

RESIDENCY TRAINING

IN

INFECTIOUS DISEASE

AND

MEDICAL MICROBIOLOGY

PROGRAM MANUAL

Residency Training in Infectious Disease and Medical Microbiology Program Description

This document outlines the basic structure of the residency training program. It includes descriptions of the following:

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Program structure:**RPC Terms of Reference**

Terms of Reference for the Residency Program Committee (RPC)
 Medical Microbiology and Infectious Diseases

Preamble: As most residents are enrolled in both Microbiology and Infectious Diseases, and the faculty is largely the same, a combined RPC will meet for the Medical Microbiology, Infectious Diseases, Pediatric Infectious Diseases and Combined programs. Issues specific to each of the programs will be dealt with in the context of these meetings, with members recusing themselves from the discussion as necessary.

Mandate

The core roles of the RPC are as follows:

1. Develop, review and approve the training curriculum in accordance with the accreditation standards by the Royal College of Physicians of Canada, the College des Medecins du Quebec.
2. Serve as advisory resources to the Program Directors (PD) on specific issues such as structuring of core lectures, elective rotations, resident's schedule, format of research exposure and training.
3. Address residents' pedagogical and training concerns, and identify deficiencies in the program or specific attendings.
4. Selection of candidates for admission to the program
5. Evaluation of residents in collaboration with the PDs and approve resident promotions
6. Election of RPC members and the PDs
7. Selection of guest speakers for the Academic Half-day
8. The solicitation and distribution of funds for the purpose of post-graduate education

Composition

The RPC will be composed of academic attending staff involved in regular supervision of residents in training. The members will include all of the site and division heads, as well as at least one member from each of the four core teaching hospitals. The committee will be chaired by the PD for Adult Infectious Diseases and Microbiology, except for issues specifically related to Pediatric Infectious Diseases, in which case the Pediatric PD Director will assume this task. An elected resident representative (usually the Chief Resident) or their designate will also sit on the committee. The program administrator will attend meetings in a non-voting capacity, and will keep the minutes.

Frequency of meetings:

The committee will meet quarterly. Extra sessions may be arranged at the request of the PD, or the Department Head.

Subcommittees

Admissions subcommittee: A subcommittee of the current and ex-program director as well as one representative from each of the McGill sites will be appointed by the committee to review all applicants, and conduct admission interviews annually. The current PD will chair this subcommittee.

Promotions subcommittee – Routine promotions will be approved by the RPC (the resident representative is recused from these discussions) based on the recommendations of the PD. In the event of a borderline evaluation, or resident dispute, a specific Promotions subcommittee will be struck adhering to the same composition as the admissions subcommittee. This subcommittee will be chaired by the appropriate PD.

Research subcommittee – This committee will consist of four active researchers, ideally representing clinical and basic science research, appointed by the RPC. The chair of this subcommittee will be selected from the members, and need not be one of the PD. In this event, the chair will report back to the PD after each meeting. This subcommittee meets quarterly.

The following institutions participate in the program:

Name of Institution	Name of the Coordinator in this Institution
Jewish General Hospital (JGH)	Karl Weiss
MUHC- Montreal's Children Hospital (MCH)	Earl Rubin
MUHC- Royal Victoria Hospital (RVH)	Dalius Breidis
Montreal General Hospital (MGH)	Vivian Loo
JD Maclean McGill Centre for Tropical Disease	Michael Libman
Laboratoire de Santé Publique du Québec (LSPQ)	Cecile Tremblay
Chronic Viral Illness Service (MUHC)	Joseph Cox
Saint Mary's Hospital	Makeda Semret
Lachine General Hospital	Cecilia Costiniuk

The committee structure is as follows:

Program Committee

Dr. Michael Libman
Dr. Donald Sheppard
Dr. Matthew Oughton
Dr. Earl Rubin
Dr. Jane MacDonald
Dr. Vivian Loo
Dr. Andre Dascal
Dr. Makeda Semret
Dr. Marcel Behr
Micheline Parent Teaching Technologist
Chief Resident

Admissions Subcommittee

Dr. Matthew Oughton (Program Director, Adult ID and Medical Microbiology)
Dr. Marty Teltscher (ex- Program Director, Adult ID and Medical Microbiology)
Dr. Donald Vinh (Research Committee Chair)
Chief Resident
* Other members determined annually

Research Committee

Dr. Donald Vinh, Chair
Dr. Don Sheppard
Dr. Marcel Behr
Dr. Jesse Pappenburg
Dr. Michael Libman

Terms of Reference for the Resident Research Subcommittee

Preamble: This committee is a subcommittee of the Resident Program Committee (RPC) whose composition, mandate and frequency of meetings are defined below.

Mandate

The core roles of the Resident Research Subcommittee are as follows:

1. Monitor resident research and scholarly activities during the course of their training. Only residents in the McGill Infectious Diseases and/or Medical Microbiology training programs are included in this mandate.
2. Link residents with appropriate supervisors
3. Track resident progress on scholarly projects, and maintain a record of their progress using the research tracking form
4. Advocate for residents in the event of conflicts
5. Ensure resident scholarly activities comply with ethical and moral standards of research
6. Offer scientific critique of current and planned projects
7. Guide residents in the acquisition of basic skills in the planning, conducting and disseminating the results of research projects.

Composition.

This committee will consist of four active researchers, ideally representing both clinical and basic science research, appointed by the RPC. The chair of this subcommittee will be selected from the members, and need not be one of the PDs. In this event, the chair will report back to the relevant PD after each meeting. The Chair is appointed by the RPC for a term of three years. The appointment of a new Chair after two terms is preferred.

Mechanism for conflict resolution

In the event that a concern or conflict is identified, the research committee may act as an advocate for the resident. Under these conditions the following steps should be followed:

1. The resident should be encouraged to communicate directly with the supervisor to resolve the issue.
2. If the resident is unable or uncomfortable dealing with the issue alone, then the committee chair may represent the committee and contact the supervisor directly. This communication, and the supervisor response should occur within a reasonable (< 1 month) delay.
3. If a successful resolution cannot be achieved, or if the chair deems it necessary, the supervisor may be invited to attend the committee and discuss the issue.
4. Failure of a supervisor to meet any of the committee's requests as detailed above are grounds for removal of the resident from the project.

Frequency of meetings:

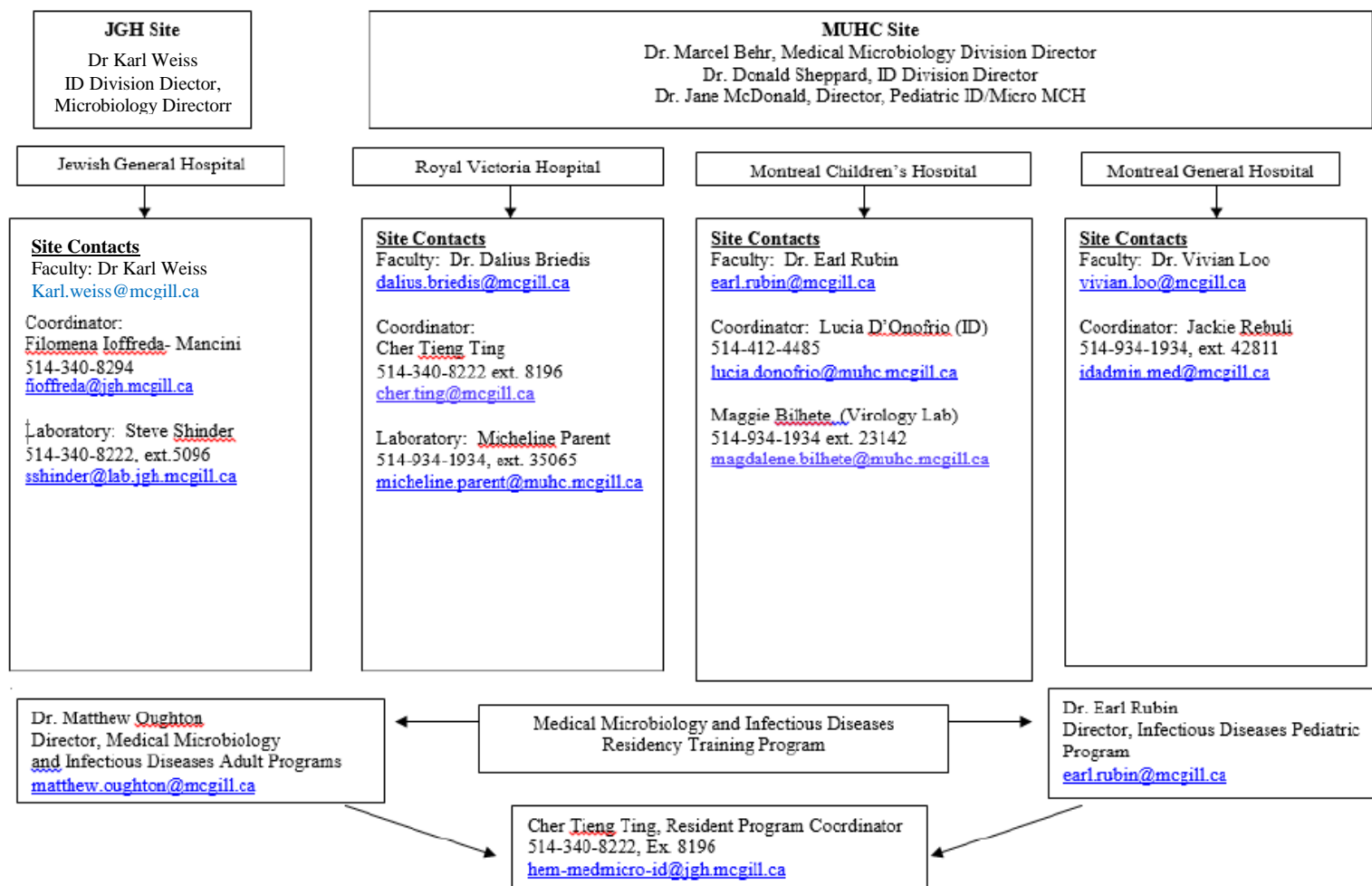
The committee will meet quarterly. Extra sessions may be arranged at the request of the PD, or the Chair of the committee.

Confidentiality:

Subject matter discussed at the committee meetings is highly confidential, and should not be disclosed to individuals outside the committee except through the channels detailed above.

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Medical Microbiology & Infectious Diseases Organizational Chart 2016



Training Program Requirements:

Infectious Disease

Mandatory Content of Training (Both ID/MM)

Description	Duration	Hospitals or other Institutions in Which This Training May be Taken
Adult Infectious Diseases (or pediatric ID if in pediatric stream)	10 periods	* RVH, JGH, MGH, St Mary's
Pediatric Infectious Diseases (or adult ID if in pediatric stream)	2 periods	MCH
Medical Microbiology Virology Mycology Parasitology Bacteriology Serology	6 or 24 periods	** MCH, RVH, JGH, MGH, MCTD
Hospital Infection Control	2 period	MCH, JGH, MUHC
Tropical Medicine	1 period	MGH
Outpatient ID related clinics	1 period	Any adults site

* Year is based on 13 periods of 4 weeks each (total =26).

** See detailed Medical Microbiology rotation schedule.

Elective Content of Training (4 periods total, only for Adult ID)

Description	Duration	Hospitals or other Institutions in Which This Training May be Taken
A. Clinical Infectious Diseases	up to 5 periods	All McGill Centre, St. Mary's Ste-Justine's (Children's) Hospital, St-Luc Hospital
B. Medical Microbiology	up to 5 periods	All McGill Centres and others that meet program committee standards
C. Research: Clinical Microbiology Basic	up to 5 periods	
D. Course work Epidemiology	1-2 periods	McGill Department of Epidemiology and Biostatistics

Medical Microbiology

(Residents in full program require 24 months of microbiology. Those in the infectious disease program only will need 6 months of microbiology: see the section on specific objectives for medical microbiology training for infectious disease residents.)

Mandatory Content of Training

Description	Duration	Hospitals or other Institutions in Which This Training May be Taken
Introduction to the Laboratory(Level I)	2	JGH, MCH, MGH, RVH
General Bacteriology (Level II)	6	JGH, MCH, MGH, RVH
Mycology	1	RVH, MGH
Mycobacteriology	1	JGH, RVH, MGH
Parasitology	1	MCTD
Serology / Immunology	1	JGH, MGH, RVH
Virology	1	MCH
Laboratory Management (Level III) / Protocol Development	6	JGH, MCH, MGH, RVH

“Elective” Content of Training

Description	Duration	Hospitals or other Institutions in Which This Training May be Taken
Anaerobic Bacteriology	1	St. Luc Hospital, University of
General Bacteriology	1	University of Montreal Hospitals
Mycology	1 week	LSPQ
Parasitology	1 week	LSPQ
Mycobacteriology	1 week	LSPQ
Special Techniques	2 weeks	LSPQ
Epidemiology	2	McGill Department of Epidemiology
Research	4 (max)	Discretionary
Further training in any core discipline	4 (max)	Discretionary
Community hospital	1	Non-accredited institution at the discretion of the program director

The major training activities are:

1. Rotations in the diagnostic laboratories or other microbiology laboratory electives - 24 months.
2. Rotations on clinical infectious disease services - 12 months.
3. Academic half-days: Thursdays 8-11 a.m. except July and August. The "first hour " (8-9 a.m.) consists of resident presentations, journal club, and guest speakers, with emphasis on current and controversial clinical and laboratory topics. The "second hour" (9-11 a.m.) are small group seminars for the residents, supervised by a staff member. These are 84 2 hour sessions in a 2 year cycle, although for practical reasons about 75 are scheduled.

Topics in Microbiology - 28

Topics in Infection Control - 12

Topics in Basic Science and Immunology - 10

Topics in Infectious Diseases - 6

Practice exams - 4

Ethics - 2

Journal club - 6

Guest speakers - variable

The second session follows a pre-set curriculum which is reviewed annually by the Program Director, the residents and the Residency Training committee. For most sessions, residents are provided with readings and questions one week in advance in order to prepare for the seminars. The components of the program are listed below with the understanding that there is a core of knowledge and varying goals of a technical and attitudinal nature to be attained.

1. General knowledge of medical microbiology and associated clinical laboratory technical skills.

Venue: Laboratory rotation in the McGill hospital laboratories for specified periods of time.

Academic half-day, second part (core teaching, 9-11 a.m.), 2 years cycle includes:

- i. Microbiology core lectures, selected topics in basic microbiology and lab management with practical laboratory demonstrations - 42 sessions.
- ii. Basic science of microbiology and immunology, including topics in host defence, pathogenesis, genetics, and research technologies.

2. General knowledge of epidemiology, public health and biostatistics and their application in the prevention of infectious disease.

Venue: a. Hospital infection control rotation (4wks) – MCH, MUHC and JGH

- b. Course 36 hours - "Epidemiology of Infectious and Parasitic diseases", every June in Department of Epidemiology and Biostatistics
- c. Core teaching in Hospital Infection Control and Epidemiology - 12 sessions
- d. Attendance at regular infection control meetings in each hospital

3. Critical evaluation of literature

- Venue:
- a. Weekly inter-hospital rounds and journal club (academic half-day, first part)
 - b. Research projects and publications
 - c. Basic courses in epidemiology and biostatistics every May in the Department of Epidemiology - 6 to 7 credits

4. Laboratory management:

- Venue:
- a. Level III rotations in laboratory - minimum (see resident graded responsibility)
 - b. Laboratory management course 8 hours annually, as part of core microbiology series.

5. Communication skills in teaching, lab management and team work.

- Venue:
- a. Consultation on wards under staff supervision
 - b. Regular and frequent presentation at academic half-day Inter-hospital infectious disease rounds and journal club
 - c. Research publication and presentation
 - d. Supervision of medical student seminars.

6. Research experience. (Under Royal College requirements, each resident is required to finish at least one scholarly activity of sufficiently high quality to be published or presented at a national meeting.)

- Venue:
- a. Research project(s) under staff guidance
 - b. Resident seminars given by Resident Research Committee
 - c. Constant exposure to research seminars in Department of Microbiology and McGill Centre for Host Resistance
 - d. Annual residents' presentation of research, in progress and completed
 - e. Quarterly review of progress for all fellows at the Resident Research Committee

7. Clinical infectious disease (etiology, pathogenesis, natural history, pathology, clinical features, management, immunology, pharmacology)

- Venue:
- a. Consultation service of MCH, RVH, JGH, MGH
 - b. Outpatient infectious disease service of RVH, McGill Aids Centre, MCTD, MCH, JGH, St. Mary's
 - c. Inter-hospital ID rounds weekly
 - d. Infectious disease rounds at each hospital

8. Attitudes and ethics relevant to profession.

- Venue:
- a. Example of staff in discussions in the laboratory, at rounds, and with patients
 - b. Ethics rounds, Shared rounds with Respiriology (1 session annually) and one session per year in the Academic Half-day

Academic Half-Day

Residents are required to attend the Thursday morning series of rounds, from 8AM to 11 AM. They will be exempted from any other responsibilities during this time. The first hour usually takes the form of resident presentations or Journal Club sessions, except when a guest speaker has been invited.

Inter-hospital ID rounds: A topic of general interest is presented. It may be primarily clinical or laboratory oriented. The topic should involve a currently evolving or controversial issue, requiring review of primary sources, rather than simply a textbook type of review. The presentation often includes a relevant case presentation, but this is not necessary. The purpose is to provide the resident with an opportunity to search the primary literature, synthesize the material collected, critically appraise the information, and present it in an instructive, clear, and organized fashion. The rounds also allow the resident to be evaluated on all these skills. In general, one or two attending staff are assigned to provide feedback to the resident after each presentation. Residents, particularly those at the start of their training, are encouraged to discuss the choice of possible topics or studies, as well as the structure of their talks, with a member of the attending staff.

Journal Club: One or two relatively complex publications (usually related to a single topic) are presented. Rather than reviewing the topic, the purpose is to critically appraise the methodology of the studies. Residents are expected to discuss in depth the strengths and weaknesses of the papers, as well as the validity and applicability of the conclusions. They should review the design of the studies, and, as much as possible the statistical methods as well.

The second hour (9AM-11AM) consists of seminars for the residents, as described above. The list of topics is evaluated annually with the Program Director and Chief Resident, and approved by the RPC.

Travel to Conferences

Residents should usually attend ICAAC and the majority should also attend the Quebec Microbiology annual meeting and/or AMMI Canada. Support for residents presenting papers is provided from a departmental “levy” and a small travel stipend is given to all residents annually. Funds for these stipends are provided for by having the program director solicit donations for a resident education fund, unless there are funds from specific research projects specifically allocated for travel. Decisions concerning allowable expenses and who will have their travel subsidized are made by the program director.

Practice exams

An oral examination simulating the Royal College oral and practical exam in Microbiology is given annually. Feedback is given individually immediately afterwards.

A multiple choice examination is also given annually and answers are discussed as a group. We plan to convert this to more closely resemble the new Royal College short answer format.

These exams are meant to provide residents with some objective measure of their progress. Evaluations are limited to an assessment of satisfactory performance for the level of training, but feedback concerning the expected level of competence is given.

Evaluations

The program activities reflect its objectives, and progress in each area is evaluated as listed below.

- 1) knowledge of medical microbiology
 - monthly report from supervisor in laboratory to program director
 - yearly oral exam or multiple choice exam
 - evaluations from academic half-day second hour
- 2) knowledge of epidemiology, hospital infection control
 - report from infection control rotation supervisor
 - formal grades for courses in epidemiology
 - evaluations from academic half-day second hour
- 3) critical evaluation of literature
 - observation of journal club presentations and feedback to resident
- 4) laboratory management knowledge skills
 - oral examination yearly
 - monthly evaluations during "level 3" laboratory rotations
- 5) communication skills
 - observation of ward consultation skills by staff supervisor
 - observation of ID rounds and journal club presentations, with formal individual feedback each session
- 6) research skills
 - yearly research presentation and award
 - assessments by research committee (written)
- 7) knowledge of clinical infectious disease
 - observation and monthly report by clinical supervisor on ward
 - yearly oral and written exam
- 8) attitudes & bioethics
 - observation by all faculty with feedback to resident in monthly reports

Resident communications

The Program Director Matthew Oughton is available at any time to discuss residents' progress.

For each 4 week rotation, a resident evaluation form is using the McGill One45 system which must be validated by the resident. A verbal evaluation is also provided at the end of each rotation. All staff should provide verbal feedback to the residents at the end of their rotation period, including one week rotations.

At the end of each 3 month period, the Program Director meets informally with each resident to discuss issues and career planning. In addition every six months, the PD meets with each resident to formally discuss the evaluations, plans rotational changes that will meet the resident's needs and will communicate any concerns that have arisen from the Program Committee regarding the resident performance. At the 6 monthly meeting, the 6 month evaluation forms are completed. This meeting also provides the occasion for discussion of career plans and any problems or suggestions the resident may have concerning the program. If the program director notes any problematic evaluations during ongoing review of the monthly evaluations, a meeting is arranged prior to the 6-monthly sessions.

Once yearly, the program committee meets to evaluate each resident with respect to promotion to the next academic year, or completion of the program, as the case may be.

Issues of interpersonal conflict, harassment, breaches of contract or any other dispute should be brought to the immediate attention of the Program Director. If the resident is uncomfortable discussing these issues with the PD, they may directly contact the department head (Drs Loo or Sheppard) or the Program Ombudsman (Dr Phillip Wong, Gastroenterology.)