UBC Strategic Decision Support (SDS)
- Division members discussed and validated the division's Vision and Mission and success statements were drafted for each core area
- The division's Equity, Diversity, Decolonization and Inclusion (EDDI) subcommittee is led by Dr. Ruth MacRedmond and will advise best practices for EDDI and contribute to strategic planning



## KEY CHALLENGES

- Exposure to diverse learning opportunities (subspecialties, clinical, research, rural programs)
- Lack of capacity in our systems to sustain wellness, innovation and resilience to crisis-related risks
- Financial instability hinders ability to sustain and grow mandate
- External forces that increase patient care needs and exacerbate burnout (pandemic, climate)

## FACULTY MEMBERS

Professors	2
Clinical Professors	7
Associate Professors	2
Clinical Associate Professors	9
Clinical Assistant Professors	23
Clinical Administrators	1
Clinical Instructors	14
Emeriti	1

## MAJOR ACHIEVEMENTS

In June 2022, Drs. Jim Russell, Keith Walley, and an international team published in Nature Medicine an article entitled “Redefining Critical Illness,” where they re-examined the syndrome-based model of critical care. Instead, the team hypothesized that exploring the underlying biological features may lead to improved disease characterization and eventually treatment by using biological characteristics such as genotype or gene expression signatures to define prognosis and response to treatment. This is a near-universal approach to cancer treatment that can be used in critical illness such as sepsis.

In February 2022, Dr. Robert McDermid gave a TEDx Talk entitled “Why Talking About Dying Matters.” He discussed the idea of what dying well looks like and compassionately talked about death as an important stage of all our lives versus something to be feared and avoided. The full TEDx Talk can be found [here](#).

## EDUCATION

UBC Education Program Directors:



Mypinder Sekhon, PGME Director

Number of subspecialty Training program residents:

- 9 Critical Care Medicine Residents

There is a collegial and supportive learning environment, with uniquely broad clinical exposure which supports a positive learning environment that promotes resident wellness.

## RESEARCH

UBC Research Funding/Grants: \$888K

Number of publications: 96

Dr. Najib Ayas co-chaired (with Dr. Knauert from Yale) an American Thoracic Society Workshop to develop an Official Research Statement on the Causes, Consequences, and Treatments of Sleep and Circadian Disruption in the ICU. The “Causes, Consequences, and Treatments of Sleep and Circadian Disruption in the ICU: An Official American Thoracic Society Research Statement” document has recently been published in American Journal of Respiratory and Critical Care Medicine and will serve as a robust roadmap to help guide research priorities in this important area.

A highly collaborative team with Dr. Jim Russell found unique patterns of proteins in acute COVID-19, and the patterns were different in males versus females. These unique proteins could be future diagnostic tests and/or treatment targets in acute COVID-19. This study highlights the unique international collaboration of our CIHR-funded ARBs CORONA network with 19 sites, including 3 in BC with investigators Drs. Keith Walley and John Boyd (St. Paul’s), Dr. Greg Haljan (Surrey), Dr. Karen Tran (VGH), and Dr. David Sweet (VGH) plus five specialty research labs, including the University of Victoria Genome BC Proteomics Centre that did the proteomics analyses and Leiden Medical Centre’s Dr. Yassene Mohammed who did the pathway analyses.

## CLINICAL HIGHLIGHTS

The collaborative team at VGH ICU was awarded platinum status for Extracorporeal Membrane Oxygenation (ECMO) by Extracorporeal Life Support Organization, the highest recognition in ECMO with only two other hospitals in Canada. The highly specialized team’s meticulous efforts to support critically ill patients and their robust training contributed to the award for excellence.

In 2022, Dr. Don Burke was working in a southwestern regional hospital in Ukraine where they are taking care of civilians and military personnel alongside Ukrainian healthcare providers and volunteers. After returning, he has been working with their local humanitarian campaign, “Ukraine Health and People,” which acts as a communication network to effectively collect and distribute much-needed supplies throughout Ukraine. He has also kept communication with many of their field physicians. If you’d like to learn more and support the efforts in Ukraine, please visit <http://uhnp.org>.