



HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

HIV AMBULATORY CARE ROTATION

McGill University Health Centre

Site:

McGill University Health Centre
Chronic Viral Illness Service
1001 boul. Décarie, block D, 2nd floor
Montréal, Québec H4A 3J1

The Chronic Viral Illness Service of the McGill University Health Centre serves over 1900 patients HIV mono-infected, HCV mono-infected or HIV/HCV co-infected. It is one of the largest HIV ambulatory care clinics in the province of Québec.

An interdisciplinary team approach is provided to patients. The medical staff includes infectious disease specialists, hepatologists and general practitioners with an expertise in HIV patient care. The team also includes 5 pharmacists, clinical and research nurses, a nutritionist, two social workers, a psychiatrist, and a psychologist. Pharmacists offer pharmaceutical care to clinic patients on a full-time basis. Furthermore, since May 2006, the hospital is responsible for the Québec Antiretroviral Therapeutic Drug Monitoring (TDM) Program. Pharmacists do TDM interpretations for patients from across the country.

The Québec division of the Canadian HIV / AIDS Trial Network is located at the McGill University Health Centre. Clinical studies and fundamental research on HIV, viral hepatitis and comorbidities are ongoing. Specific research interests include new HCV therapies, viral resistance to antiretrovirals, immunotherapeutics, HIV/HCV co-infection, neuro-cognitive impairment associated with HIV, pharmacokinetics of antiretrovirals in plasma and reservoirs.



HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

Preceptors:

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Duration of rotation: 10 weeks (2 blocks of 5 weeks)

Goals: The HIV specialty resident will be asked to apply the pharmaceutical care model to patients with HIV and/or viral hepatitis.

- 1) To increase the resident's knowledge on antiretrovirals and other medications used for the management of HIV / AIDS, viral hepatitis and opportunistic infections.
- 2) To increase the resident's ability to identify, manage and monitor drug-related problems seen in HIV-infected patients or patients with viral hepatitis and collaborate with other healthcare professionals.
- 3) To increase the residents's awareness of social, psychological, emotional and ethical issues which accompany HIV and/or viral hepatitis.

HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

Objectives: By the end of the rotation, the resident will be able to:

1. Discuss the current recommendations for the management of HIV, HCV and HBV:
 - a. Disease process: epidemiology, transmission risk factors and preventative measures, natural history of infection, interpretation of pertinent laboratory tests, clinical presentation, complications, prognosis;
 - b. Pharmacotherapy: when to start and change therapy, choosing an antiviral treatment in treatment-naïve and treatment-experienced patients;
 - c. Monitoring: monitoring of efficacy, adverse drug reactions and adherence;
2. Discuss the current recommendations for the management of opportunistic infections, concomitant infections and HIV related complications (will vary based on the cases seen):
 - *Pneumocystis jiroveci* pneumonia
 - Toxoplasmosis encephalitis
 - Oral and esophageal candidiasis
 - Herpes virus infections
 - *Mycobacterium avium* complex
 - Cryptococcal meningitis
 - Progressive multifocal leukoencephalopathy
 - Tuberculosis co-infection
 - Syphilis
 - Neurocognitive impairment
 - HIV nephropathy
 - AIDS associated malignancies, etc;
3. Recommend appropriate antiviral regimens to patients and to the treating team based on the patients' medical history, concomitant medications, laboratory results, viral mutations, and preference, and based on the pharmacological characteristics of the available and investigational antivirals;
4. Counsel patients starting new antiviral regimens and/or new medications for the management of opportunistic infections or other complications;
5. Identify health problems and develop and implement an individualized pharmaceutical care plan to manage these health problems:
 - a. Collect pertinent disease, drug and patient information from the patient's chart and by interacting with the patient;
 - b. Identify actual and potential health problems;
 - c. Prioritize the health problems;
 - d. For each health problem, provide appropriate recommendations for the management of the problem and communicate the plan to the medical team and to the patient;
 - e. Develop and implement a monitoring plan.

HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

6. Anticipate, detect, manage and monitor adverse drug reactions;
7. Anticipate, detect, manage and monitor drug-drug interactions;
8. Provide appropriate and concise drug information in a timely manner to patients and health professionals (including the 1-800 line) who have queries on the management of HIV, HCV, HBV and opportunistic infections;
9. Recognize when to prescribe antiretroviral therapeutic drug monitoring, participate in the TDM data collection, understand the interpretation report and do the necessary follow-up with the team and patient;
10. Maintain effective and respectful collaborative relationships with the patient and healthcare team members to respond to the needs of the patients and ensure quality of care and patient safety;
11. Act as a responsible, mature, professional and motivated member of the interdisciplinary team;
12. Develop, implement and/ or update tools, services or medication-use systems that improve consistency and quality of care for individual patients and groups of patients;
13. Document adverse drug reactions, incidents and accidents, and recommend modifications to medication-use systems and pharmacy services, if applicable, to prevent these in the future;
14. As applicable, demonstrate effective use of the four roles of practice-based teaching (direct instruction, role modeling, coaching and facilitation).

Additional activities:

- During the 10 week rotation, the resident will present at least one (1) journal club AND one (1) case presentation or pharmacotherapy topic review;
- If the schedule permits, the resident will be asked to precept a 4th year PharmD student (Faculté de pharmacie, Université de Montréal) or a MSc in Advanced Pharmacotherapy resident (Faculté de pharmacie, Université de Montréal). This includes creating a rotation schedule/teaching plan for the learner (student/resident), reviewing the learner's personal learning objectives, demonstrating appropriate selection and performance of practice-based teaching roles (direct instruction, role modeling, coaching, facilitation), participating in the assessment of the learner and providing regular feedback;
- Participating in weekly psychosocial rounds;
- Participating in weekly HIV pharmacy meetings;
- Attending Chronic Viral Illness Service academic rounds.

Assessment and evaluation:

The resident will be assessed for each 5 week block as follows :



HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

- The resident will complete a written self-assessment at midpoint (2.5 weeks) and at the end of the rotation (5 weeks);
- The primary preceptor, in collaboration with the secondary preceptors if needed, will complete a mid-point assessment at 2.5 weeks (verbal or written) and a written final assessment at 5 weeks;
- Verbal feedback will be given throughout the rotation;
- The clinical rotation assessment form will be used for these assessments;
- At the end of the rotation, the resident will also complete an evaluation of the rotation and of the preceptor(s).