

Pediatric Pain Medicine Fellowship

The Hospital for Sick Children

The Hospital for Sick Children (SickKids) Fellowship in Pediatric Pain Medicine is a one-year postgraduate clinical and research training program in the management of pediatric pain under the direction of the Department of Anesthesia and Pain Medicine. The program builds on the CanMeds roles recommended by the Royal College of Physicians and Surgeons of Canada. The goal of the fellowship program is to mentor clinicians in pediatric pain management practice and research. The program includes training in the management of acute, transitional and chronic pain in children. This document outlines the basic components of the program.

Basem Naser
Director, Acute Pain Service

Lisa Isaac
Director, Transitional Pain Service

PEDIATRIC PAIN FELLOWSHIP

Funding: Department of Anesthesia and Pain Medicine Fellowship Program

Program duration: 1 year (July 1 - June 30)

Certificate:

- On successful completion of the program, fellows will receive a certificate similar to that currently issued to fellows who have completed the Department of Anesthesia and Pain Medicine's postgraduate fellowship program.
- The certificate will identify Pediatric Pain as the primary focus.

Stakeholders:

1. Department of Anesthesia and Pain Medicine: Anesthesiologist-in-Chief (Jason Maynes); Associate Chief (Mark Levine); Director, Acute Pain Service (Basem Naser); Director, Pediatric Anesthesia Fellowship Program (Ilavajady Srinivasan); Pain Fellowship Coordinator and Medical Director, Transitional Pain Service (Lisa Isaac); Medical Director, Chronic Pain Program (Fiona Campbell); Director, Regional Anesthesia (Joost DeRuiter); Members of the Department of Anesthesia and Pain Medicine; Chief Clinical and Research fellow.
2. University of Toronto: Beverley Orser (Chair, Department of Anesthesia, University of Toronto); Doreen Yee (Fellowship Program Director, University of Toronto).

Job Description:

1. Comply with the SickKids Department of Anesthesia and Pain Medicine pediatric fellowship training program requirements
2. Execute Pain Fellowship program expectations
3. Complete clinical rotations in core and elective programs
4. Complete the assessment and interview process
5. Participate in in-house pain call

Fellowship format:

The format will be a clinical and research fellowship within the Department of Anesthesia and Pain Medicine, including rotations in specialized areas such as acute pain, transitional pain, chronic pain, palliative pain, sedation and procedural pain, regional anesthesia, pain in complex medical conditions, and intensive rehabilitation for pain. Research and education are an integral part of the fellowship. Refer to tables in the following sections for structure and duration of each activity.

Pain-related call:

Weekday: 8 AM to 5 PM in-house daily call for pain consultation

Weekend: during the 2-week APS rotation

General anesthesia call:

In-house general pediatric anesthesia call in the second six months of the fellowship if desired (and appropriate)

Vacation and Academic time:

20 days of vacation and 3 days to attend conference(s).

Curriculum:

- Combination of didactic lectures, seminars, and workshops.
- Main textbook: “Pain in Infants, Children, and Adolescents” by Schechter, Berde, and Yaster.
- Seminars: Fellows in the department are encouraged to attend all general pediatric anesthesia and pain fellowship seminars. Seminars in pain will be presented by members of the pain team. Each fellow is expected to participate by delivering 2 to 3 seminars annually. Focus of pain fellow’s seminars will be topics related to pain. Pain fellow may also attend pain related seminars at other hospitals and those given by the U of T inter-professional group.
- Workshops (optional): One of the following—U of T Ultrasound Workshop, ASRA courses, U of T Inter-Professional Pain Week, PainU.
- Conferences: One of the following—Canadian Pain Society Conference, International Forum on Pediatric Pain, IASP Pediatric Pain Symposium, or other.

Assessment:

OBJECTIVES OF THE ASSESSMENT

1. Establish the level of knowledge in general pain before and after the pain fellowship.
2. Establish the level of knowledge in pediatric pain management before and after the pain fellowship.
3. Establish the educational effectiveness of the pain fellowship based on 1 and 2.
4. Establish the level of competence in relation to the objectives of the pain fellowship and for each rotation.

FORMAT OF ASSESSMENT

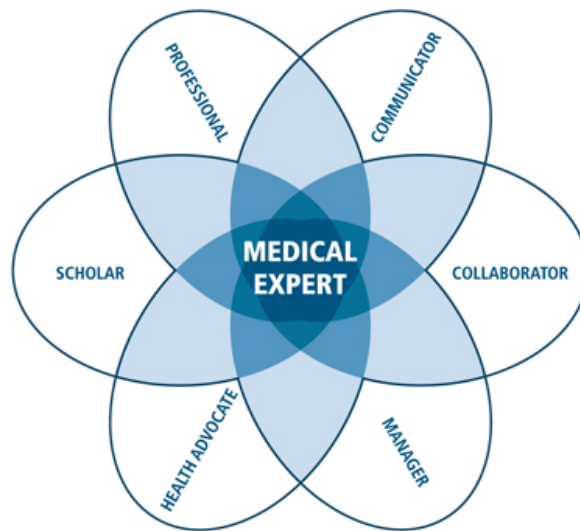
1. Initial multiple choice evaluation in the first month of fellowship, and repeated at the end of the fellowship. The evaluation will include:
 - a. Questions in pain-related basic science.
 - b. Case studies examining level of competence in the objectives of the fellowship.
2. Periodic interviews. The initial interview is scheduled at 4 weeks after commencing the fellowship. Other interviews are conducted at 4 months, 8 months, and at the end of the fellowship.
3. Formal assessment forms are to be completed at the end of each rotation.

Rotations:

Acute Pain Service, Transitional Pain Service, Chronic Pain Program, Procedural Pain and Sedation, Pediatric Palliative Pain Team, Sunnybrook Regional Anesthesia Program, and Wasser Adult Chronic Pain Program, Toronto General Hospital Transitional Pain Service, GetUpandGo Intensive Pain Rehabilitation program.

Fellowship Goals & Objectives:

The goals and objectives of the Pediatric Pain fellowship build on the general objectives for training recommended by the Royal College of Physicians and Surgeons of Canada. These objectives target competencies in seven roles: Medical Expert/Clinical Decision-maker, Communicator, Collaborator, Manager, Health Advocate, Scholar, and Professional roles.



Four areas of competency are expected: clinical, research, education/teaching, and administration.

1. CLINICAL

- 1.1. Competency in pain history and physical exam
- 1.2. Competency in using age appropriate pain assessment tools
- 1.3. Competency in identifying surgical procedures that require acute pain service involvement post-op
- 1.4. Competency in diagnosing and managing acute and chronic pain conditions
- 1.5. Competency in prescribing and programming PCA
- 1.6. Competency in prescribing and performing regional blocks, single-shot administration and continuous infusion of local anesthetics
 - 1.6.1. Neuraxial blockade: caudal, lumbar and thoracic epidurals
 - 1.6.2. Peripheral and Regional Nerve Blocks
 - 1.6.2.1. Popliteal nerve block
 - 1.6.2.2. Saphenous nerve block
 - 1.6.2.3. Transversus abdominis plane block
 - 1.6.2.4. Infraclavicular brachial plexus block
 - 1.6.2.5. Axillary brachial plexus block

- 1.6.2.6. Ilioinguinal, iliohypogastric nerve block
 - 1.7. Competency in opioid prescription, conversion, and transition
 - 1.8. Competency in managing opioid-induced adverse effects
 - 1.8.1. Opioid-induced pruritus
 - 1.8.2. Opioid-induced bowel dysfunction
 - 1.8.3. Opioid tolerance and hyperalgesia
 - 1.8.4. Opioid withdrawal and weaning
 - 1.9. Competency in prescribing adjuvant medications
 - 1.9.1. Ketamine infusion
 - 1.9.2. Anticonvulsants for pain
 - 1.9.3. Antidepressants for pain
 - 1.9.4. Sedatives, hypnotics, and antispasmodic
 - 1.9.5. Alpha-2 adrenergic agonists
 - 1.9.6. Others
 - 1.10. Competency in managing pain in medical conditions
 - 1.10.1. Mucositis
 - 1.10.2. Graft vs. host disease
 - 1.10.3. Sickle cell disease
 - 1.10.4. Juvenile rheumatoid arthritis
 - 1.10.5. Widespread pain
 - 1.10.6. Recurrent abdominal pain
 - 1.10.7. Complex regional pain syndrome
 - 1.10.8. Others
 - 1.11. Competency in managing sedation and procedural pain
 - 1.12. Competency in attending and supporting end-of life situations
 - 1.13. Competency in diagnosis and management of toxicity associated with local anesthetics, opioids and other pain medications
 - 1.14. Others
2. RESEARCH:
- 2.1. Attend and participate in ongoing research seminars that form part of the pediatric anesthesia fellowship program
 - 2.2. Conduct audits of pain related issues
 - 2.3. Present one or more abstracts at U of T Shields Research Day
 - 2.4. Present one or more abstracts at a national/international meeting
 - 2.5. Publish a literature review or original manuscript on pain-related topic
3. EDUCATION & TEACHINGS:
- 3.1. Study and teach topics related to pain as listed in recommended pain textbooks
 - 3.2. Participate in lectures for health care professionals, including nurses, APNs, residents, fellows and staff
 - 3.3. Present at the Department of Anesthesia and Pain Medicine Friday Grand Rounds
 - 3.4. Others
4. ADMINISTRATIVE:
- 4.1. Manage clinical rounds independently
 - 4.2. Ability to create a pain service in other organizations
 - 4.3. Ability to update and create pain-related policies and guidelines
 - 4.4. Ability to manage patient data by using and/or constructing pain databases
 - 4.5. Others

TABLE 1: TYPE AND DURATION OF CLINICAL ACTIVITIES

Activity	Duration	Details
Vacation	4 weeks	<ul style="list-style-type: none"> Periods of 1-2 weeks to be arranged at the beginning of the fellowship (recommended time during APS and/or OR rotations)
Conferences and workshops	3 days	<ul style="list-style-type: none"> Examples: U of T Ultrasound Workshop, ASRA (American Society of Regional Anesthesia), Canadian Pain Society, International Forum on Pediatric Pain, and IASP (International Association for the Study of Pain)
Total calls	Pain-related and general call	<ul style="list-style-type: none"> Pain-related call: Weekday: 8 AM to 5 PM in-house daily call for pain consultation; Weekend: during the 2-week APS rotation. General anesthesia call: In-house call in second six months of fellowship if desired
OR Rotation	12 - 14 weeks	<ul style="list-style-type: none"> 1 - 2 week blocks involving cases that have high probability of need for regional anesthesia, e.g. orthopedics, urology, general surgery. This exposure will supplement the regional anesthesia elective done at Sunnybrook
Procedural pain & Sedation	4 weeks	<ul style="list-style-type: none"> Assignments to 8D, 8C, 4C, MRI, IGT, CT
Acute Pain Rotation	8 weeks	<ul style="list-style-type: none"> Eight one-week blocks
Chronic Pain Rotation	4 days of clinic/week + 8-12 weeks	<ul style="list-style-type: none"> Chronic Pain Clinic Mondays, Wednesdays, Thursdays, Transitional Pain Service Tuesdays when not completing a rotation. 4 week rotations in pediatric pain, out-patient adolescent/adult pain at Mount Sinai, palliative pain at SickKids, pain in complex medical conditions at SickKids/Bloorview GetUpandGo, Transitional Pain Service at Toronto General Hospital.
Research time	1 day/week	<ul style="list-style-type: none"> Only during OR/Chronic Pain Service weeks
Elective Rotations	Total of 14 weeks	<ul style="list-style-type: none"> 6-week rotation in pediatric sub-specialties 4-week ultrasound rotation at Sunnybrook (optional) 2-week rotation, GetUpandGo
	Pediatric specialties, 4 weeks	<ul style="list-style-type: none"> 1-2 week rotations in variety of pain-relevant pediatric sub-specialties e.g. palliative medicine.
	Regional Anesthesia, 4 weeks (optional)	<ul style="list-style-type: none"> Ultrasound and regional anesthesia rotation at Sunnybrook hospital
	GetUpandGo, 2 weeks	<ul style="list-style-type: none"> To allow understanding of pain in non-communicating children, e.g., those with cerebral palsy, acquired brain injury

APPLICATION REQUIREMENTS

Typically one fellowship position is offered annually. Please note that this fellowship is best suited for applicants approaching consultant grade. Candidates with significant experience as independent practitioners will not qualify for this program.

Please note that Canadian fellowships are not ACGME accredited. Also, this training period does not count towards Canadian Royal College exam eligibility.

The deadline for applications for fellowships commencing July 2025 is **April 30, 2024**. The selection of applicants will be completed in September 2024; shortly thereafter applicants will be notified of the selection committee's decision.

Please note the link to the Paediatric Anesthesia Fellowship application on our website will direct you to the University of Toronto online Postmd ApplicationS System (PASS).

You will be required to submit a completed application form, as well as upload a current curriculum vitae, a letter of intent, copies of your medical degree and specialty certification. In addition, three letters of reference must be submitted by your referees.

Your **curriculum vitae** must be prepared in accordance with the University of Toronto format and must include:

- Cover page with name, date of birth, country of birth, citizenship, and date CV is prepared
- Biographical information:
 - o Degrees: degree/year/institution/specialty
 - o Training
 - o Employment
 - o Honors
 - o Professional affiliations and activities
- Academic History
 - o Research endeavors
 - Please include any research presentation(s)
 - o Research awards
- Publications
- Others

The **letter of intent** should include the reasons why you wish to pursue this fellowship, personal goals for the fellowship year, and the role this training will play in achieving your career aspirations. In addition, the letter of intent should outline a research topic that is of interest to you.

Copies of your **medical degree and specialty certification** must include English translation by an approved translator, if applicable. If you are currently a trainee, please arrange for your program director to provide a letter of good standing with start date in program, expected end date and date you will receive your

certificate. Fellows who are completing their Anesthesia residency in Canada will be required to inform the Fellowship Program Director of the outcome of their FRCPC Certification Exam, as soon as the exam results are received.

Current ***letters of reference*** are to be received from the referees via email to anesthesia.fellowship@sickkids.ca. Letters should be addressed to Dr. Lisa Isaac, must be signed, on departmental letterhead, and should comment on the following points:

- Clinical Skills
- Communication Skills
- Academic History
- Management/Administrative Skills
- Professionalism
- Research activities

For graduates of medical schools where the language of instruction is not English, completion of the ***TOEFL or IELTS*** is required. Minimum score requirements for TOEFL are: Paper Based Test 587, Computer Based Test 240, and Internet Based Test 96. Minimum score requirement for IELTS is 7.0. Proof of these test scores must be included when submitting the completed application. If the language of instruction was English at the medical school attended, these tests are not required.

If further information about the fellowship is required, please email anesthesia.fellowship@sickkids.ca.

Thank you again for your interest in the program and we look forward to receiving your application.