**Research – ROTATION DESCRIPTION & SPECIFIC OBJECTIVES**

**Pediatric Emergency Medicine Subspecialty Residency - University Of Calgary**

**EXPECTATIONS**

* The resident is required to complete two blocks (eight weeks total) dedicated to a scholarly project. The Royal college requires:
  + A project related to Pediatric Emergency Medicine, including research, education, quality improvement, or creative professional activity (such as advocacy or health promotion). Ideally, this project will lead to a presentation or publication that would permit peer review in a setting outside the resident’s own center. This may include description in a manuscript, development of an educational curriculum for a course or group, presentation of QI activities, or protocol development.
* Prior to starting training, the resident will be introduced to potential academic supervisors in the department and encouraged to develop ideas for their scholarly project; they will be. expected to have identified a project supervisor within the first month of their training.
* Residents can start a new project or join an existing project being conducted by a supervisor as long as they are a significant contributor.
* The resident is expected to orally present their project at the annual Pediatric Emergency Research Canada (PERC) Conference and are encouraged to also present at a national level conference or scientific meeting. Options will be considered in discussion with the program director; these include but are not limited to annual meetings of the Canadian Pediatric Society, Canadian Association of Emergency Physicians, International Conference on Residency Education, Pediatric Academic Society and American Academic of Pediatrics.
* Progress needs to be shown from the first to second year of training; attendance at PERC will be expected by all trainees and be fully supported by the program.
* Research supervision should be provided by a physician in the section of Pediatric Emergency Medicine with an academic/research appointment either as the primary supervisor or as a secondary supervisor when a clinical staff physician is selected as the primary supervisor.

**STRUCTURE**

* Eight weeks of dedicated time is made available for scholarly project work in the rotation schedule over two years.
* The University of Calgary provides a Research Course dedicated to residents that is held yearly in block five. All residents joining the program from sites outside of Calgary will be required to complete this four-week course with exceptions considered only for trainees with previous extensive training in research/scholarship; this will represent the first research block in their training. Residents who have already completed the research course may opt out, if demonstrating a solid research foundation, at the program director and residency training committee’s discretion. Participation in the course may also be modified to involvement in small group work only (vs the didactic lecture component) – this decision will be made upon individual discussions between residents, program director, and research course directors.
* Trainees will participate in quarterly dedicated AHD “fireside chats” which are informal sessions with the academic research group to discuss their projects and review their progress/obstacles encountered. Staff supervisors for the resident project must be in attendance, and it is the responsibility of the resident to ensure they are aware of the fireside chat dates and confirm their attendance:
* To prepare the academic research group for the fireside chat discussions, one week prior to each fireside chat, the residents will be expected to complete a brief written Q&A review form on their projects and email to the program director. The document template will be available on the program website.
* The resident must also notify their project supervisor one week before the fireside chat to discuss content that will be presented.
* One specific session will be scheduled during academic half day teaching yearly to practice PERC presentations prior to the annual PERC meeting.
* Research supervisors will be required to complete narrative assessments on the resident’s progress/performance approximately q6 months for review by the program’s competence committee.

**OBJECTIVES**

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

**Communicator:**

* The resident should be able to formulate a clear and focused scholarly inquiry (e.g. research question, SMART aim).
* The resident should be able to summarize and communicate the results of scholarly work to patients, families and other health care professionals.

**Leader:**

* The resident should be capable of managing the financial and human resources available for scholarly projects.
* The resident should be able to apply the science of quality improvement to contribute to patient safety and improving systems of patient care.

**Scholar:**

* The resident should perform each of the following during the training period: Perform a critical appraisal on a topic:
* Perform a thorough literature review on a topic.
* Generate a study protocol or scholarly project proposal.
* Create a submission for the ethics review board or for ARECCI (for Quality Improvement (QI) projects) as appropriate for the type of scholarly project.
* Present their findings at the local, national or international level.
* Disseminate results of a scholarly project (e.g. manuscript, research or quality improvement protocol, white paper or policy, clinical practice guideline).
* The resident should demonstrate critical thinking and integrate critical appraisal of the literature into the bedside approach.
* The resident should be able to apply best evidence to the allocation of health care resources.

**Professional:**

The resident should demonstrate responsibility by being reliable and dependable.

* The resident should demonstrate good self-assessment ability by being aware of own limitations and seeking feedback.
* The resident should respect issues of equity.
* The resident should understand the consent and surrogate decision-making process.