Critical Care Cardiology Clinical Fellowship

Introduction

Cardiac or coronary care units, staffed by cardiologists, have been in existence for over 50 years. Since their advent, there has been a substantial fall in patient mortality. In the past 10 years, the coronary care unit patient population has changed with a higher number of comorbidities and more patients requiring advanced life support therapies such as mechanical ventilation, inotropic agents, renal replacement therapies, and mechanical circulatory support. Consequently, cardiac care units in many tertiary hospitals bear a striking similarity to intensive care units. Therefore, the traditional skill set of the cardiologist working in a coronary care unit has shifted to one requiring familiarity with a wide range of chronic diseases and acute non-cardiovascular complications.

The increase in demand for cardiac intensive care units and the increasing complexity of the patient population has brought with it the need for more complex technologies and therapies. Patients and families who present with complex disease processes may also be at the end of their life and cardiologists need to be comfortable communicating with patients and families regarding end-of-life care.

The Canadian CICU director-working group, the American Heart Association, and the European Society of Cardiology have all published position papers advocating for dedicated critical care training for cardiologists attending in cardiac intensive care units. They recognize the need for cardiologists to increase their skill set in order to provide quality care to this patient population.

Our program is unique as one of the first in Canada to offer this clinical fellowship in a world-class facility that includes Critical Care Medicine, Cardiovascular Intensive Care, Solid Organ Transplant, Mechanical Circulatory Support, and Cardiology.

Fellowship Program

This program is a one-year fellowship in the Department of Critical Care Medicine in concert with the Division of Cardiology. The fellowship emphasizes the care of the cardiac intensive care unit patient augmenting a cardiologist’s ability to care for the critically ill cardiac patient. Learning opportunities are focused on Critical Care Medicine, Cardiac Intensive Care, Cardiovascular Intensive Care, and patient safety. The intent of this program is to train cardiologists to care for sicker patients in the cardiac intensive care unit.

The program is administered under the Critical Care Medicine Residency Training Committee and Program Director. Trainees will be immersed in critical care training, education, and leadership similar to Royal College Critical Care Medicine residents. This includes dedicated and protected weekly academic half days, simulation sessions (including both task-trainer and in-situ full team simulation), hemodynamics/ventilator/renal replacement therapy bootcamps, journal clubs, as well as examination including written examinations, Structured Assessment of Clinical Evaluation Reports (STACERs), and Objective Structured Clinical Examinations (OSCEs).
Based on the recommendations from the Canadian CICU directors working group and the American Heart Association, the training includes:

- four (4-week) blocks of general intensive care divided between the University of Alberta Hospital and Royal Alexandra Hospital sites
- two blocks of cardiovascular (surgical) intensive care at the Mazankowski Alberta Heart Institute
- one – two blocks of cardiac intensive care at the University of Alberta Hospital
- one block of anesthesia
- three - four blocks of elective, clinical research, or quality improvement with an emphasis on patient safety and protocol development
- one block of vacation time

Funding and Eligibility

Funding for the fellowship for Canadian medical graduates consists of an annual salary of $60,000 paid as $5,000 monthly. The program requires fellows to provide 4 weeks (28 days) of service as well as four additional weekends (Friday 5 pm to Monday 8 am) of clinical work for funding the fellowship. These clinical weeks may be in internal medicine, cardiology, or critical care throughout hospitals in the province and will be scheduled once a successful applicant is chosen and will require the fellow to document fee for service billings that will then be billed by the department. A priority will be given to put clinical placements for exposure in hospitals that may have a future need for critical care cardiologists. Further details about the funding arrangement are available on request. Applicants must possess or be eligible for a specialist certificate in Cardiology, Royal College of Physicians and Surgeons of Canada or equivalent and be eligible for provincial full (non-educational) licensure with the College of Physicians and Surgeons of Alberta (CPSA).

International medical graduate applicants must have governmental/institutional funding. In addition, a Government of Canada Work Permit is required before the fellowship can begin. International medical graduates must possess a specialist certificate in Cardiology by the Royal College of Physicians and Surgeons of Canada or recognized equivalent.

How to apply

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

1) Letter of intent
2) Curriculum vitae
3) Three reference letters (including one from the applicant’s Cardiology Program Director)
4) College of Physicians and Surgeons of Alberta licence or confirmation of eligibility for full (non-educational) licence (Canadian medical graduates) or educational licence (international medical graduates)
5) Funding commitment (international medical graduates only)
6) English language proficiency - [CPSA - ELP - Requirements](https://www.ualberta.ca/critical-care) (international medical graduates only)

Applications will be accepted from March 1st until April 30th the year prior to program start date. For example, applications for fellowships starting on July 1st of the (n+1) year are accepted from March 1st until April 30th of the (n) year. The fellowship runs from July 1 to June 30 however, off-cycle residents/fellows may be considered. For more information, please contact [ccmedu@ualberta.ca](mailto:ccmedu@ualberta.ca) (Program Administrator) and/or Dr. Janek Senaratne [janeks@ualberta.ca](mailto:janeks@ualberta.ca) (Fellowship Director).

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](https://www.ualberta.ca/medicine/index.html) or [Department of Critical Care Medicine: Fellowship Training](https://www.ualberta.ca/critical-care). Details about the City of Edmonton can be found at [www.edmonton.ca](http://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, Canadian citizens 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.*