



# **UNIVERSITY OF CALGARY**

## **PERIOPERATIVE MEDICINE FELLOWSHIP PROGRAM MANUAL**

Updated November 2020

## **PERIOPERATIVE MEDICINE FELLOWSHIP**

The University of Calgary offers a one year fellowship program in Perioperative Medicine. The overarching goal of the fellowship will be to develop an understanding of risk assessment and stratification of high risk patients coming for surgery. Further, to develop strategies for risk modification beginning at the time of surgical decision making and extending until discharge.

The fellowship training occurs primarily at the Foothills Medical Centre, with additional time at the Peter Lougheed Centre and other sites in the city as elective choice dictates.

### **ROTATION SCHEDULE**

Duration - 12 months

13 blocks of 4 weeks duration consisting of:

1. Core Rotations – 11 blocks:
  - Perioperative Medicine at the Foothills Medical Centre (FMC) – 7 blocks
  - Perioperative Medicine + POCUS at the Peter Lougheed Centre (PLC) – 2 blocks
  - Transfusion Medicine + Patient Blood Management (FMC) – 1 block
  - Acute Pain Service (FMC) – 1 block
2. Elective Rotations – 2 blocks

#### **Electives may include:**

1. Chronic pain/transitional pain
2. Palliative care
3. Echocardiography lab (TBD)
4. Regional anesthesia
5. Sleep Medicine
6. Other subspecialty medicine rotation (as determined by availability)
7. Cardiac anesthesia/TEE
8. Additional clinical time at FMC/PLC
9. Other rotations, at fellows' suggestion, will be considered for their educational merit.

#### **Educational activities during FMC rotations:**

The fellow will assess and optimize patients in the PAC and admitted patients on the inpatient units for both urgent, and non-urgent, high risk surgery.

The fellow will self-schedule into ORs with high risk, non-cardiac surgery, patients with a focus on mitigation of risk in the perioperative period, including the use of POCUS. This may involve the supervision of residents.

The fellow will work with Internal Medicine to follow up on patients identified as high risk, for example through pre-op BNP testing and/or preoperative assessment. Areas of post-op focus will be cardiopulmonary, thromboembolic, endocrine, and cognitive.

The fellow will participate in a multispecialty committee to discuss complex clinical preoperative cases. This may need to be via telehealth or another electronic platform according to availability of members.

### **Educational activities during PLC rotations:**

The fellow will assess and optimize high risk patients in the PAC and on the inpatient units who are coming for surgery. The fellow will self-schedule into the OR for high risk patients undergoing surgery, including but not exclusively those having vascular surgery. The focus will be on strategies to mitigate risk, including the use of POCUS to guide management. This may involve the supervision of residents.

### **Non-Clinical Education Opportunities:**

In addition to the clinical activities outlined above the fellow will have support for the following opportunities:

1. Point of Care Ultrasound Course: in-person two-day course conducted twice/year (typically April and September) in Calgary.
2. Online perioperative ultrasound course, which may include one of the following:  
<https://www.iteachu.com/courses/periop/> or <https://usabcd.org/> .
  - Note: Course costs will be subsidized by the fellowship program at the completion of the course. Proof of completion of the course will be required to obtain a subsidy. Subsidization may not cover the entire cost of registration and travel and is at the discretion of the Fellowship Directors.
3. Attendance at courses/ conferences, ex. Perioperative Care Congress (<http://periopcongress.org/>) or Evidence-Based Perioperative Medicine (<https://ebpom.org/>).
4. University College of London Perioperative Medicine in Action Course (<https://www.futurelearn.com/courses/perioperative-medicine>).
5. Credit courses from Community Health Sciences, Cumming School of Medicine. These may include Biostatistics, Fundamentals of Epidemiology, Foundations of Health Sciences Research, Health Policy, and Systematic Reviews and Meta-Analysis.
6. FMC grand rounds and Morbidity and Mortality Rounds
7. Department of Anesthesia journal club meetings

### **Teaching Opportunities:**

The fellow will be involved in teaching and supervising a variety of learners in the clinical environment, including residents rotating through their Perioperative Anesthesia rotation. The fellow will also be involved in the resident academic half day program depending on the teaching rotations scheduled during their 12 month period.

### **Research Opportunities:**

The fellow will assume a supervised research/QI project on a topic related to perioperative medicine. Fellows are encouraged to present a poster at the CAS annual meeting.

## **Grand Rounds:**

The fellow will present once at FMC anesthesia grand rounds during their fellowship year.

## **Longitudinal Responsibilities:**

The perioperative medicine fellow will have longitudinal responsibilities that will need to be maintained over the 12 month period, regardless of current rotation site:

1. The FMC Pre-Admission Clinic Liaison Committee
2. The ERAS committee
3. Complex Case Committee
4. Specialist LINK: resource and clinical pathway development

The FMC PAC Liaison Committee meets quarterly, or more frequently as required. The fellow will attend these meetings in order to gain an understanding of the administrative aspects of running a multidisciplinary clinic, including policies for screening and triaging patients.

The fellow will attend monthly colorectal ERAS meetings.

The fellow will attend Complex Case Committee meetings, which are scheduled ad hoc throughout the year. These involve a multidisciplinary discussion between surgery, anesthesia, internal medicine, geriatrics and intensive care about high-risk cases presenting for surgery.

Specialist LINK is a service that connects family physicians and specialists in the Calgary area. The service involves a tele-advice line, clinical care pathways, and other resources to help family physicians care for their patients. The fellow will help to create anesthesiology resources for this site.

## **LEARNING OBJECTIVES**

By the end of the fellowship the fellow will be able to:

### **Medical Expert**

- Describe the physiological impact of surgery and recovery from surgery.
- Discuss preoperative risk assessment and stratification for patients undergoing non-cardiac surgery.
- Perform preoperative assessments of patients undergoing urgent and non-urgent surgery. Develop management plans for risk stratification, medical optimization, intraoperative, and postoperative care.
- Manage high risk patients during intra- and postoperative periods.
- Explain the role of ultrasound in perioperative management of high risk cases.
- Demonstrate the use of POCUS in the perioperative period.
- Explain how patients at high risk for postoperative complications can be identified pre- and intra- operatively.
- Manage high risk patients in the post-op period, with a focus on cardiopulmonary, endocrine and cognitive function.
- Describe the concept of Enhanced Recovery and how it is implemented.

## **Communicator**

- Obtain information from patient, the medical record, and colleagues sufficient to identify perioperative risk and formulate a management plan.
- Communicate risk assessment and options to patients in order to allow them to participate in decision making about their care.
- Demonstrate an ability to communicate with patients and their families in a compassionate manner.
- Discuss risk assessment and plan for risk stratification, anesthetic management and postoperative care with physician colleagues.
- Document concise summary of consultation and recommendations in patient's medical record, either dictated or written.
- Effectively communicate current issues in the area of perioperative medicine to anesthesia colleagues at FMC divisional grand rounds.
- Provide feedback on the educational experiences of this program to the fellowship supervisor.

## **Collaborator**

- Demonstrate the ability to work with physician colleagues and patients to achieve an acceptable management plan.
- Formulate management plans that demonstrate an awareness of the utility of multispecialty and multidisciplinary health care providers.
- Describe techniques to enhance communication and understanding of concerns about high risk patients.

## **Scholar**

- Demonstrate an ongoing effective personal learning strategy.
- Critically appraise and discuss publications in the area of perioperative medicine with particular reference to their application to the local population.
- Use evidence in clinical decision making appropriately.
- Design and participate in studies on perioperative interventions and outcomes.
- Describe the utility of data collected by provincial programs, e.g. ERAS.
- Construct and deliver formal teaching sessions for residents in the area of perioperative medicine.

## **Manager**

- Describe the structure of a perioperative care model and key points of intervention for risk reduction.
- Demonstrate awareness of the costs associated with perioperative care interventions.
- Identify the elements of efficient preoperative screening and assessment of patients presenting for non-emergency surgery.
- Discuss the practical barriers to perioperative medical interventions.
- Contribute to the development of strategies to overcome barriers and to change culture in order to adapt to a perioperative care model.
- Demonstrate awareness of the interests of multiple stakeholders involved in perioperative care. Manage the expectations of multiple stakeholders in order to allow for appropriate experiences for all learners.

## **Health advocate**

- Recognize the benefits to the patient and to society of an organized perioperative care model.
- Identify the ethical concerns at both a patient level and a societal level in surgical decision making in high risk patients.
- Suggest strategies for ensuring access to preoperative assessment for patients in rural locations.

## **Professional**

- Demonstrate commitment to the well-being of individual patients, society and self. Demonstrate integrity, honesty, compassion, and a respect for diversity,
- Meet medical, legal, and professional obligations of a specialist.
- Demonstrate awareness of own limitations , seek advice when needed, and engage in accurate self-appraisal.

## **EVALUATION POLICY**

1. Verbal feedback during the day while working with preceptors.
2. Daily evaluation and feedback via one45 for clinical work in core rotations.
3. ITER for each block and final evaluation by the fellowship supervisor.
4. Off-service rotation evaluations will be completed by the supervisor of that rotation. These will be reviewed by the perioperative fellowship director.
5. Research or QI project will be evaluated by fellowship supervisor.
6. Logbook and fellowship portfolio.
5. Quarterly meetings with fellowship supervisor.

Note re logbook and fellowship portfolio:

This body of work should be created over the course of the 12 month fellowship and should include illustrative cases and reflections on administrative activities that highlight the educational experiences relevant for perioperative medicine. It will be reviewed by the fellowship supervisor and the Fellowship Committee.

## **REMUNERATION/LOCUM**

### **Locum Scheduling**

The fellow's income for the training year is generated through locum Main OR assignments where the fellow bills the day as an independent practitioner. The locum assignments will be at the FMC. If a fellow is interested in locum opportunities at other Calgary hospitals this can be explored. The FMC locum shifts are assigned by the FMC Main OR schedulers and can be in any OR including but not limited to Foothills, McCaig, Labor & Delivery (day assignments only), Tom Baker Cancer Center, Diagnostic, and subspecialty rooms (thoracics, neuro, etc.).

Fellows are also expected to cover weekend 2nd or 3rd call Main OR shift. These shifts generally begin between at 7:30 am (assuming there is a need for 2 or 3 OR rooms). They typically end by

18:00. Fellows bill during these assignments similar to any other locum assignment. Fellows will not be given any 1st call Main OR or OB evening shifts during their fellowship year. Any special requests by the department for a fellow to cover one of these shifts will have to be approved by the FMC site chief, the fellowship director and the fellow.

The fellows will be assigned approximately 60 weekday assignments per year and 8 weekend assignments per year. The locum shifts will be distributed in a fashion that will 1) minimize impact on fellowship education and 2) provide additional OR coverage during time periods where the schedulers are traditionally short-staffed.

Ideally the locum assignments will be evenly spread out over the block, however depending on need/availability fellows may be asked to provide locum coverage concentrated within period of their block (ex. 3 assignments in one week followed by 2 weeks with no assignments). Fellows will need to be available for room assignments (though may not actually be booked) for 2 of the 4 high demand vacation periods: Thanksgiving, Christmas, New Year, and Spring Break. At the start of the fellowship year, the fellows are expected to choose with 2 periods they will be available for potential scheduling. If you are scheduled on a STAT you may choose any other day to have "in-lieu". The choice of in-lieu day can be made by 1) e-mailing the program secretary and director (same as vacation requires), or 2) booking them on Physician Scheduler as an "Academic Day" with a note to the schedulers.

## **Billing**

Fellows are responsible to obtain billing codes from the surgeon they are working with as well as entering appropriate modifiers. Billing slips will be submitted for 3rd party billing (provided by MediCom) to be submitted to Alberta Health & Wellness. Billing will be paid by AH&W into an account reserved exclusively for anesthesia fellows. Fellows will then be paid out of this account on a monthly basis. Billings and the fellowship accounts are maintained by our program. Individual fellow billing summaries and statements can be made available upon request.

Billing slips are submitted to MediCom by placing a sealed envelope in the mail slot marked "CAS" in the FMC 2nd floor anesthesia mail room. Slips are picked up Thursday morning. If possible, please try submit all billings for each rotation on the last Wednesday prior to the start of the next rotation.

Any WBC payments will come to the account directly. In the rare event that you bill an international patient that payment will be sent directly to you from MediCom and will not be counted in your annual salary or quarterly bonuses from AHS (i.e. if and when you get paid it will be "bonus" money).

For any "split-cases", where the case has been split between a fellow and another attending, the following procedure will need to be followed.

- Scenario 1: You are billing the "split-case". You need to write down on the billing slip that it is a split case, the name of the other anesthesiologist, and the times each person was involved in the case. This is in addition to the regular billing info. Submit this slip. The other anesthesiologist will be paid their portion directly from the Fellowship Program.
- Scenario 2: The other anesthesiologist is billing the "split-case." You must still fill in a complete billing slip as described above. The difference will be **to note clearly that it is**

**the other anesthesiologist submitting to AH&W.** Once that anesthesiologist has given you a check then we will subtract that amount from your next monthly payment.

- Please do not arrange to have any billings paid to you directly from another attending, for a split-case or otherwise. Doing so will be considered an unprofessional action and may result in loss of the end-of-year bonus.

## **Fellowship Salary**

Fellows will be paid a yearly salary of \$95 000.00. This salary will be paid out monthly at the end of each month. Fellows' billings will be reviewed quarterly: June 30, September 30, December 31, and March 31. A 50% proportion of billings above a calculated rate of \$95 000/year will be paid to the Fellows as a bonus after the completion of their fellowship year. It takes several weeks to ensure all billings have been received and the accounting is complete. Therefore, fellows can expect to receive their bonus 2-3 months after completion of their fellowship.

The remaining 50% of the billing income will be transferred to a University of Calgary Research Account. The purpose of this account will be to enhance the academic experience for the fellows. Expenditures from the Research Account will be decided by a committee and approved by the Fellowship Director. There will be fellow representation on this committee.

The mandate of the Research Account is to spend funds only on requests which are directly related to Fellowship Academics. This includes, but is not limited to the following:

1. Equipment/statistical assistance/administrative help for research projects
2. Equipment used for fellowship education
3. Reimbursement of travel for conference presentations
4. Honorariums for selected visiting speakers

**Note:** No tax will be withheld by AHS so please plan to set aside an appropriate amount of your salary and bonus payments to account for income tax payment. In addition, any professional membership/registration fees, CMPA dues, and supplemental health care insurance is NOT provided by the Fellowship Program.

## **Extra Locum Assignments**

Fellows may elect to request additional locum assignments during their vacation time. All billings during this time will still be subjected to the arrangement specified above (IE 50% retention above \$95 000.00). Fellows may also elect to use vacation time to work at a hospital outside of Alberta. The specifics of such an arrangement (privileges, CMPA, etc.) is to be set-up by the fellow and that particular hospital. Any income generated outside of Alberta would not go through the AHS Fellowship Account and would not be subjected to any retention of funds.

## **ABSENCE FROM CLINICAL WORK**

### **Academic Days**

The fellow will have the equivalent of one academic day each week during their perioperative medicine blocks. These days can be chosen by the fellow, but require approval by the fellowship supervisor. The purpose of these days is to allow time to read around topics



related to perioperative medicine and to allow time to for research, quality improvement, and teaching.

### **Vacation**

Fellows are allotted up to 4 weeks (including weekends) of vacation time during the fellowship year. Fellows are encouraged to minimize vacation requires during non-Perioperative Medicine blocks to limit the loss of educational activities during these short periods.

Vacation requests can be submitted to the Fellowship Directors for Perioperative Medicine blocks. Any requests during non-Perioperative Medicine blocks should be directed to the specific rotation director, in addition to informing the Fellowship Directors.

### **Conferences**

Fellows are encouraged to attend relevant conferences/educational meetings. Attendance to these events will be allowed without requiring the use of vacation time for up to 5 weekdays or 3 events. Additional time off will be possible should the fellow be presenting a poster or speaking at a conference. These additional conference requests will be assessed on a case-by-case basis.

### **Leaves of Absences (LOA)**

The PGME LOA policy can be found at: <http://wcm.ucalgary.ca/pgme/current-trainees/residency-training-policies> under the tab "Leaves of Absence". Special leave will be granted by the Fellowship Directors in accordance with PGME/ AHS/ RCPSC policies. The general rule is that any LOA over 2 weeks duration (accumulative) will require extension of training.

### **Early Termination of the Fellowship Program**

Requests for early termination of the fellowship program should be made to the Fellowship Supervisor as soon as possible to facilitate the required paperwork and scheduling changes.

The fellow will be excused from all educational activities immediately. Attempts will be made to cover any locum shifts that have already been assigned. If no coverage is possible, the fellow will be asked to complete the assignment so that patient care is not negatively affected.

If there has been insufficient locum work to cover the fellow's month salary payments, the fellow will be required to reimburse the Fellowship Program for the difference.

Early departure will result in forfeiture of the fellows' 50% split of any overage billings accumulated up to the point of fellowship termination.

## **CODE OF CONDUCT**

All fellows should be aware of the PGME policies on code of conduct expected of medical trainees. This can be found at <http://wcm.ucalgary.ca/pgme/current-trainees/residency-training-policies> under 'Code of Conduct'. Although directed towards residents, the same expectations apply to fellows. The PGME complete policy on clinical fellowships can be accessed through the following link: [cumming.ucalgary.ca/pgme/files/pgme/clinical-fellows-policy-final.pdf](http://cumming.ucalgary.ca/pgme/files/pgme/clinical-fellows-policy-final.pdf).

Fellows are also expected to be aware of and abide by the College of Physician and Surgeons of Alberta's. Standards of Practice (<http://www.cpsa.ca/standardspractice/>), Code of Conduct (<http://www.cpsa.ca/cpsa-code-conduct/>) and Code of Ethics (<http://www.cpsa.ca/standardspractice/code-of-ethics/>).

## **FELLOW WELLBEING**

Fellow well-being is given a high priority in our program. For health, personal, and career concerns, fellows are encouraged to seek assistance early. In addition to the resources available within the department, excellent support is available through the University Health Services at the U of C (<https://www.ucalgary.ca/wellnesscentre/services/health/medical>) and the Physician and Family Support Program (PFSP) of the Alberta Medical Association (AMA) (<https://www.albertadoctors.org/services/physicians/pfsp>).

## **PERSONAL & PROFESSIONAL RESPONSIBILITIES**

Be aware of escalating health problems, sleep deprivation, stress, worries and doubts, and promptly discuss these issues with the Fellowship Director or other Faculty Member. Be aware of signs of drug misuse in your colleagues and seek advice if you have concerns.

## **HARASSMENT AND BULLYING, OMBUDSMAN**

Any fellow who feels that they are being harassed or bullied should notify either: a Faculty member or the Fellowship Director. All allegations of harassment and bullying are taken seriously and will be investigated and addressed. In the event that the fellow is not comfortable addressing the matter with any member of the Department of Anesthesia, the fellow should contact the program's ombudsman, Dr. John Graham ([john.graham@ahs.ca](mailto:john.graham@ahs.ca)) to have the matter addressed.

## **FELLOW SAFETY POLICY**

All fellows should be aware of the PGME policy on resident safety. This information can be found at <http://wcm.ucalgary.ca/pgme/current-trainees/residency-training-policies> under 'Resident Safety'. These same policies apply to fellows. The Perioperative Medicine Fellowship Program wishes to act promptly to address identified safety concerns and incidents, and to be proactive in providing a safe learning environment.

## **FELLOWSHIP PROGRAM DIRECTOR**

The Fellowship Director (PD) is responsible for the overall conduct of the fellowship program and is accountable to the Foothills Medical Centre Department of Anesthesia, the Head of the Department of Anesthesia, the Associate Dean for PGME, and the RCPSC. Specific duties include:

1. The development and operation of the program to meet general and specific standards of accreditation;
2. Selection of candidates for admission to the program, including the organization and conduct of interviews;
3. Evaluation in accordance with appropriate policies and stated educational objectives;
4. Maintenance of an appeal mechanism;
5. Facilitation of career planning;
6. Counseling fellows as required and dealing with professional and personal problems
7. Ongoing program review to include:
  - a. The educational experience (including the curriculum as it relates to goals and objectives);
  - b. Optimal use of available resources and facilities;
  - c. Opinions of the fellows;
  - d. Teaching and teachers.

The PD will ensure that the formal teaching in the program is organized, relevant, and continually updated. Assistance and resources will be provided to faculty involved in educational programs. The PD acts as a liaison between the fellows and faculty, frequently in the role of fellow advocate. Fellows' specific needs and requests are to be dealt with compassionately and rationally. With the assistance of faculty, the PD is required to have an ongoing awareness of fellow's performance. Performance (or other) concerns will be addressed with the fellow and FMC Department of Anesthesia in a timely and appropriate fashion.

## **FELLOWSHIP SELECTION PROCESS**

Applications for fellowship training in Perioperative Medicine will be submitted directly to the Fellowship Director. All applicants must have received FRCPC designation or equivalent and qualify for licensing from the College of Physicians and Surgeons of Alberta. A complete application includes: cover letter, current CV and three (3) letters of reference.

Candidate files are reviewed, and selected candidates are invited for an interview. The date for Calgary interviews is determined based on availability of Faculty for interviews, as well as the schedule of the fellowship applicant. If the applicant is unable to travel for an in-person interview, then a phone or videoconference interview will be arranged. This alternative arrangement will not be harmful to the success of an applicant in securing a fellowship position.

During the selection process, consideration is given to academic record, clinical performance record, suitability for training in Perioperative Medicine, letters of reference, cover letter, and the interviews. The interview is conducted by a selection committee. Application decisions made by the selection committee are final.

## **RESOURCES FOR FELLOWS**

### **Agencies**

The AMA offers a variety of services (<https://www.albertadoctors.org/>), including emergency support. The AMA Physician and Family Support Program (<https://www.albertadoctors.org/services/physicians/pfsp>) manages a hotline at 1-877- SOS-4MDS (767-4637) (<https://www.albertadoctors.org/services/physicians/pfsp/i-needhelp-now>). Up to six one-hour counseling sessions per family member per year are available free of charge.

AHS also has an Employee and Family Assistance Program that can be reached at 1-877- 273-3134 or <http://insite.albertahealthservices.ca/Files/hr-whs-fact-sheet-shepellfgionline-access.pdf>.

The main campus of the U of C offers a variety of services, including a bookstore, recreational facilities, The Chaplains' Association, Student Rights Advisor, and Academic Counseling.

### **Personal Health Care**

All fellows are urged to have a Family Physician throughout their training. Self-medication, prescription-writing without formal medical consultation, and removal of pharmaceuticals from the OR are not supported. While it is reasonable to keep a limited number of labeled syringes/vials to be taken to patient care areas while on call, keeping narcotic boxes in the on-call room is absolutely prohibited.

### **CMPA**

If you think you might be, or are faced with, a serious complaint or a threat of a lawsuit, then you should notify the CMPA by telephone 1-800-267-6522 at once. Send complete, concise information. Do not contact the CMPA by e-mail. Wait for a reply from the CMPA before taking any further steps or making any statements. Be sure your clinical records are secure. Do not consult a lawyer without instructions from the CMPA. The CMPA does not accept responsibility for the payment of legal expenses incurred without its prior approval. Do not answer any letters of complaint from patients, lawyers or others without first receiving the CMPA's advice.

### **Experts from Outside the Specialty**

Experts in the areas of law, practice management, accounting, lifestyle, time management, addiction, learning problems, exam-writing anxiety, multiple choice answering strategies, sleep disorders, and a variety of other areas of potential interest to residents and fellows are frequently invited to present at academic half-day and CARR. The PD will facilitate arrangements for individual fellows to get help in these areas, if interested.

## **APPLICATION DEADLINES:**

The deadline for applications is April 30th in the year prior to starting. The fellowship begins July 1st each year.

Interviews will be held in May, with final decisions made by June 30th of the year prior to start date.

Elective choices must be made by January 31st prior to the start date.

## **APPLICATION REQUIREMENTS:**

Fellows applying for the anesthesia stream require the following:

1. Candidates must be eligible for BOTH a License for Postgraduate Training in Alberta AND a License for Independent Practice from the College of Physicians and Surgeons of Alberta (CPSA).
2. Letter of intent
3. Curriculum Vitae
4. Three letters of reference.

The above should be mailed or emailed to:

Fellowship Directors: Drs. Danae Krahn and Maria Chuquer

Department of Anesthesiology, Perioperative and Pain Medicine.  
Room C222, Foothills Medical Centre.  
1405 29 St NW  
Calgary, Alberta, T2N 2T9.

email: [anesthesia.fellowships@ahs.ca](mailto:anesthesia.fellowships@ahs.ca)