



Critical Care Ultrasound (CCUS) Clinical Fellowship

Introduction

Over the last 20 years, bedside ultrasound has become a vital asset to the diagnosis and management of a variety of critical illnesses. Beginning with ultrasound-guided vascular cannulation, point-of-care ultrasound has expanded in breadth and depth, now encompassing an array of focused and goal-directed ultrasound examinations. Critical care ultrasound (CCUS) is the culmination of this skill set with specific applications in the setting of critical and complex medical and surgical illnesses. CCUS encompasses an array of targeted point-of-care assessments including hemodynamic, cardio-respiratory assessment, multi-system sonography and procedural guidance. Competence in CCUS is increasingly an integral skill set in the armamentarium of the intensivist.

While the appetite for CCUS training within critical care medicine (CCM) residency training around the world is growing, access to fundamental supports to deliver that training, including skilled faculty, remains an unresolved challenge. CCM residency training, in its relative infancy, has historically focused on ultrasound as a tool to guide-vascular access with less dedicated training in other modalities. With the call for more expansive training (e.g. focused echocardiography, thoracic/abdominal ultrasound) the need for skilled faculty has blossomed. The “Canadian Recommendations for Critical Care Ultrasound and Competency” published in 2014, further call for a “local expert” to serve to support local dissemination and standardization of training pathways. Critical care medicine physicians with additional training and expertise in CCUS are desperately needed to help design, implement and maintain high-quality curricula and ensure achievement of high standards. At this current time, there remains few ways in which sub-specialty trained CCM physicians can receive the necessary training to serve such a purpose.

Fellowship Program

We offer a one-year clinical fellowship program in critical-care & point-of-care ultrasound. This training is intended to provide the critical care physician with an enhanced skill set in CCUS proficiency, medical education, educational quality assurance and administration. Graduates from this program will be equipped to lead CCUS programs at their future academic or community critical care programs. Training will take place primarily in the General Systems Intensive Care Unit at the University of Alberta Hospital with core ultrasound faculty but will include the opportunity to provide educational support to other Edmonton Zone critical care units including cardiovascular and neurological intensive care units. The training objectives are based on the Canadian CCUS recommendations, ACCP/SRLF recommendations and the “International Consensus Statement on Training Standards for Advanced Critical Care Echocardiography”. This fellowship includes 12-months of training in a general-systems intensive care unit with a mixed population of medical-surgical, burn, neurological and transplant patients. Image archiving and reporting for educational quality assurance is achieved with an established digital archiving system “QPath E”. Scholarly activities occur concurrently throughout the training period, with the expectation to participate in or develop an original scholarly project.

Our program is unique and is one of the few in Canada to offer this fellowship in a world-class facility with high-level critical care medicine serving a mixed adult population of critically ill patients.



Funding and Eligibility

Funding for Canadian trainees is via up to 8 weeks of locum work in intensive care; to be secured by the applicant (need not be local). We are happy to help you explore options.

International trainee applicants must have governmental/institutional funding. In addition, a [Government of Canada Work Permit](#) is required before the fellowship can begin.

Applicants must possess or be eligible for a specialist certificate in Critical Care Medicine, Royal College of Physicians and Surgeons of Canada or equivalent and be eligible for provincial licensure with the College of Physicians and Surgeons of Alberta ([CPSA](#)).

How to apply

To apply please forward the following to cmedu@ualberta.ca

- 1) Letter of intent
- 2) Curriculum Vitae
- 3) Reference letter from the applicant's Critical Care Program Director
- 4) Two letters of reference, dated within last 2 years
- 5) Funding commitment (international trainees only)
- 6) College of Physicians and Surgeons of Alberta licence or confirmation of eligibility
- 7) English language proficiency - [CPSA - ELP - Requirements](#)

Applications will be accepted from March 1st – April 30th the year prior to the program start date. The fellowship runs from July 1 to June 30 however, off-cycle residents/fellows may be considered. For more information, please contact cmedu@ualberta.ca (Program Administrator) and/or Dr. Brian Buchanan (Fellowship Director) at bmb@ualberta.ca.

Details about the University of Alberta, the Faculty of Medicine & Dentistry and the Department of Critical Care Medicine can be found on the Faculty's Home Page at <https://www.ualberta.ca/medicine/index.html> or [Department of Critical Care Medicine: Fellowship Training](#). Details about the City of Edmonton can be found at www.edmonton.ca

We thank all applicants for their interest; only those selected for an interview will be contacted. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

The University of Alberta and Alberta Health Services hire on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities and Indigenous persons.