

These training requirements apply to those who begin training on or after July 1, 2022.

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING

Royal College certification in Internal Medicine

OR

Eligibility for the Royal College examination in Internal Medicine

OR

Registration in a Royal College-accredited residency program in Internal Medicine (see requirements for these qualifications)

A maximum of one year of training may be undertaken during concurrent training for certification in Internal Medicine.

ELIGIBILITY REQUIREMENTS FOR EXAMINATION¹

All candidates must be Royal College certified in Internal Medicine in order to be eligible for the Royal College examination in Hematology.

The following training experiences are required, recommended, or optional, as indicated:

TRANSITION TO DISCIPLINE (TTD)

The focus of this stage is to introduce residents to the subspecialty of Hematology, providing an orientation to the educational program and to the setting in which they will train and work. This stage also serves to assess and verify the competencies acquired in Internal Medicine and their application to the unique patient population served by Hematology.

¹ These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.

Required training experiences (TTD stage):

1. Clinical training experiences:

1.1. Hematology

- 1.1.1. Inpatient service
- 1.1.2. Clinic
- 1.1.3. After-hours coverage

2. Other training experiences:

2.1. Orientation to:

- 2.1.1. The local institution(s) and clinical environment(s)
- 2.1.2. The training program, its functioning and relevant policies and procedures
- 2.1.3. Local postgraduate medical education (PGME) resources for wellness and safety
- 2.1.4. The Hematology Portfolio and local electronic platform

2.2. Formal instruction in:

- 2.2.1. Hematologic emergencies
- 2.2.2. Patient care protocols and care pathways
- 2.2.3. Safe administration of systemic therapy
- 2.2.4. Procedures, including bone marrow aspirates and biopsies
- 2.2.5. Approach to peripheral blood morphologic examination

Optional training experiences (TTD stage):

3. Other training experiences:

- 3.1. Simulation-based training focused on clinical and laboratory hematologic emergencies

FOUNDATIONS OF DISCIPLINE (F)

The focus of this stage is the development and application of the knowledge and skills needed to assess, diagnose, and manage patients with uncomplicated acute and chronic hematologic conditions. Residents perform and interpret hematologic diagnostic investigations both as a clinician providing care to individual patients and as a consultant providing recommendations to the referring clinician.

Required training experiences (Foundations stage):

1. Clinical training experiences:
 - 1.1. Hematology
 - 1.1.1. Clinic, which may include longitudinal clinic
 - 1.1.2. Inpatient service, including ward and/or consultation service
 - 1.1.3. After-hours coverage
 - 1.2. Morphology and laboratory hematology
 - 1.3. Participation at interdisciplinary rounds, including tumour boards
2. Other training experiences:
 - 2.1. Formal instruction in:
 - 2.1.1. Basic sciences relevant to Hematology
 - 2.1.2. Approach to diagnosis and management of patients with hematologic disorders
 - 2.1.3. Access to resources, including treatments and therapies
 - 2.1.4. Approach to peripheral blood morphologic examination
 - 2.2. Critical appraisal activities, such as journal club

Recommended training experiences (Foundations stage):

3. Other training experiences:
 - 3.1. Teaching and supervising junior trainees

CORE OF DISCIPLINE (C)

In this stage, residents build on their achieved competencies to provide comprehensive management for any patient with a hematologic condition. They also build on previous experience with hematologic diagnostic modalities to add the interpretation and reporting of all diagnostic tests. Residents establish their role as a contributing physician in the multidisciplinary team.

Required training experiences (Core stage):

1. Clinical training experiences:
 - 1.1. Hematology
 - 1.1.1. Clinics, including benign and malignant hematology, and thrombosis and hemostasis

HEMATOLOGY TRAINING EXPERIENCES (2022)

- 1.1.2. Inpatient service, including ward² and/or consultation service
- 1.1.3. Longitudinal clinic
- 1.1.4. Hematopoietic stem cell transplantation (HSCT) and cellular therapy service
- 1.1.5. Participation in the management of systemic therapy related emergencies in any setting, such as infusion suite, medical day unit, or ward
- 1.1.6. Telephone consultation
- 1.1.7. After-hours coverage
- 1.2. Hematology laboratories:
 - 1.2.1. General hematology
 - 1.2.2. Hemoglobinopathy testing
 - 1.2.3. Coagulation
 - 1.2.4. Special hematology testing
 - 1.2.5. Peripheral blood morphology
 - 1.2.6. Flow cytometry
 - 1.2.7. Cytogenetic analysis
 - 1.2.8. Molecular testing and diagnostics
 - 1.2.9. Hematopathology
- 1.3. Transfusion medicine service/blood bank
- 1.4. Participation at interdisciplinary rounds, including tumour boards
- 2. Other training experiences:
 - 2.1. Formal instruction in:
 - 2.1.1. Basic sciences relevant to Hematology
 - 2.1.2. Pharmacology and prescription of systemic therapy and safe handling of chemotherapy
 - 2.1.3. Administration of intrathecal chemotherapy
 - 2.1.4. Palliative care, including pain management
 - 2.1.5. Hematologic disorders in special populations, including pregnant and postpartum patients and adolescent and young adult patients
 - 2.1.6. Research methodologies relevant to Hematology

² An experience in ward is required if not already completed at Foundations stage.

- 2.2. Instruction in quality assurance, quality control and quality improvement in hematology laboratory services
- 2.3. Critical appraisal activities, such as journal club
- 2.4. Scholarly activity (e.g., quality improvement, education, or research project)

Recommended training experiences (Core stage):

3. Clinical training experiences:

- 3.1. Hematology
 - 3.1.1. Community
 - 3.1.2. Adolescent and young adult
 - 3.1.3. Pregnancy and pre-pregnancy

- 3.2. Palliative Medicine

4. Other training experiences:

- 4.1. Formal instruction in:
 - 4.1.1. Response to requests for MAID
 - 4.1.2. Response to a patient safety issue
 - 4.1.3. Advocacy for individual patients and populations
- 4.2. Instruction in laboratory quality assurance processes
- 4.3. Teaching and supervising junior learners
- 4.4. Participation in a committee or other group activity (e.g., guideline committee, drug funding body, provincial cancer site group)
- 4.5. Career planning, including
 - 4.5.1. Creating and maintaining a curriculum vitae (CV) and teaching dossier
 - 4.5.2. Application for a position

Optional training experiences (Core stage):

5. Clinical training experiences:

- 5.1. Medical oncology clinics
- 5.2. Radiation oncology clinics
- 5.3. Pediatric hematology
- 5.4. Canadian Blood Services (CBS) or Hema-Quebec blood distribution centre
- 5.5. Human leukocyte antigen (HLA) laboratory

6. Other training experiences:

- 6.1. Formal instruction in principles of clinical epidemiology

TRANSITION TO PRACTICE (TTP)

The focus of this stage is the comprehensive management of the work of a hematologist for both an individual patient and the multiple demands of a clinic. At this stage, the resident demonstrates autonomy and takes a leadership role in the provision of hematology services in clinical and administrative situations.

Required training experiences (TTP stage):

1. Clinical training experiences:

- 1.1. Hematology, in the role of a junior attending³

- 1.1.1. Inpatient service, which may include consultation service and/or ward
- 1.1.2. Clinic
- 1.1.3. Triage of referrals
- 1.1.4. After-hours coverage

- 1.2. Participation at interdisciplinary rounds, including tumour boards

2. Other training experiences:

- 2.1. Delivery of formal learning activities
- 2.2. Participation and leadership in academic, teaching, and/or administrative rounds

Recommended training experiences (TTP stage):

3. Clinical training experiences:

- 3.1. Junior attending role in any hematology experience

4. Other training experiences:

- 4.1. Development of a personal learning plan for transition into practice
- 4.2. Formal instruction in:
 - 4.2.1. Maintenance of competence
 - 4.2.2. Practice management

³ "Junior attending" means that the resident assumes responsibility for patient care and for clinical supervision and education of other learners, with as much independence as permitted by competence, law, and hospital policy.

Optional training experiences (TTP stage):

- 5. Clinical training experiences:
 - 5.1. Hematology in the community setting
 - 5.2. Laboratory Hematology

CERTIFICATION REQUIREMENTS

Royal College certification in Hematology requires all of the following:

- 1. Royal College certification in Internal Medicine;
- 2. Successful completion of the Royal College examination in Hematology; and
- 3. Successful completion of the Royal College Hematology Portfolio.

NOTES

Alternative Route to Certification

Individuals who are eligible for Royal College certification in Medical Oncology may be eligible for an accelerated course of training leading to certification in Hematology, based on the achievement of competencies relevant to both disciplines. Assessments of the achievement of relevant competencies will be made on an individual basis by the accepting Hematology program director and the associated postgraduate medical education office, following the principles of the Royal College Credentials policy for Competence by Design.

Guidance for residents and programs regarding accelerated training for Medical Oncology residents in training or graduates:

- 1. It is strongly recommended that residents who intend to pursue training in Hematology following Medical Oncology identify this as early as possible in their Medical Oncology training. It is the responsibility of the resident to contact the program directors of both the Medical Oncology and Hematology programs to declare their intention and discuss how to tailor their training.
- 2. Hematology residency requires longitudinal training experiences in the hematology laboratories in order to acquire the laboratory medicine skills relevant to Hematology; these experiences begin within the Foundations stage of training in Hematology and continue in the Core stage. In order to facilitate these longitudinal training experiences, it is important that residents identify their intention to pursue Hematology training by the end of the Foundations stage of Medical Oncology training. This will allow residents to incorporate hematology laboratory training experiences during the Core stage of Medical Oncology training and thereby accelerate their achievement of the competencies relevant to the hematology

laboratory upon their transition to the Hematology program (i.e., complete Hematology training requirements in one year following completion of Medical Oncology).

3. Relevant professional activities and training experiences during Medical Oncology will be reviewed on an individual basis by the accepting Hematology program and its postgraduate medical education office and can be credited towards achievement of competence in Hematology.
4. Transition to Discipline in the Hematology program can be used to verify and document achievement of selected Hematology EPAs and to create an individualized curriculum. If acceptable to the Medical Oncology Program Director, the final stages of medical oncology training could be used for this purpose as well.
5. Achievement of competence can be demonstrated with an individually-tailored assessment plan, since it may not be feasible for these trainees to undergo the number of observations mandated in the current iteration of the EPAs.

The Hematology Portfolio refers to the list of entrustable professional activities across all four stages of the residency Competence Continuum, and associated national standards for assessment and achievement.

MODEL DURATION OF TRAINING

Progress in training occurs through demonstration of competence and advancement through the stages of the Competence Continuum. Hematology is planned as a two-year residency program. There is no mandated period of training in each stage. Individual duration of training may be influenced by many factors, which may include the resident's singular progression through the stages, the availability of teaching and learning resources, and/or differences in program implementation. Duration of training in each stage is therefore at the discretion of the faculty of medicine, the competence committee, and the program director.

Guidance for programs:

The Royal College Specialty Committee in Hematology's suggested course of training, for the purposes of planning learning experiences and schedules, is as follows:

- 2 months in Transition to Discipline
- 3 months in Foundations of Discipline
- 16 months in Core of Discipline
- 3 months in Transition to Practice

Guidance for postgraduate medical education offices:

The stages of the Competence Continuum in Hematology are generally no longer than:

- 2 months for Transition to Discipline
- 3 months for Foundations of Discipline
- 16 months for Core of Discipline
- 3 months for Transition to Practice
- Total duration of training – 2 years

This document is to be reviewed by the Specialty Committee in Hematology by December 2023.

APPROVED – Specialty Standards Review Committee – January 2021