

# Clinical Immunology and Allergy Training Experiences

**2021** VERSION 1.0

These training requirements apply to those who begin training on or after July 1, 2021.

**NOTE:** This document applies to residents in both Adult and Pediatric Clinical Immunology and Allergy. Throughout this document, unless otherwise indicated, all clinical experiences are intended to refer to an experience with the patient population relevant to the resident's training stream: adult or pediatric.

## **ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING (ADULT STREAM)**

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 training for certification in Internal Medicine

#### **ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING (PEDIATRIC STREAM)**

Royal College certification in Pediatrics

OR

Eligibility for the Royal College examination in Pediatrics

OR

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

A maximum of one year of training may be undertaken during training for certification in Pediatrics

### ELIGIBILITY REQUIREMENTS FOR EXAMINATION1

All candidates must be Royal College certified in their primary specialty in order to be eligible for the Royal College examination in Clinical Immunology and Allergy.

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

## TRANSITION TO DISCIPLINE (TTD)

The purpose of this stage is verification of the competencies of primary specialty training in Internal Medicine or Pediatrics. This includes the initial assessment and management of allergic emergencies, such as anaphylaxis, and the basic procedural skills of allergy testing. This stage provides an orientation to the residency program, clinical setting(s), and institution(s).

## Required training experiences (TTD stage):

- 1. Clinical training experiences:
  - 1.1. Ambulatory or inpatient service in Clinical Immunology and Allergy
- 2. Other training experiences:
  - 2.1. Formal instruction in
    - 2.1.1. Basic and clinical sciences of Clinical Immunology and Allergy
      - 2.1.1.1. Immune mechanisms
      - 2.1.1.2. Hypersensitivity reactions
      - 2.1.1.3. Recognition and management of anaphylaxis and other emergencies
    - 2.1.2. Testing and use of devices
      - 2.1.2.1. Laboratory tests for immunodeficiency
      - 2.1.2.2. Epicutaneous testing
      - 2.1.2.3. Intradermal testing
      - 2.1.2.4. Intramuscular and subcutaneous injections
      - 2.1.2.5. Epinephrine auto-injector demonstration and use

<sup>&</sup>lt;sup>1</sup> These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.

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- 2.1.3. Consult letter writing skills using validated written communication frameworks
- 2.2. Orientation to
  - 2.2.1. The training program and local institution(s), their functioning, and relevant policies and procedures
    - 2.2.1.1. Professionalism policies and expectations
  - 2.2.2. The *Clinical Immunology and Allergy Competencies*, the Royal College Clinical Immunology and Allergy Portfolio, and the local electronic platform

#### Recommended training experiences (TTD stage):

- 3. Clinical training experiences:
  - 3.1. After-hours coverage of the clinical immunology and allergy service
- 4. Other training experiences:
  - 4.1. Review of clinical practice guidelines in Clinical Immunology and Allergy
  - 4.2. Formal instruction in inhaler device technique
  - 4.3. Simulation-based education with a focus on clinical and procedural skills
  - 4.4. Participation in patient safety and quality improvement/assurance activities
  - 4.5. Initiation of a scholarly research, quality assurance, or educational project
  - 4.6. Orientation to maintaining a portfolio for reflective practice and ongoing programmatic assessment
  - 4.7. Orientation to building a curriculum vitae (CV) and/or a teaching portfolio

### Optional training experiences (TTD stage):

- 5. Clinical training experiences:
  - 5.1. Performance of patch testing
- 6. Other training experiences:
  - 6.1. Formal instruction in constructive bidirectional feedback
  - 6.2. Objective structured clinical examination (OSCE) of procedures, such as challenges and dilutions
  - 6.3. Focused experience providing early clinical and technical skills training (e.g., boot camp)

## FOUNDATIONS OF DISCIPLINE (F)

In this stage, residents assess and initiate management for patients with common uncomplicated allergic and immunologic disorders. They perform common procedural skills, synthesize the results, and communicate results to other health care professionals. Residents identify their personal and professional development needs, as well as teach and coach junior learners.

#### Required training experiences (Foundations stage):

- 1. Clinical training experiences:
  - 1.1. Clinical Immunology and Allergy
    - 1.1.1. Clinic
    - 1.1.2. Consultation to inpatient services, including emergency department and intensive care unit(s)
- 2. Other training experiences:
  - 2.1. Formal instruction in
    - 2.1.1. The basic and clinical sciences of Clinical Immunology and Allergy
    - 2.1.2. Procedural skills
      - 2.1.2.1. Challenges, including oral, parenteral, and exposure, and including foods, inhalants, and drugs
      - 2.1.2.2. Spirometry
      - 2.1.2.3. Inhaler device technique
      - 2.1.2.4. Subcutaneous and sublingual immunotherapy
      - 2.1.2.5. Oral immunotherapy
      - 2.1.2.6. Desensitization
    - 2.1.3. CanMEDS Roles as applied to Clinical Immunology and Allergy
  - 2.2. Initiation of a scholarly research, quality assurance, or educational project
  - 2.3. Development of a personal learning plan

## Recommended training experiences (Foundations stage):

- 3. Clinical training experiences:
  - 3.1. Clinical Immunology and Allergy
    - 3.1.1. Continuity clinic

- 3.1.2. Medical day unit
- 3.1.3. Infusion clinic
- 3.1.4. Clinic in community setting
- 3.1.5. Pediatric Clinical Immunology and Allergy (for adult stream)
- 3.1.6. Adult Clinical Immunology and Allergy (for pediatric stream)
- 3.1.7. After-hours coverage
- 3.2. Other clinical services relevant to Clinical Immunology and Allergy
  - 3.2.1. Dermatology
  - 3.2.2. Occupational medicine
  - 3.2.3. Otolaryngology
  - 3.2.4. Respirology
  - 3.2.5. Rheumatology
  - 3.2.6. Transplant medicine, which may include hematological transplantation, solid organ transplantation, and/or tissue typing laboratory experience
- 4. Other training experiences:
  - 4.1. Participation in patient safety and quality improvement/assurance activities
  - 4.2. Journal club or other critical appraisal activity
  - 4.3. Simulation-based education with a focus on clinical and procedural skills
  - 4.4. Review of resident portfolio for reflective practice or ongoing programmatic assessment with program director or delegate
  - 4.5. Review of CV and/or a teaching portfolio with program director or delegate

#### Optional training experiences (Foundations stage):

- 5. Clinical training experiences:
  - 5.1. Clinical immunology diagnostic laboratory
  - 5.2. Pulmonary function laboratory
- 6. Other training experiences:
  - 6.1. Postgraduate medical office (PGME) resident common curriculum
  - 6.2. In-training examinations, such as the American Board of Allergy and Immunology in-training exam or locally developed exams

#### CORE OF DISCIPLINE (C)

In this stage, residents build on the Clinical Immunology and Allergy approach in cases with greater complexity, including diagnosis and management of any allergic and immunologic condition and management of emergencies, including anaphylaxis, asthma, and angioedema. This stage also focuses on interpreting the results of procedures and implementing therapeutic strategies. Residents participate in scholarly activities and begin to establish a career plan.

#### Required training experiences (Core stage):

- 1. Clinical training experiences:
  - 1.1. Clinical Immunology and Allergy
    - 1.1.1. Clinic
    - 1.1.2. Consultation to inpatient services, emergency department, intensive care unit, and outside physicians<sup>2</sup>
    - 1.1.3. Pediatric Clinical Immunology and Allergy (for adult stream)
    - 1.1.4. Adult Clinical Immunology and Allergy (for pediatric stream)
  - 1.2. Clinical immunology diagnostic laboratory
  - 1.3. At least three of the following other clinical services
    - 1.3.1. Dermatology
    - 1.3.2. Occupational medicine
    - 1.3.3. Otolaryngology
    - 1.3.4. Respirology
    - 1.3.5. Rheumatology
    - 1.3.6. Transplant medicine, which may include hematological transplantation, solid organ transplantation, and/or tissue-typing laboratory experience
- 2. Other training experiences:
  - 2.1. Formal instruction in
    - 2.1.1. The basic and clinical sciences of Clinical Immunology and Allergy
    - 2.1.2. CanMEDs Roles as applied to Clinical Immunology and Allergy
    - 2.1.3. Physician wellness/resiliency
  - 2.2. Participation in patient safety and quality improvement/assurance activities
  - 2.3. Completion of, or presentation of work to date as related to a scholarly research, quality assurance, or educational project

<sup>&</sup>lt;sup>2</sup> "Outside physicians" refers to physicians in the community as well as those at other hospitals or institutions.

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- 2.4. Teaching other residents, students, or other health professionals
  - 2.4.1. Large and/or small group teaching
  - 2.4.2. Clinical teaching

#### Recommended training experiences (Core stage):

- 3. Clinical training experiences:
  - 3.1. Clinical Immunology and Allergy
    - 3.1.1. Continuity clinic
    - 3.1.2. Clinics in the community setting
    - 3.1.3. After-hours coverage
  - 3.2. Pulmonary function laboratory
  - 3.3. Other clinical services relevant to Clinical Immunology and Allergy
    - 3.3.1. Hematology
    - 3.3.2. Infectious diseases
    - 3.3.3. Medical genetics
- 4. Other training experiences:
  - 4.1. Simulation-based education with a focus on clinical and procedural skills
  - 4.2. Participation in morbidity and mortality rounds
  - 4.3. Review of resident portfolio for reflective practice or ongoing programmatic assessment with program director or delegate
  - 4.4. Review of CV and/or a teaching portfolio with program director or delegate

#### Optional training experiences (Core stage):

- 5. Clinical training experiences:
  - 5.1. Specific and/or enhanced skills acquisition related to individual interest, career plan, and/or community needs
  - 5.2. Performance of oral immunotherapy
  - 5.3. Review of resident logbook of procedures, and unusual or infrequent cases
- 6. Other training experiences:
  - 6.1. Objective structured clinical examination (OSCE)
  - 6.2. American Board of Allergy and Immunology in-training exam

- 6.3. Journal club or other critical appraisal activity
- 6.4. Attendance at a conference and/or scientific meeting relevant to Clinical Immunology and Allergy
- 6.5. Primary immunodeficiency videoconferences
- 6.6. Postgraduate medical office (PGME) resident common curriculum

## TRANSITION TO PRACTICE (TTP)

The focus of this stage is managing the multidimensional aspects of practice, including triaging and prioritizing patients, while addressing competing occupational demands and administrative duties. This stage also includes assessment and management of complex patients when there may be uncertainty in the diagnosis or treatment.

### Required training experiences (TTP stage):

- 1. Clinical training experiences:
  - 1.1. Clinical Immunology and Allergy clinic, including triage of consultation requests
- 2. Other training experiences:
  - 2.1. Formal instruction in
    - 2.1.1. Medico-legal aspects of practice
    - 2.1.2. Reflective practice
    - 2.1.3. Practice management
      - 2.1.3.1. Billing
      - 2.1.3.2. Resources and equipment needed for setting up practice
      - 2.1.3.3. Contract negotiation
  - 2.2. Journal club or other critical appraisal activity
  - 2.3. Teaching other residents, students, or other health professionals
    - 2.3.1. Large and/or small group teaching
    - 2.3.2. Clinical teaching

#### Recommended training experiences (TTP stage):

- 3. Clinical training experiences:
  - 3.1. Clinical Immunology and Allergy
    - 3.1.1. Clinic in the community setting
    - 3.1.2. Continuity clinics

- 3.1.3. Consultation to inpatient services, emergency department, intensive care unit, and outside physicians
- 3.1.4. After-hours coverage
- 4. Other training experiences:
  - 4.1. Formal instruction in
    - 4.1.1. Physician wellness and resiliency
    - 4.1.2. Conflict resolution skills
  - 4.2. Simulated cases/discussions of complex cases and/or orphan or rare diseases
  - 4.3. Objective structured clinical examination (OSCE)
  - 4.4. Supervision and teaching of junior learners
  - 4.5. Initiation of a maintenance of certification (MOC) portfolio, such as MAINPORT

## Optional training experiences (TTP stage):

- 5. Clinical training experiences:
  - 5.1. Clinical Immunology and Allergy
    - 5.1.1. Outreach clinic
    - 5.1.2. Telemedicine
  - 5.2. Specific and/or enhanced skills acquisition related to individual interest, career plan, and/or community needs
- 6. Other training experiences:
  - 6.1. Participation with patient or community organizations
  - 6.2. Attendance at a conference and/or scientific meeting relevant to Clinical Immunology and Allergy

#### **CERTIFICATION REQUIREMENTS**

Royal College certification in Clinical Immunology and Allergy requires all of the following:

- 1. Royal College certification in Internal Medicine or Pediatrics;
- 2. Successful completion of the Royal College examination in Clinical Immunology and Allergy; and
- 3. Successful completion of the Royal College Clinical Immunology and Allergy Portfolio.

#### **NOTES**

The Clinical Immunology and Allergy 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. Clinical Immunology and Allergy 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 Clinical Immunology and Allergy's suggested course of training, for the purposes of planning learning experiences and schedules, is as follows:

- 3 blocks in Transition to Discipline
- 4-6 blocks in Foundations of Discipline
- 12-14 blocks in Core of Discipline, including three blocks of training in the stream different from the resident's home program (i.e., Pediatric CIA for an Adult CIA resident and vice versa)
- 4-6 blocks in Transition to Practice

#### CLINICAL IMMUNOLOGY AND ALLERGY TRAINING EXPERIENCES (2021)

#### Guidance for postgraduate medical education offices:

The stages of the Competence Continuum in Clinical Immunology and Allergy are generally no longer than

- 3 blocks for Transition to Discipline
- 6 blocks for Foundations of Discipline
- 14 blocks for Core of Discipline
- 6 blocks for Transition to Practice
- Total duration of training 24 months

This document is to be reviewed by the Specialty Committee in Clinical Immunology and Allergy by December 2021.

**APPROVED** – Specialty Standards Review Committee – August 2019 **REVISED CBD LAUNCH DATE** – Specialty Committee in CIA – May 2020

<sup>\*</sup>One block is equal to four weeks