Fellowship – Specialized Respirology Medicine Program in Adult Airway Diseases

A flexible 6- to 24-month specialized respirology medicine program in airway diseases for clinicians (adult respirology medicine, internal medicine) and/or clinician researchers who want to gain advanced expertise in asthma and COPD.

The program is particularly for clinicians who want to take on roles as a leader at a specialized asthma clinic to prescribe biologics, as the head of a pulmonary rehabilitation service, or as a clinical/translational clinician scientist. Fellows in this program will have to respond to urgent questions and assessment requests from respiratory therapists working at the Centre d'excellence des voies respiratoires de l'Estrie.

Program description

General objectives

- Acquire clinical knowledge about airway diseases and master a systematic approach to patient assessment and follow-up as part of precision medicine, including acute crisis situations.
- Coordinate a multidisciplinary team to both care for patients individually and globally manage a clinic specializing in asthma and/or COPD.
- Develop your skill at reading and analyzing scientific publications about airway diseases.

Optional general objective (for programs that last ≥ 1 year or for clinician researchers)

• Actively participate in developing a clinical/translational research project or quality of care project.

Specific objectives

- Show a sound scientific and clinical understanding of normal airway physiology as well as the pathophysiology, investigation, and treatment of airway diseases:
 - o Asthma
 - COPD
 - Breathing pattern disorders
 - o Laryngeal dysfunction
 - Exercise-induced bronchoconstriction

- Specific occupational lung diseases (asthma, byssinosis, COPD)
- Eosinophilic granulomatosis with polyangiitis
- Allergic bronchopulmonary aspergillosis
- Chronic eosinophilic pneumonia
- Chronic bronchitis
- Independently perform procedures as part of the specialized treatment of airway diseases:
 - Portable spirometry
 - Fractional exhaled nitric oxide testing
 - Standardized symptom / quality of life scales
 - o Objective measures of treatment adherence
- Understanding the basics of delegating diagnostic procedures:
 - o Bronchoprovocation testing
 - Methacholine challenge
 - Eucapnic voluntary hyperventilation
 - Exercise-induced
 - Induced sputum cell counts
 - Allergy tests
- Effectively teach patients non-pharmacological methods to manage their symptoms:
 - Nature of the disease and treatment
 - Importance of treatment adherence
 - Recognizing attacks
- Acquire basic skills to treat the ENT pathologies related to airway diseases:
 - Allergic rhinitis
 - Nonallergic rhinitis
 - Chronic rhinosinusitis with nasal polyps
 - Chronic rhinosinusitis without nasal polyps
 - Inducible laryngeal obstruction
- Acquire basic skills to care for patients with atopic conditions related to the treatment of airway diseases:
 - Seasonal allergic rhinoconjunctivitis
 - Perennial allergic rhinoconjunctivitis
 - Eczema (atopic dermatitis)

- o Urticaria
- Allergen desensitization with sublingual immunotherapy
- Give a presentation at least once every 3 months to the airways group on a specific topic related to airway diseases
- Participate in at least one national or international scientific conference

Fellows' role

Communication

- Establish a therapeutic relationship with patients and/or families; effectively communicate the diagnostic, therapeutic and prognostic aspects of the person's condition.
- Explain the risks and benefits of each treatment and procedure, for example, when prescribing an asthma action plan or a biologic.
- Establish a collaborative working environment with the multidisciplinary airway team and consulting physicians from other specialties.
- Compile, synthesize and communicate (orally and in writing) information about the overall treatment of patients with severe airway disease.

Collaboration

- Coordinate the collaborative work of the airway clinic's multidisciplinary team.
- Help recruit and carry out clinical or translational research studies on airway diseases.

Leadership

- Take on a leadership role at the airway clinic.
- Supervise the work of junior residents and clinical clerks while providing them with quality teaching.
- Understand the organizational and financial issues and constraints of running an airway clinic.

Health promotion

- Help to proactively prevent the most common complications of airway diseases (decline in lung function, condition exacerbations, hospitalization, reduced quality of life, death).
- Promote the adoption of healthy lifestyles and encourage treatment adherence.
- Demonstrate an understanding of the long-term physical, psychological and social impacts of chronic respiratory disease.

Academic knowledge

- Actively participate in the teaching activities organized by the respirology medicine department.
- Demonstrate an ability to consult different databases and to sort and choose relevant medical information to guide the patient's clinical care.
- Be able to critically and thoroughly evaluate medical information from research.

- Make patient-centred, evidence-based clinical decisions.
- Take an active role in research on airway diseases.
- Develop a reflective practice to perform self-evaluations and implement a personal continuous development plan.

Professionalism

- Demonstrate a commitment to patients by applying best practices and upholding ethical standards, particularly in the context of research.
- Act and behave according to the ethical rules of the medical profession and show honesty, integrity, commitment, compassion, respect, altruism, respect for diversity, and professional secrecy.
- Recognize personal limits and learn to ask for help when needed to develop professional independence without compromising patient safety.

Evaluation format

A mid-fellowship evaluation and a self-evaluation filled out by the candidates will be done every 4 weeks, and an evaluation will be done by the supervisors at the end of the fellowship. Evaluation forms will also be filled out by other colleagues (nurses, respiratory therapists, pharmacists, etc.) and compiled by the program director.

The program director will hold the following at minimum:

- 1. A start-of-program meeting to explain the objectives and expectations.
- 2. A mid-program meeting to discuss the candidate's progress.
- 3. An end-of-program meeting to compile all evaluations. Further meetings may be held if deemed necessary.

Admission criteria

Prerequisites

- Have completed the minimum required training: For candidates from general internal medicine or respirology medicine = have completed the core internal medicine program; For candidates from general medicine = have completed 2 years of training.
- 2. Be fluent in French and English.
- 3. Hold a CMQ permit to practice; international candidates may refer to the following website: <u>http://www.cmq.org/hub/en/diplome-international-medecine-dim-deux-voies-exercice.aspx</u>.
- Have permission to stay in Quebec (e.g. Canadian nationality, permanent residency, work visa). * International candidates may also get support from <u>USherbrooke</u> <u>International</u>

Documents to submit with your application

- 1. Student record (evaluations from previous rotations)
- 2. Cover letter

- 3. Curriculum vitae
- 4. Letter of support
- 5. Proof (or at least a clear possibility) of the right to stay in Quebec

Other information

Teaching methods: In addition to the existing respirology courses for all residents, airway disease seminars and directed readings specifically for clinical fellows will be organized every month to optimize the learning of more advanced concepts and will be tailored to the fellows' specific level. These seminars will cover theoretical topics on the full range of required competencies (medical expertise, collaboration, ethics, research, management).

Complementary educational activities included in the fellowship: Participation in international seminars (Treatable Traits journal club, Newcastle, Australia; Guy's Severe Asthma Centre Seminar Program, London, UK).

For complementary training for an MSc/PhD and for clinician researchers, additional educational support will be provided as part of their graduate program. Fellows who need access to the lab will receive the necessary safety training.

Financial support for international candidates: The Department of Medicine and other granting bodies may fund a clinical or research fellowship. The deadline for the department's competition is October 1. Please contact the program directors as soon as possible to start the process as required.

For more information

Program directors

- Simon Couillard
- Philippe Lachapelle

Training sites

- CHUS Hôpital Fleurimont: 50% (for the teaching program and clinical research)
- CHUS Hôtel-Dieu: 50% (2 full clinic days per week + active participation at 4 ENT clinics)
- External sites: Upon request (e.g. allergy-immunology course)

Number of positions

• Only 1 student position

Duration

• Flexible program from 6 to 24 months depending on the fellows' needs (e.g. R6 program, clinician researcher, international fellowship)