



Faculty of Health Sciences  
Postgraduate Medical Education

## Clinician Investigator Program (CIP)

---

### Program Handbook

---



## TABLE OF CONTENTS

<b>1. GOALS AND OBJECTIVES .....</b>	<b>5</b>
<b>1.1 OVERALL GOALS AND OBJECTIVES .....</b>	<b>5</b>
<b>1.2 DETAILED GOALS AND OBJECTIVES IN CANMED FORMAT .....</b>	<b>5</b>
<b>1.2.1 <i>Medical Research Expert</i>.....</b>	<b>5</b>
<b>1.2.2 <i>Research Communicator</i>.....</b>	<b>5</b>
<b>1.2.3 <i>Research Collaborator</i>.....</b>	<b>6</b>
<b>1.2.4 <i>Research Manager</i> .....</b>	<b>6</b>
<b>1.2.5 <i>Health Advocate</i>.....</b>	<b>6</b>
<b>1.2.6 <i>Research Scholar</i>.....</b>	<b>6</b>
<b>1.2.7 <i>Professional</i> .....</b>	<b>7</b>
<b>2. APPLICANTS AND APPLICATION PROCESS .....</b>	<b>7</b>
<b>2.1 APPLICANT ELIGIBILITY .....</b>	<b>7</b>
<b>2.2 APPLICATION REQUIREMENTS .....</b>	<b>7</b>
<b>2.3 PRE-APPLICATION PREPARATION .....</b>	<b>9</b>
<b>2.4 HOW TO APPLY .....</b>	<b>9</b>
<b>2.5 WHEN TO APPLY .....</b>	<b>9</b>
<b>2.6 APPLICANT SELECTION, CONFIRMATION AND REGISTRATION WITH     RCPSC .....</b>	<b>9</b>
<b>3. DESCRIPTION OF CIP PROGRAM .....</b>	<b>9</b>
<b>3.1 OVERVIEW.....</b>	<b>9</b>
<b>3.2 CIP TRAINING PATHWAYS (DISTRIBUTION OF RESEARCH TRAINING) .....</b>	<b>10</b>
<b>3.2.1 <i>Continuous Training Pathway</i>.....</b>	<b>10</b>
<b>3.2.2 <i>Distributed Pathway</i>.....</b>	<b>10</b>
<b>3.2.3 <i>Fractionated Pathway</i> .....</b>	<b>10</b>
<b>3.3 GRADUATE AND NON-GRADUATE STREAMS .....</b>	<b>10</b>
<b>3.3.1 <i>Graduate Stream</i> .....</b>	<b>10</b>
<b>3.3.2 <i>Non-Graduate Stream</i> .....</b>	<b>11</b>
<b>3.4 RESEARCH TRAINING AT EXTERNAL (NON-McMASTER) INSTITUTIONS ..</b>	<b>11</b>
<b>3.5 RESEARCH TRAINING PLAN FOR INDIVIDUAL TRAINEES.....</b>	<b>12</b>
<b>3.6 ACADEMIC SESSIONS AND ETHICS TRAINING .....</b>	<b>12</b>
<b>3.6.1 <i>Academic Sessions</i> .....</b>	<b>12</b>
<b>3.6.2 <i>Ethics Training</i>.....</b>	<b>12</b>
<b>4. CIP TRAINEE ADVISORY COMMITTEE.....</b>	<b>13</b>
<b>5. CIP TRAINING COMMITTEE AND ITS TERMS OF REFERENCE ....</b>	<b>14</b>

<b>5.1</b>	<b>MEMBERSHIP AND MEMBER'S RESPONSIBILITIES .....</b>	<b>14</b>
5.1.1	<i>Chair and Program Director .....</i>	14
5.1.2	<i>Departmental Representatives .....</i>	14
5.1.3	<i>Associate Dean Graduate Studies, Health Science .....</i>	14
5.1.4	<i>Graduate Program Coordinators .....</i>	14
5.1.5	<i>Health Research Services Representative .....</i>	14
5.1.6	<i>Trainee Representatives .....</i>	15
5.1.7	<i>Program Administrative Assistant .....</i>	15
<b>5.2</b>	<b>GOALS AND RESPONSIBILITIES OF THE TRAINING COMMITTEE .....</b>	<b>15</b>
<b>5.3</b>	<b>GOVERNANCE .....</b>	<b>15</b>
<b>5.4</b>	<b>FREQUENCY OF MEETINGS .....</b>	<b>16</b>
<b>5.5</b>	<b>REPORTING STRUCTURE .....</b>	<b>16</b>
<b>6.1</b>	<b>CIP AND RCPSC REGISTRATION .....</b>	<b>16</b>
<b>6.2</b>	<b>GRADUATE PROGRAMS .....</b>	<b>16</b>
<b>7.</b>	<b>FUNDING FOR CIP TRAINEES.....</b>	<b>16</b>
7.2.1	<i>ONTARIO MINISTRY OF HEALTH DURING CIP AND CLINICAL RESIDENCY OVERLAP YEARS.....</i>	17
7.2.2	<i>INTERNAL AND EXTERNAL RESEARCH FELLOWSHIP AWARDS.....</i>	17
7.2.3	<i>SPONSORING INSTITUTION OR COUNTRY.....</i>	17
7.2.4	<i>CLINICAL EARNINGS AND CLINICAL SCHOLAR POSITIONS.....</i>	17
7.2.5	<i>CLINICAL DEPARTMENTS AND DIVISIONS .....</i>	18
7.2.6	<i>GRADUATE PROGRAMS .....</i>	18
7.2.7	<i>McMASTER'S POSTGRADUATE MEDICAL EDUCATION OFFICE .....</i>	18
<b>8.</b>	<b>EVALUATION OF TRAINEES .....</b>	<b>18</b>
8.1	<b>SELF EVALUATION BY TRAINEES .....</b>	<b>19</b>
8.2	<b>ADVISORY COMMITTEE EVALUATIONS .....</b>	<b>19</b>
8.3	<b>CIP PROGRAM DIRECTOR INTERVIEW AND PROGRESS SUMMARY.....</b>	<b>21</b>
<b>9.</b>	<b>EVALUATION OF CIP FACULTY.....</b>	<b>21</b>
<b>10.</b>	<b>CAREER PLANNING AND COUNSELING .....</b>	<b>21</b>
10.1	<b>CAREER PLANNING .....</b>	<b>21</b>
10.2	<b>COUNSELING FOR CIP TRAINEES.....</b>	<b>22</b>
10.3	<b>APPEALS BY CIP TRAINEES .....</b>	<b>22</b>
<b>11.</b>	<b>TRAINEE SAFETY POLICY .....</b>	<b>22</b>
11.1	<b>CLINICAL RESIDENCY PROGRAM SAFETY TRAINING REQUIREMENTS.....</b>	<b>23</b>
11.2	<b>GRADUATE STUDIES PROGRAM SAFETY TRAINING REQUIREMENTS .....</b>	<b>23</b>
<b>12.</b>	<b>COMPLETION OF CIP PROGRAM .....</b>	<b>23</b>

<b>12.1 RESEARCH AND WRITE-UP PHASES OF CIP .....</b>	<b>23</b>
<b>12.2 REQUIREMENTS FOR COMPLETION OF MCMASTER'S CIP PROGRAM .....</b>	<b>23</b>
<b>13. APPENDICES .....</b>	<b>24</b>
<b>13.1 CIP TRAINING COMMITTEE MEMBERS AND CONTACT INFORMATION.....</b>	<b>24</b>

# 1. Goals and Objectives

## 1.1 Overall Goals and Objectives

- To assist in the career development of future clinician investigators.
- To provide advice to residents who are considering training as a clinician investigator.
- To provide trainees with an individualized program, within a well developed general framework, for research training in conjunction with various university Graduate Programs.
- To promote the integration of research and clinical training.
- To optimize research and clinical mentorship during research training.
- To facilitate the acquisition of knowledge and attitudes that are important for clinician investigators.
- To facilitate contact and collaboration between trainees, and between trainees and established researchers, both within McMaster and at other institutions.

## 1.2 Detailed Goals and Objectives in CanMed Format

The following is an outline of training objectives for the McMaster CIP program formatted according to Royal College Physicians and Surgeons of Canada (RCPSC) CanMEDS competencies and roles. During the course of their training, CIP trainees are expected to show progression in these areas of knowledge, skills and attitudes. Before starting, and during the course of CIP training, trainees, supervisors and advisors are required to review these objectives and are encouraged to tailor them to fulfill individualized research training plans.

### 1.2.1 *Medical Research Expert*

#### Knowledge base

- Acquire a thorough knowledge of the chosen field of research, and a good basic knowledge of additional related areas.
- Function effectively as a clinician investigator, integrating all of the CanMEDS roles.

#### Learning skills

- Demonstrate initiative in learning and continue to develop self-directed learning skills.
- Demonstrate willingness to obtain feedback on knowledge and performance.

### 1.2.2 *Research Communicator*

#### Ability to communicate and interact with colleagues

- Communicate effectively with peers and other professionals.
- Communicate effectively with patients who are involved in research protocols.
- Provide information efficiently, and learn to obtain appropriate information from others.
- Handle conflict situations tactfully and effectively.
- Facilitate the learning of others such as patients, housestaff, other health professionals, research trainees, faculty and graduate students.

#### Quality of verbal presentations, formal and informal

- Develop efficient presentation skills, with appropriate use of audiovisual aids. Preparation should be timely, accurate, clear, concise and of appropriate depth.

#### Quality of written research reports and manuscripts

- Develop and demonstrate skills in scientific writing. Work should be well organized, clear and accurate.

### **1.2.3 Research Collaborator**

#### Professional interactions and ability to collaborate with others

- Establish effective relationships with team members and be helpful, respectful, and supportive to others while demonstrating honesty and integrity.
- Recognize the value of, importance of, and opportunities for, establishing research collaborations.
- Learn how to set up collaborations that are rewarding for, and respectful of, all parties.
- Contribute positively to the research team.

### **1.2.4 Research Manager**

#### Project management and resource utilization

- Demonstrate ability to manage research projects, with appropriate use and appreciation of resources.
- Use information technology appropriately in research activities.
- Manage experimental data recording and result interpretation appropriately.
- Be familiar with, and adhere to, McMaster University Postgraduate Medical Education Guidelines on Health and Personal Safety Policy:  
<http://fhs.mcmaster.ca/postgrad/documents/HealthandPersonalSafetyPolicy.pdf>

#### Personal career management

- Develop skills in management of own research career, including balancing clinical and research demands and responsibilities.
- Demonstrate an ability to perform administrative duties and to take on leadership roles.

#### Follow-up and completion of tasks

- Be well-organized and complete assignments efficiently and in advance of deadlines.

### **1.2.5 Health Advocate**

#### Health advocacy and knowledge of ethics in medical research

- Participate in ethical research, with appreciation for the importance of research to the social, economic and biologic factors that impact health.
- Participate in activities that demonstrate advocacy for subjects, patients, communities and populations in relationship to health promotion and the performance of health-related research.
- Promote dissemination of research knowledge to patients, communities and populations.

### **1.2.6 Research Scholar**

#### Research skills in study/experimental design

- Acquire research design skills appropriate to the trainee's field and level of training.
- Accurately elicit and synthesize relevant research information and perspectives from relevant sources.
- Critically evaluate information and its sources and apply this appropriately to research practices and decisions.

#### Quality of data recording and interpretation

- Develop skills and accuracy in all aspects of the recording and interpretation of research data.

#### Problem solving skills

- Demonstrate problem-solving skills in research, clinical activities and in interactions with others.

### Appreciation of components of proper scientific inquiry

- Develop understanding of the components of empirical inquiry including background preparation, hypothesis generation, description of rationale and objectives, data collection and evaluation, discussion of results and generation of conclusions.
- Contribute to the creation, dissemination, application and translation of new knowledge and practices.

### Complete research projects

- Complete research projects under the supervision of the Research Supervisor including the writing, submission and presentation of grant proposals, original work at scientific meetings, and original work for publication (as appropriate).

## **1.2.7 Professional**

### Sense of responsibility and interest

- Demonstrate appropriate responsibility, ethical behavior and initiative in research projects.
- Demonstrate commitment, honesty, integrity and compassion in research activities, including participation in profession-led regulation, peer-review activities, and the prevention of academic fraud.
- Seek additional tasks to advance skills.
- Complete work and responsibilities in advance of deadlines.
- Be familiar with, and adhere to, McMaster University Postgraduate Medical Education Guidelines on Professional Behavior and Ethical Performance:  
<http://fhs.mcmaster.ca/postgrad/documents/Professionalism.pdf>

### Self-awareness and responses to feedback

- Develop an awareness of own strengths and weaknesses and actively seek feedback and advice.
- Accept and respond appropriately to constructive feedback.

## **2. Applicants and Application Process**

### **2.1 Applicant Eligibility**

In order to be eligible to apply to CIP the following criteria must be satisfied:

- (1) Currently enrolled in a RCPSC specialty or subspecialty residency program, **OR**
- (2) Accepted to soon start in a RCPSC specialty or subspecialty residency program, **OR**
- (3) Within six months of having completed a RCPSC specialty or subspecialty residency program (usually applies to persons who have completed a residency program at another university and are now enrolled in a McMaster Graduate Program).

#### **AND**

- (1) Planning on applying to, or are currently accepted into, a Graduate Program (Section 3.3.1), **OR**
- (2) Already have a PhD and are planning on applying for, or are currently accepted into, a Post Doctoral Fellowship position that is approved by a Graduate Program.

### **2.2 Application Requirements**

A complete application includes all of the following:

- (1) A letter from the applicant that outlines his/her training plans, career goals and interest in becoming a clinician investigator.

- (2) An updated curriculum vitae, which should include a list of all publications and research experience.
- (3) University transcripts (*This is not required by the CIP program if official transcripts were submitted and evaluated as part of the trainee's application to a McMaster University Residency or Graduate Program*).
- (4) Letters of reference which must include:
  - a) A letter of reference and support from the trainee's proposed CIP Research Supervisor. This letter should outline training goals, the proposed date that research training will commence, and sources of potential and secured salary support for the trainee.
  - b) A letter of support from the applicant's Specialty/Subspecialty Clinical Residency Program Director. This letter should discuss the timing of the applicant's entry into the CIP program and how potential overlap in fulfilling CIP and clinical training requirements might be accommodated.

Letters of reference should address: The capacity in which the referee knows the applicant (e.g., when and in what role); strengths and weaknesses of the applicant; how the applicant compares with his/her peers; and whether the trainee has the potential to become a successful clinician investigator. A maximum of two additional letters of support may be submitted by other individuals who can also provide relevant information on the trainee's research potential.

### **2.2.1 Additional requirements if an application is being made for a CIP-funded position**

Salary Support for years spent in CIP can be obtained from various sources that can be categorized as "CIP-funded" (funded by the Ministry of Health of Ontario) and "Non-CIP-funded" (Section 7). CIP-funded positions are allocated by competition and are generally for the first year in CIP. Whereas there is no upper limit to the number of trainees who can be accepted into a Non-CIP funded position, there are a limited number of CIP-funded positions (Section 7.1). Although none of the following are absolute requirements, satisfying these conditions strengthens an application for a CIP-funded position.

Early application: As note in Section 7.2.1, applications for CIP-funded positions must be submitted by 30 September preceding the planned start in CIP (usually 1 July).

Funding for additional years in CIP: CIP-funded positions are for one year, which will usually be the first year in CIP. An explicit documented commitment of funding for the 2<sup>nd</sup> year in CIP is required if clinical residency training will be interrupted in order to do CIP. The guarantor of such funding will often be a clinical department or division (and associated clinical residency program), a graduate program, a research institute, or a combination of these bodies. . A commitment for funding of the 2<sup>nd</sup> year in CIP is not required if the applicant will have completed their clinical residency training, and will be in a position to self-fund (e.g., as a Clinical Scholar) during this period.

Graduate Program Contact: Applicants who are not already accepted into a Graduate Program are encouraged to meet with one or more faculty members of the Graduate Program that they hope to join (Section 12 for Graduate Program Coordinators on the CIP Training Committee). In addition to learning about the Graduate Program and obtaining advice about potential research supervisors, the graduate studies representative may provide a letter of support for the CIP application (such a letter of support does not count as one of the two optional additional reference letters that an applicant may submit [Section 2.2]).



## **2.3 Pre-application Preparation**

Potential CIP applicants are advised to contact their Clinical Residency Program Directors, the CIP Program Director (Dr. Clive Kearon; Sections 5.1.1. and 12.1), CIP Departmental Coordinator (Sections 5.1.2 and 12.1), and/or the CIP Graduate Program Coordinators (Sections 5.1.4 and 12.1) early in their clinical training to help coordinate their research mentorship linkages and the timing of their CIP and Graduate Program applications. This process should start at least 12 months in advance for a Ministry of Health of Ontario-funded position, at least 6 months in advance for a Non-CIP-funded position, and may start a number of years before ultimately applying to CIP. It is usual for potential applicants to have met with the CIP Program Director before submitting an application. At this meeting the CIP Program Director will discuss: 1) the CIP program generally, 2) potential Research Supervisors and Research Advisors (Section 4), 3) Graduate Program options at McMaster (Sections 3.3.1, and 4) funding issues (Section 7).

## **2.4 How to apply**

Send the required application documents outlined in Section 2.2 to the CIP Administrative Assistant, Ms. Sharon Ciraolo, by email: [sciraolo@mcmaster.ca](mailto:sciraolo@mcmaster.ca) or Fax: 905-527-2707.

## **2.5 When to apply**

Applications for CIP-funded positions (Sections 2.2.1 and 7.1) must be submitted by 30 September.

General applications to CIP (Non-CIP-funded positions) are accepted throughout the year and are encouraged before 1 April.

## **2.6 Applicant Selection, Confirmation and Registration with RCPSC**

The CIP Training Committee reviews all applications and approves those who are selected for entry into the CIP program and for CIP-funded positions. Provisional acceptance into CIP can occur before acceptance into a Graduate Studies program (Graduate Stream; Section 3.3.1), however, acceptance into a Graduate Studies program is a condition for final acceptance into CIP.

Successful applicants will receive: 1) a letter of acceptance from the CIP program; and 2) a Postgraduate Medical Education Letter of Appointment (Contract).

Applicants who have applied, but have not been selected, for a CIP-funded position will be informed they have not been selected for CIP-funding (may still be accepted into a Non-CIP-funded position). If an offered CIP-funded position is subsequently declined, that position may then be offered to another candidate.

A RCPSC CIP Registration form, which must be signed by the CIP Trainee, Residency Program Director, Graduate Program Dean/delegate, and the Dean of Postgraduate Medical Education, is then forwarded to RCPSC by the CIP program ([RCPSC CIP Registration form](#)).

# **3. Description of CIP Program**

## **3.1 Overview**

CIP is a RCPSC program that is designed to assist in the training of clinician investigators. Trainees start in CIP while they are in specialty or subspecialty clinical residency programs, or

immediately on completion of such a program. Trainees are also usually enrolled in a McMaster University Graduate Program doing either an MSc or a PhD degree (Graduate Stream). Trainees who already have a PhD can be in CIP without being enrolled in a Graduate Program (Non-Graduate Stream). CIP aims to supplement the training that is provided by the Graduate Programs, with a particular focus on enhancing skills, knowledge and attitudes that are important to a clinician investigator. There are three pathways for CIP training, all of which are available at McMaster (see below). Time spent in CIP may overlap with residency training (provided the residency programs can accommodate the time that is devoted to research training [e.g., research electives]) or all time spent in CIP may be incremental to time spent in residency programs. Research training that is done before being enrolled in CIP will not be credited towards fulfilling CIP research training requirements (i.e., retroactive recognition of research credit is not permitted).

### **3.2 CIP Training Pathways (distribution of research training)**

All CIP trainees are enrolled in one of the following three CIP training pathways.

#### **3.2.1 Continuous Training Pathway**

The Continuous Training pathway involves a minimum of 24 months of continuous, intensive, research training, which can be started at different time points in relationship to residency training. During this period, the trainee must devote at least 80% of their time to research training. The remaining 20% of time may be spent at clinical or other activities. Trainees most often start in the Continuous Training pathway after their PGY2 year (subsequently returning to the equivalent of the PGY3 residency year) or on completion of their specialty or subspecialty clinical residency training. Most trainees enter this pathway.

#### **3.2.2 Distributed Pathway**

The Distributed Curriculum Training pathway involves a minimum of 27 months of continuous, intensive, research training that includes the last 3 months of the PGY3 year and the following 24 months. In this pathway, clinical training that normally would be gained in the last 3 months of the PGY3 year is distributed over the 27 month period, during which the trainee must devote at least 75% of their time to research training. Trainees may be accepted into the Distributed Curriculum Training pathway on entry into a Residency program (i.e. PGY1 year) or subsequently. Very few trainees enter this pathway.

#### **3.2.3 Fractionated Pathway**

The Fractionated Training pathway involves a minimum of 24 months of intensive research training during which the trainee must devote at least 80% of their time to research. The 24 month period of training is not continuous; instead, it is made up of blocks of at least 3 months with one of the blocks being at least 12 months (e.g., two 3 month blocks, a 6 month block and a 12 month block). Very few trainees enter this pathway.

### **3.3 Graduate and Non-Graduate Streams**

Regardless of the training pathway in which a CIP trainee is enrolled, trainees are also in either a Graduate or a Non-Graduate Stream.

#### **3.3.1 Graduate Stream**

Most CIP trainees are enrolled in the CIP Graduate Stream and, in fact, acceptance into a Graduate Program is a requirement for acceptance into McMaster CIP unless the applicant already has a PhD. Trainees in the Non-Graduate Stream, as with trainees in the Graduate Stream, will be in either the Continuous, Distributed, or Fractionated, pathways outlined above,

with the same time commitment to further research training. Trainees are often enrolled in one of the following Graduate Programs of the Faculty of Health Sciences at McMaster:

- Health Research Methodology (HRM) Graduate Program (MSc and PhD)
- Medical Sciences Graduate Program (MSc and PhD)
- Biochemistry and Biomedical Sciences Graduate Program (MSc and PhD)

These three graduate programs offer MSc and PhD degrees. With the possible exception of a MSc in the HRM program, all graduate degrees require completion of a thesis. There is the option of obtaining a course-based MSc in the HRM program, however, the McMaster CIP program strongly recommends a thesis-based MSc for those in the HRM program and CIP. For a non-thesis MSc, there must be a plan to do work that is expected to lead to publications equivalent to a graduate thesis.

The HRM program now offers students the opportunity to specialize in one of five fields and to receive this designation on their degree at graduation. The fields of specialization are Clinical Epidemiology, Biostatistics (PhD only), Health Services Research, Population & Public Health and Health Technology Assessment. For more information on the fields of specialization, including career foci click on the website: <http://fhs.mcmaster.ca/hrm/specialization.html>

Admission requirements and application processes for McMaster Graduate Programs that enroll CIP trainees are available from the individual Graduate Programs and are detailed in their websites.

- **Health Research Methodology:**  
[http://fhs.mcmaster.ca/hrm/msc\\_program.html](http://fhs.mcmaster.ca/hrm/msc_program.html)  
[http://fhs.mcmaster.ca/hrm/phd\\_program.html](http://fhs.mcmaster.ca/hrm/phd_program.html)
- **Medical Sciences:**  
<http://fhs.mcmaster.ca/medsci/>
- **Biochemistry and Biomedical Sciences:**  
<http://fhs.mcmaster.ca/biochem/graduate/index.html>

Acceptance into CIP is not restricted to trainees who are enrolled in one of these three Graduate Programs. CIP trainees may be enrolled in other degree programs such as Education, Business Administration or Biomedical Engineering, either at McMaster or at another accessible university (e.g., University of Toronto) (Section 3.4).

### **3.3.2 Non-Graduate Stream**

Trainees who already hold a PhD (e.g., MD/PhD graduates) may join CIP without enrolling to do another graduate degree if they have been accepted for Postdoctoral Research Training with a supervisor who is an approved faculty member with a Graduate Program. The Non-Graduate Stream CIP trainee is expected to be an active participant in the academic activities of the research group with whom he/she is training, to attend relevant seminars, workshops and conferences, and to meet the training expectations of his/her CIP Advisory Committee.

### **3.4 Research Training at External (Non-McMaster) Institutions**

There is the option for CIP trainees to do part, or all, of their research training at another institution. If all, or most, of the research training is being done at a university with a RCPSC approved CIP program, it is preferable for the CIP trainee to be enrolled in that university's CIP program. If that is not possible, including if the external institution (which may not be a Canadian university) does not have a RCPSC approved CIP program, the trainee can be enrolled in McMaster's CIP program provided the following requirements are met:

- a. Specific trainee goals and objectives are developed in advance of the research experience;
- b. There is a designated mentor at the external institution who will also be a member of the trainee's CIP Advisory Committee, either as Research Supervisor or as a Research Advisor;
- c. The educational objectives of the research experience in the external institution are agreed upon by the trainee, the mentor at the external institution, and the McMaster CIP Program Director;
- d. There is a well-defined mechanism for the CIP program to receive regular evaluation reports of the trainee's progress while at the external institution.

### **3.5 Research Training Plan for Individual Trainees**

The generic goals and objectives for the CIP have been outlined in Section 1. Based on these generic objectives, individual training plans are developed for each CIP trainee by his/her CIP Advisory Committee (Section 4). The trainee's goals and objectives are revised and documented every six months on the main In Training Evaluation Report (ITER), and these objectives are an important part of the interim assessments of progress of the trainee and verification of completion of the research component of the program.

### **3.6 Academic Sessions and Ethics Training**

#### **3.6.1 Academic Sessions**

CIP organizes monthly Academic Sessions that cover a broad range of topics that are relevant for clinician investigators, supplement individualized research training, and are not available in graduate courses. The sessions are usually held in the evening at McMaster's University Club on the main McMaster campus and refreshments are provided. The presenters are experienced clinician investigators and others with relevant specialist expertise (e.g., administrators, research office staff). CIP trainees are required to attend these sessions and attendance is recorded. Topics covered include advice about career building, grant and manuscript writing, grant and article reviewing, and discussion of ethical issues in research. Topics for CIP Academic Sessions are selected with input from the CIP trainees, CIP Training Committee, and other CIP faculty (e.g., other presenters). Trainees formally evaluate all sessions and presenters are provided with anonymous feedback from the trainee evaluations.

#### **3.6.2 Ethics Training**

CIP has also made arrangements for all CIP trainees to be permitted to attend meetings of the human and animal Research Ethics Boards, and attendance at one of these meeting is required. The Faculty of Health Sciences' Health Research Services office, and the Postgraduate Medical Education office through the Multidisciplinary Academic Half Days, organizes other research ethics sessions that CIP trainees are encouraged to attend.

As part of their ethics training, and with a particular emphasis on age, gender and ethnicity issues in research, all CIP trainees are required to submit certification of having successfully completed the following e-modules:

- Tri-Council Policy Statement (TCPS2 CORE) tutorial: <http://www.ethics.gc.ca/eng/education/tutorial-didacticiel/>
- Good Clinical Practice (GCP) Training: <http://fhs.mcmaster.ca/healthresearch/GCP.html>

Trainees are encouraged to access the following websites for additional on-line training tools, educational resources and reference materials:

- **Ethics in Health Research (humans, animals, biologic agents and cells), McMaster University:**

- <http://fhs.mcmaster.ca/healthresearch/ethics.html>
- **Human Subject Protection:**  
[http://www.mcmaster.ca/ors/ethics/faculty\\_tutorial.htm](http://www.mcmaster.ca/ors/ethics/faculty_tutorial.htm)
- **Chart Review, Privacy Legislation, Confidentiality:**  
[http://www.mcmaster.ca/ors/ethics/faculty\\_educ.htm](http://www.mcmaster.ca/ors/ethics/faculty_educ.htm)
- **Research Forums (offered at all hospital sites, various topics):**  
[http://fhs.mcmaster.ca/healthresearch/news\\_events.html](http://fhs.mcmaster.ca/healthresearch/news_events.html)
- **International Conference on Harmonization (ICH) Good Clinical Practice Guidelines via Health Canada:**  
<http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/ich/efficac/e6-eng.php>

#### 4. CIP Trainee Advisory Committee

Composed of:

Research Supervisor (1)

Research Advisors (2)

Clinical Supervisor (1) (may be the Research Supervisor or one of the Research Advisors)

Each CIP trainee must have an individualized CIP Advisory Committee. A CIP Advisory Committee consists of at least three, and typically four, faculty members who act as research and clinical advisors to the trainee. The Advisory Committee must contain an approved member of a Graduate Program faculty. The chair of the trainee's Advisory Committee is the Research Supervisor. Research Supervisors must have adequate research programs, facilities and secured funding to support the trainee's work and, almost always, are approved faculty in a Graduate Program. The trainee's Advisory Committee also contains two Research Advisors and a Clinical Supervisor (this role may be held by the Research Supervisor or one of the Research Advisors). Research Advisors are required to be experienced researchers and usually will be approved faculty in a Graduate Program. Clinical Supervisors are required to be respected clinicians. They will usually hold positions in education or administration, such as being the program director for a residency program or being the head of a hospital clinical service. The Research Supervisor has a prominent role in the selection of Research Advisors, and the CIP Training Committee must approve the selection of the two Research Advisors and the Clinical Supervisor.

The CIP Advisory Committee is responsible for developing and overseeing the trainee's individualized research program, his/her research and clinical mentoring, and completion of ITERs. The trainee's goals and objectives are revised and documented every six months on the main ITER. Efforts are made to ensure that there is as much overlap as possible between the trainee's CIP Advisory Committee and their Graduate Program Supervisory Committee, and that the same person serves as the trainee's Graduate Program Supervisor and CIP Research Supervisor. Graduate faculty who serve both as CIP Research Supervisors, and Graduate Program Supervisor, report on trainee progress separately to the CIP Program, and to the Graduate Program in which the CIP trainee is enrolled, and Graduate Program and CIP records are maintained separately.

## **5. CIP Training Committee and its Terms of Reference**

As detailed below, the CIP Training Committee is responsible for the operation, planning, organization and supervision of the program.

### **5.1 Membership and Member's Responsibilities**

#### **5.1.1 Chair and Program Director**

- Formulate agenda
- Chair the meeting
- Present issues to the committee for discussion
- Contribute to the discussion
- Assign responsibility for follow-up actions
- Encourage attendance of committee members; recruit new members as terms end
- Revise and approve minutes

#### **5.1.2 Departmental Representatives**

*(Medicine, Surgery, Psychiatry and Behavioral Sciences, Pathology and Molecular Medicine, Obstetrics and Gynecology, Pediatrics)*

- Represent their clinical department
  - Relay CIP issues to department members (e.g., chairman, program director)
  - Relay department issues to the CIP Training Committee
- Be aware of the progress of the CIP trainees in their respective clinical departments
- Present issues to the meeting for discussion
- Contribute to the discussion
- Accept responsibility for follow-up actions
- Review and approve minutes

#### **5.1.3 Associate Dean Graduate Studies, Health Science**

- Ensure that the CIP program is consistent with McMaster University's Graduate Programs
- Present issues to the meeting for discussion
- Contribute to the discussion
- Accept responsibility for follow-up actions
- Review and approve minutes

#### **5.1.4 Graduate Program Coordinators**

*(Health Research Methodology, Medical Sciences, Biochemistry and Biochemical Sciences)*

- Represent their Graduate Programs
  - Relay CIP issue to Graduate Program members (e.g., chairman, other)
  - Relay their Graduate Program issues to the CIP Training Committee
- Be aware of the progress of the CIP trainees in their respective graduate programs
- Present issues to the meeting for discussion
- Contribute to the discussion
- Accept responsibility for follow-up actions
- Review and approve minutes

#### **5.1.5 Health Research Services Representative**

- Represent the Associate Dean of Research
  - Relay CIP issues to the Associate Dean of Research
  - Relay issues from the Associate Dean of Research to the CIP Training Committee

- Present issues to the meeting for discussion
- Contribute to the discussion
- Accept responsibility for follow-up actions
- Review and approve minutes

### **5.1.6 Trainee Representatives**

#### *Appointed and Elected Representative*

- Represent the Trainees
  - Relay CIP issues to trainees when appropriate
  - Relay trainee issues to the CIP Training Committee and provide a trainees' report
- Present issues to the meeting for discussion
- Contribute to the discussion
- Accept responsibility for follow-up actions
- Review and approve minutes

### **5.1.7 Program Administrative Assistant**

- Schedule meetings and issue agendas
- Record meetings and prepare minutes
- Represent the Postgraduate Medical Education Office
- Contribute to the discussion
- The program assistant is a non-voting member

## **5.2 Goals and Responsibilities of the Training Committee**

- Be responsible for the operation, planning, organization and supervision of the CIP program and its trainees
- Participate in the selection of trainees for admission to the program
- Ensure that CIP meets its own goals and objectives, and that it follows the RCPSC guidelines for training clinician investigators in accordance with relevant CanMEDS competencies
- Optimize collaborations and interactions with the Graduate Programs and with the Clinical Departments
- Contribute to the establishment of, and approve, mechanisms to provide career planning and counseling to trainees
- Oversee the process of in-training evaluation, including the final evaluation of trainees
- Approve the selection of Research Supervisors for individual trainees and evaluate their performance in this role when indicated
- Participate in the appeals mechanism in accordance with Postgraduate Education committee policies
- Conduct an annual review of the program to assess the quality of the educational experience and to review the resources available in order to ensure that maximal benefit is being derived from the integration of the components of the program. This review must include:
  - an assessment of each component of the program to ensure that the educational objectives are being met;
  - an assessment of resource allocation to ensure that resources and facilities are being utilized with optimal effectiveness; and
  - an assessment of teaching in the program, including teaching in areas such as biomedical ethics, medicolegal considerations, and administrative and management issues.

## **5.3 Governance**

- Decision making by majority with the Chair as a voting member
- If there is disagreement and there is concern that the position of a Clinical Department or Graduate School is inadequately represented, voting will be suspended until further consultation occurs.

#### **5.4 Frequency of Meetings**

- Scheduled meetings are usually 2 months apart and a minimum of every 3 months
- Unscheduled meeting as the need arises

#### **5.5 Reporting Structure**

- The Chair reports to the Assistant Dean, Postgraduate Education (Dr. M. Walton).
- The Chair communicates with clinical specialty and subspecialty program directors collectively through Postgraduate Medical Education Committee meetings (member of this committee) and with these persons individually as the need arises.
- Departmental, Graduate Program and Trainee representatives report to their constituencies.
- Approved Minutes of CIP Training Committee Meetings are sent to CIP Training Committee members and to Dr. M. Walton.

### **6. Costs of Enrolling in McMaster's CIP Program**

#### **6.1 CIP and RCPSC Registration**

There are no tuition or enrollment fees specific to the McMaster CIP program. However, as CIP is a RCPSC program that falls under the jurisdiction of the Postgraduate Medical Education (PGME) Office, trainees must be registered with the PGME Office and there is an associated registration fee of \$650 per academic year (July 2014 rate). Trainees who are currently in a RCPSC residency program (i.e., overlapping residency training and CIP training) will already be registered with the PGME Office and therefore will incur no additional registration costs for CIP. The registration fee applies to those who have completed their residency training and are in the research phase of CIP (minimum of 2 years registration), but does not apply to those who have completed the research phase of CIP and have entered the write-up phase (Section 11.1).

#### **6.2 Graduate Programs**

CIP trainees who are in the Graduate Stream must be enrolled in a Graduate Program, for which there is a separate application process and application fee of about \$100 (subject to change) (Section 3.3.1; <http://www.xmarks.com/site/www.mcmaster.ca/graduate/applic.htm> ). Total annual tuition for full-time students enrolled in the Health Sciences Graduate Programs at McMaster University, can be found at <http://graduate.mcmaster.ca/future-students/tuition-fees.html> Graduate Programs and clinical departments may fully, or partially, cover these tuition costs (Sections 7.5 and 7.6).

### **7. Funding for CIP Trainees**

Funding for positions in CIP are categorized as "CIP-funded" and "Non-CIP-funded". A CIP-funded position refers to a position (or year) in CIP that is fully funded by dedicated CIP funding from the Ontario Ministry of Health. Non-CIP-funded positions refers to all other positions (or years) in CIP that are supported by other sources of funding, including Ontario Ministry of Health funding for clinical residency years (core or sub-specialty) that also contribute to (i.e., overlap with) CIP training requirements.



## **7.1 CIP-funded-positions (Ontario Ministry of Health)**

There are a limited number of positions in CIP that are directly funded by the Ontario Ministry of Health (currently six positions). These positions can be held before residency training has been completed (i.e., interspersed with years of residency training) or can be held as soon as clinical residency training has been completed. All applications to CIP (CIP-funded and Non-CIP-funded) require support from the applicant's clinical residency program. Application to join CIP before residency training has been completed also requires documented agreement from the clinical residency program that the trainee may interrupt clinical residency training. This usually requires one or more years of advanced planning. As funding from the Ontario Ministry of Health (MOH) is a full resident's salary, a CIP trainee who has MOH funding will not hold another major source of funding. The application date for CIP-funded positions is 30 September (Section 2.5).

## **7.2 Non-CIP-funded positions**

If a trainee is not in a CIP-funded position (or year) it is necessary for another source of funding to be secured. This also applies to the second year of funding for a trainee whose first year was CIP-funded. There are many acceptable forms of Non-CIP-funding, which may include a combination of sources, and these sources may change from year to year. The following is a list of potential sources of non-CIP-funding. Sources of funding are not equally available to all trainees (e.g., may differ by clinical department, clinical division or, graduate program), and sources of funding that are not on this list are also acceptable. Funding is typically secured with the help of the trainee's Research Supervisor, and clinical and academic departments or divisions.

### **7.2.1 Ontario Ministry of Health during CIP and Clinical Residency overlap years**

This applies if CIP and clinical residency training overlap, which can occur if the residency program can accommodate substantial blocks of time for research (e.g., 12 months). As funding from the Ontario Ministry of Health (MOH) is a full resident's salary, a CIP trainee who has MOH funding will not hold another major source of funding.

### **7.2.2 Internal and External Research Fellowship Awards**

These awards are usually allocated by competition. Generally, internal awards from McMaster sources are smaller and less competitive to obtain than external awards (e.g., from Canadian Institutes of Health Research). Information on internal and external research awards (e.g., funding agency, name of award, eligibility criteria including clinical discipline, value, application process) can be obtained from the office of Health Research Services:

[http://fhs.mcmaster.ca/healthresearch/research\\_fundingsource\\_additional.html](http://fhs.mcmaster.ca/healthresearch/research_fundingsource_additional.html), from the CIP Health Research Services representative (Section 12.1), as well as from the trainee's mentors. Trainees may qualify to apply for an Ontario Graduate Scholarship (OGS) program, which provides more modest (partial) funding. <http://graduate.mcmaster.ca/~archive/graduate-scholarships/major-scholarships-awards/351-ogs-information-for-students>

### **7.2.3 Sponsoring Institution or Country**

Funding may be provided by a Canadian or a non-Canadian institution, or a country, which has an arrangement with the trainee to return to that institution (this is the usual expectation) on completion of the trainee's research and clinical training.

### **7.2.4 Clinical Earnings and Clinical Scholar Positions**

Some clinical departments at McMaster have the option for research trainees who have RCPSC specialty/subspecialty certification to hold a Clinical Scholar position. This is similar to a junior faculty position (however, it is not a faculty appointment) and allows the trainee to perform

clinical duties and to generate earnings that can fund all, or part of, the trainee's salary. As previously noted, there are restrictions on the proportion of time that CIP trainees can devote to clinical activities. Information on this potential source of funding can be obtained by contacting the relevant clinical departments and divisions at McMaster.

### **7.2.5 Clinical Departments and Divisions**

Some McMaster Clinical departments and divisions provide funding to cover all, or part, of a CIP trainee's salary. This opportunity may be present before or after obtaining RCPSC certification and usually requires a competitive application. Information on this potential source of funding can be obtained by contacting the relevant clinical departments and divisions at McMaster, and the CIP Departmental Representatives (Section 12.1).

Links to departmental websites (links to residency or divisional websites can be added):

- Medicine: <http://fhs.mcmaster.ca/medicine/>
- Surgery: <http://fhs.mcmaster.ca/surgery/index.html>
- Pathology and Molecular Medicine: <http://fhs.mcmaster.ca/pathology/>
- Obstetrics and Gynecology: <http://fhs.mcmaster.ca/obgyn/>
- Pediatrics: <http://fhs.mcmaster.ca/pediatrics/index.html>
- Psychiatry and Behavioral Neurosciences: <http://fhs.mcmaster.ca/psychiatryneuroscience/>

### **7.2.6 Graduate Programs**

Some graduate programs provide access to funding for their graduate students, although such funding is generally not available to physicians:

- Health Research Methodology: <http://fhs.mcmaster.ca/hrm/financial.html>
- Medical Sciences: [http://fhs.mcmaster.ca/medsci/financial\\_matters.html](http://fhs.mcmaster.ca/medsci/financial_matters.html)
- Biochemistry and Biomedical Sciences:  
<http://fhs.mcmaster.ca/biochem/graduate/financial.html>

Trainees are encouraged to enquire from prospective Research Supervisors and to approach the administrative assistants of the relevant graduate programs:

- Health Research Methodology:
  - HSC-3N10, 905-525-9140 Ext 27718, [askhrm@mcmaster.ca](mailto:askhrm@mcmaster.ca)
- Medical Sciences:
  - HSC-3N10, 905-525-9140 Ext 22736, [medsci@mcmaster.ca](mailto:medsci@mcmaster.ca)
- Biochemistry and Biomedical Sciences:
  - HSC- 4N62, 905-525-9140 Ext 22064, [bbsgrad@mcmaster.ca](mailto:bbsgrad@mcmaster.ca)

### **7.2.7 McMaster's Postgraduate Medical Education Office**

McMaster's Postgraduate Medical Education office, which is responsible for the McMaster CIP program, provides the following financial assistance to all trainees:

- Reimbursement of 50% of a domestic student's Graduate Tuition Fees, or the equivalent (if these are not covered from another source); maximum of 2 years for a MSc and 4 years for a PhD.
- Educational expenses of up to \$1,000 per year to attend approved research-related conferences or to cover other research-related costs (e.g., software licenses).

## **8. Evaluation of Trainees**

McMaster CIP In-Training Evaluation Reports (ITERS) are used to monitor learning and research performance of CIP trainees during the Research Phase (Section 11.1) of CIP. ITERS are completed on-line using the One45 WebEval system. The ITERS contain three major separate and complimentary components: 1) the [Trainee's Self Evaluation Form](#); 2) the Advisory Committee Evaluations which include the [Research Supervisor Report](#); the [Clinical Supervisor Report](#); and the [Research Advisor Report](#) (two); and 3) the CIP Program Director's Interview and "Progress Summary" report.

## 8.1 Self Evaluation by Trainees

Trainees complete this form every six months to update their Advisory Committee and the CIP program on the trainee's research progress and clinical activities. This self-report section was designed, in consultation with faculty and trainees, to serve as a template for comprehensive, self-monitoring of research progress and academic career development. Each trainee is expected to maintain an electronic file version to continuously record, update and self-evaluate their progress. The Self Evaluation form contains the following sections:

- Brief summary of CIP research project goals and progress;
- Anticipated date of completion of graduate or postgraduate studies;
- Involvement in collaborative research projects;
- Coursework completed or in progress to date, including academic grades;
- Fellowship training and/or certification exams completed or to be taken within 6 months;
- Publications submitted (manuscripts, book chapters, abstracts);
- Grants submitted and/or funded;
- Research presentations (poster, oral, peer-reviewed);
- Conferences and meetings, non-CIP rounds, journal clubs in the past 6 months;
- Academic and/or research awards received;
- Teaching, academic or administrative activities in past 6 months;
- Involvement in co-reviewing papers and grants in past 6 months;
- National and international professional societies in which you participate;
- Attendance or planned attendance at ethics review board meetings;
- Completion dates of TCPS2 core tutorial and Good Clinical Practice (GCP) training
- Clinical activities for the past 6 months;
- Career planning activities;
- Issues you would like discussed with your advisors and/or the CIP director.

## 8.2 Advisory Committee Evaluations

The trainee's CIP advisory committee monitors the progress of each trainee's progress and accomplishments, with each member of the committee completing an evaluation form using WebEval every six months.

*First, the [Research Supervisor](#) completes the main ITERS which is structured to follow and assess (i.e., rate) CanMEDS competencies and objectives, and contains space for narrative comments to provide more detailed evaluations of performance, as follows:*

### *Scholar*

- General knowledge base
- Knowledge in specialized research field
- Self directed learning

### *Technical and critical appraisal skills (research expert)*

- Research skills in study/experimental design
- Technical aspects of research skills

- Quality of data recording, and interpretation
- Problem solving skills
- Appreciation of components of proper scientific inquiry
- Ability to gather and critically appraise reference material
- Quality of data recording, and interpretation

*Collaboration*

- Professional interactions and ability to collaborate with others
- Professionalism
- Sense of responsibility and interest
- Self awareness and responses to feedback

*Professionalism*

- Sense of responsibility and interest
- Self awareness and response to feedback

*Communication*

- Ability to communicate and interact with colleagues
- Quality of verbal presentations, formal and informal
- Quality of written research reports and manuscripts
- Following up and completion of tasks, including meeting deadlines

*Manager*

- Management of research projects
- Management of research resources
- Management of research career
- Administrative and leadership roles

*Health advocate*

- Health advocacy and knowledge of ethics in medical research

*Overall progress, goals, career training*

- Outline goals for growth and improvement for the next six months of training
- Overall progress for this period of evaluation
- Trainee's overall performance and accomplishments, for level of research training
- Perceived ability for carrying out work as an independent investigator, upon completion of training
- Did the trainee meet with the Research Supervisor and discuss career planning?

Second, the ITER that was completed by the Research Supervisor is forwarded to each of the two Research Advisors who each complete supplementary forms that record: 1) satisfaction with the trainee's Self-Evaluation; 2) agreement with the Research Supervisor's ITER; 3) additional feedback of the trainee's strengths and accomplishments; 4) additional feedback on areas with potential for improvement; 5) other comments; 6) rating of overall assessment.

Both the Research Supervisor and the Research Advisor's ITERS contain questions about whether the trainee has reviewed and discussed the forms, and contain a section for trainee's comments in response to the evaluations.

Lastly, the Clinical Supervisor completes a "Clinical Supervisor Report on Training Clinical Activities" that records: 1) a synopsis of clinical activities; 2) objectives of the clinical activities; 3) how clinical activities are aiding the trainee to become a clinician investigator; 4) trainee's overall success at achieving CanMEDS competencies as a clinician and clinician-investigator.

Throughout this process of evaluation by the Advisory Committee, goals and expectations are reviewed with the trainee and set for the next period of evaluation.

### **8.3 CIP Program Director Interview and Progress Summary**

The CIP Program Director reviews the trainee's self-evaluations and evaluations of the trainee by the Research Supervisor, the Research Advisors and the Clinical Advisor when he meets with the trainee after every six month block. He reviews all of the areas that have been noted in the trainee's self-evaluation and the ITERs, assesses the trainee's progress, and comments on this progress in his "Progress Summary" report. This report is in the form of a narrative summary (rather than a pre-printed form) that is forwarded to the trainee, members of the trainee's Advisory Committee, Clinical Program Director, CIP Departmental Representatives, CIP Graduate Program Coordinator and, when appropriate, clinical departmental leaders. The CIP program Director's Progress Summary also notes issues around the trainee's funding and career planning.

## **9. Evaluation of CIP Faculty**

Trainees are required to complete a "Clinician Investigator Faculty Evaluation" form of their Research Supervisors every 6 months. This form requests rating ("not applicable", "unsatisfactory", "needs improvement", "satisfactory", "good", "excellent") in 15 domains and has an additional comments section. Using the same form, trainees also have the option (not mandatory) of evaluating their Research Advisors, Clinical Supervisor and CIP Departmental Coordinator every six months. These evaluations are reviewed by the CIP Program Director on behalf of the CIP Training Committee.

As noted in Section 3.6.1, each trainee completes an evaluation of each presentation at the monthly Academic Sessions.

The CIP program and the CIP Program Director are evaluated by the CIP trainees once in each year. Each trainee completes a CIP program evaluation form and these forms are collated by the CIP Trainee Representatives so that anonymous feedback can be provided to the CIP Program Director and to the CIP Training Committee. In addition to the questionnaire responses, trainee feedback incorporates collective suggestions and opinions from the trainees that are obtained at a meeting attended only by the trainees. This feedback is used to modify how the CIP may better meet the needs of the trainees.

## **10. Career Planning and Counseling**

### **10.1 Career Planning**

Before and after enrollment in CIP, the trainee's Clinical Residency Program Director, CIP Clinical Supervisor, Research Supervisor, Research Advisors, Departmental CIP Coordinator, and the CIP Program Director contribute to discussions about career planning for trainees. Career plans are reviewed during the evaluation process that occurs every six months while trainees are in CIP, and are commented on in the ITER and in the CIP Program Director's "Progress Summary" report. Trainees are also familiarized with the McMaster Industry Liaison Office for access to advice on the potential for commercialization of their research, and development of career opportunities with industry (<http://ip.mcmaster.ca/>).

A number of the CIP academic sessions each year include discussions of various aspects of career planning such as: research pathways; practical issues around recruitment and salary negotiation; and planning for promotion. Trainees are encouraged to attend the annual meeting of the Canadian Society for Clinical Investigation (CSCI) and its Young Investigator's Forum, and to be members of the Clinician Investigator Trainee Association of Canada, which are also resources for career planning and recruitment opportunities.

## **10.2 Counseling for CIP Trainees**

There is access to counselling both within, and outside of, the CIP program.

Counselling avenues include:

- The CIP Program Director is available to the trainee on an “open door” basis and is the trainee’s advocate in situations where trainees are experiencing stress related to work/health and personal issues.
- Similarly, the trainee’s Research Supervisor, Clinical Supervisor, Research Advisors and other individuals who have established a mentorship relationship with the trainee are available for discussion of such issues.
- CIP trainees, as do all residents, receive a hard copy of the: “Resident Wellness Support Systems” booklet which is updated annually and is also available on the Postgraduate Medical Education website: [Support Systems for Postgraduate Trainees](#) This booklet contains an extensive list of university and other counseling resources, and provides related contact information (e.g., telephone numbers, web sites). The Postgrad website also includes a Trainee Well-being page: [http://fhs.mcmaster.ca/postgrad/trainee\\_well\\_being.html](http://fhs.mcmaster.ca/postgrad/trainee_well_being.html)

## **10.3 Appeals by CIP Trainees**

An appeal by a trainee would first be made at a Program Level (Level 1 appeal) to the CIP Program Director who would try to help resolve the issue with the other party (e.g., Research Supervisor). If necessary, still at the Program Level, the trainee’s concern would be discussed with the CIP Training Committee. Consistent with standard McMaster Postgraduate Medical Education policies, if the trainee’s concerns are not resolved to the trainee’s satisfaction at the Program Level, the trainee may submit a Level 2 appeal to the Appeals Review Board, which adjudicates on behalf of the Postgraduate Medical Education Committee and the Assistant Dean, Postgraduate Medical Education. If the trainee disagrees with the judgment of the Appeals Review Board, and challenges this judgment on procedural grounds, the trainee can make a Level 3 appeal to the Postgraduate Tribunal, which adjudicates on behalf of the Dean, Faculty of Health Sciences. The Postgraduate Medical Education Office website provides a detailed description of how resident evaluations are to occur and the process for appealing an evaluation: <http://fhs.mcmaster.ca/postgrad/policies.html> (scroll down to Evaluation and Appeals section). Graduate Program student appeals are governed by McMaster University’s Student Appeals process which is described on the McMaster University website: <http://www.mcmaster.ca/policy/Students-AcademicStudies/>

## **11. Trainee Safety Policy**

CIP trainees must be familiar with, and have satisfied all of the safety requirements of, both 1) their Clinical Residency Training program, and 2) their Graduate Studies program. As there are marked differences among the Clinical Residency programs (eg, psychiatry vs. surgery vs. laboratory medicine vs. radiation oncology) and among the Graduate Studies programs (eg, basic sciences vs. clinical epidemiology), and as the safety issue differ among these, no single safety policy applies to all CIP trainees.

### **11.1 Clinical Residency Program Safety Training Requirements**

For each trainee, the Residency Safety Requirements that are specific to the trainee's residency program apply. In addition, as all CIP trainees are registered with Post Graduate Medical Education, they are also subject to the provisions of McMaster's "Medical Education Health and Safety Policy" (<http://www.fhs.mcmaster.ca/postgrad/documents/HPSP.pdf>). In common with all residents registering with Post Graduate Medical Education at McMaster, CIP trainees must successfully complete the e-modules listed below, available on-line by trainees through personal log-in.

- Orientation for New Housestaff - Introduction
- Resident Safety Training
- Due Diligence in Postgraduate Training
- Due Diligence and Health Care Regulation Quiz

### **11.2 Graduate Studies Program Safety Training Requirements**

For each trainee, the Graduate Studies Program Safety Requirements that are specific to the trainee's Graduate Studies Program apply.

Some Graduate Programs, such as Medical Sciences (e.g., laboratory-based), have specific health and safety requirements. Students must complete the following safety training modules in [Laboratory WHMIS](#); and [Fire Safety Training](#)

Other Graduate Programs, such as Health Research Methodology, apply general university policies. Students must complete the following safety training modules: Health & Safety <http://fhs.mcmaster.ca/safetyoffice/> Job Hazard Analysis <http://jhaweb.mcmaster.ca/index.html>

## **12. Completion of CIP Program**

### **12.1 Research and Write-up Phases of CIP**

The "Research Phase" of CIP refers to the period between enrolment in CIP and when CIP research training requirements are satisfied. During this Phase, the full trainee and faculty evaluation process occurs every six months. When the trainee's CIP Advisory Committee and the CIP Program Director confirms that McMaster's CIP research training requirements have been completed, the trainee transitions to the "Write-up Phase" of CIP.

Trainees remain in the "Write-up Phase" of CIP until all McMaster and RCPSC CIP requirements are completed. The only evaluation that is performed during the "Write-up" phase is a Trainee Self-Evaluation that is done annually. The main reasons for being in the "Write-up" Phase are that the trainee: 1) needs to complete Graduate requirements, including submission and defense of the trainee's thesis; and 2) has yet to complete a clinical residency program and receive RCPSC certification in their specialty.

### **12.2 Requirements for Completion of McMaster's CIP program**

Completion of CIP requires satisfactory evaluation of research training and does not include examination. The CIP Program Director first reviews all final ITERs to ensure trainees fulfill all McMaster and RCPSC CIP training requirements, including completion of their graduate studies. Completion of CIP training also requires approval by the McMaster CIP Training Committee.

In order for CIP training to be completed, the following are required:

- 1) RCPSC certification in their chosen Specialty/Subspecialty Program;
- 2) Completion of all McMaster CIP program requirements as evidenced by the program having received:
  - i) A final Self Evaluation report from the trainee, summarizing all courses taken and completed by the trainee during training, including academic grades, and an updated list of all presentations, abstracts and publications resulting from the trainee's CIP research.
  - ii) Written confirmation from the Research Supervisor that the trainee has completed the research and related training that is required to satisfy Graduate Program and CIP requirements. If the trainee has yet to complete his/her thesis, the trainee may then be considered to have moved into the "Write-up phase" of the CIP program;
  - iii) The trainee's Graduate Program must forward completion of graduate studies to the CIP program.

### **12.3 Certification of CIP Training by the RCPSC**

When all CIP research requirements are completed, McMaster University CIP program forwards a completed *Attestation of Completion of the Research Component of the Clinician Investigator Program* form to the RCPSC. When both the clinical specialty/subspecialty and the research components of the CIP program are completed, a certificate recognizing successful completion of CIP is issued by the RCPSC as well as by the McMaster Postgraduate Medical Education office.

## **13. Appendices**

### **13.1 CIP Training Committee Members and Contact Information**

#### **Program Director**

Clive Kearon, MD, MRCPI, FRCPC, PhD  
Jack Hirsh Professorship in Thromboembolism,  
Juravinski Hospital, Room A3-73,  
711 Concession St,  
Hamilton, Ontario, Canada, L8V 1C3  
T: 905 521 2100 Ext 42426  
F: 905 389 0108  
[kearonc@mcmaster.ca](mailto:kearonc@mcmaster.ca)

#### **Administrative Assistant**

Sharon Ciraolo  
Postgraduate Medical Education Office  
McMaster University, MDCL – 3101  
Tel: 905-525-9140, Ext 22776  
Fax: 905-527-2707  
[sciraolo@mcmaster.ca](mailto:sciraolo@mcmaster.ca)



**Assistant Dean, Postgraduate Medical Education**

Mark Walton, MD, FRCPC  
Professor, Pediatrics and Surgery  
McMaster University, MDCL – 3101  
Tel: 905-525-9140, Ext 22116  
Fax: 905-527-2707  
[waltonj@mcmaster.ca](mailto:waltonj@mcmaster.ca)

**Departmental CI Program Coordinators:*****Internal Medicine and Internal Medicine Subspecialties***

Dr. Michael Walsh  
Assistant Professor, Medicine/Nephrology  
McMaster University, SJH - Marion Wing, Level 3  
Tel: 905-525-9140, Ext. 35016  
[lastwalsh1975@gmail.com](mailto:lastwalsh1975@gmail.com)

***Obstetrics and Gynecology***

Dr. Sarah McDonald  
Associate Professor, Obstetrics & Gynecology  
McMaster University, HSC – 3N52B  
Tel: 905-525-9140, Ext 26559  
[mcdonals@mcmaster.ca](mailto:mcdonals@mcmaster.ca)

***Pathology and Molecular Medicine***

Dr. Anita Bane  
Assistant Professor, Pathology and Molecular Medicine  
McMaster University, Juravinski Cancer Centre, Rm. 4-62  
Tel: 905-387-9711 ext. 64503  
[bane@hhsc.ca](mailto:bane@hhsc.ca)

***Pediatrics***

Dr. Katherine Morrison  
Associate Professor, Pediatrics  
McMaster University, HSC – 3A59  
Tel: 905-521-2100, Ext 75702  
[morrison@mcmaster.ca](mailto:morriso@mcmaster.ca)

***Psychiatry and Behavioural Neurosciences***

Dr. Harriet MacMillan  
Professor, Psychiatry and Behavioural Neurosciences  
McMaster University, Chedoke Division, Patterson Bldg, Room 211  
Tel: 905-521-2100, Ext 74287  
[macmilnh@mcmaster.ca](mailto:macmilnh@mcmaster.ca)

***Surgery and Surgery Subspecialties***

Dr Sheila Singh  
Associate Professor, Neurosurgery  
McMaster University, HSC – 4E5  
Tel: 905-521-2100, Ext 75237  
[ssingh@mcmaster.ca](mailto:ssingh@mcmaster.ca)

**Associate Dean of Graduate Studies, Health Sciences**

Dr. Catherine Hayward  
Professor, Pathology and Molecular Medicine  
McMaster University, MDCL, 2235  
Tel: 905-525-9140, Ext 21609  
[adeanhsc@mcmaster.ca](mailto:adeanhsc@mcmaster.ca)

**CIP Graduate Program Coordinators:**

***Health Research Methodology Graduate Program***

Dr. Steve Hanna  
Assistant Dean, HRM  
Professor, Clinical Epidemiology and Biostatistics  
McMaster University, HSC – 2C1  
Tel: 905-525-9140, Ext 26236  
[hannas@mcmaster.ca](mailto:hannas@mcmaster.ca)

***Medical Sciences Graduate Program***

Dr. Frederick Ofori  
Emeritus Professor, Pathology and Molecular Medicine  
McMaster University, HSC – 3N26  
Tel: 905-525-9140, Ext 22535  
[ofosuf@mcmaster.ca](mailto:ofosuf@mcmaster.ca)

***Biochemistry and Biomedical Sciences***

Dr. Brian Coombes  
Associate Professor, Biochemistry and Biomedical Sciences  
McMaster University, HSC – 4H21A  
Tel: 905-525-9140, Ext 22159  
[coombes@mcmaster.ca](mailto:coombes@mcmaster.ca)

**Health Research Services**

Mr. Gregory Weiler, Director  
McMaster University, HSC – 2E14  
[gweiler@mcmaster.ca](mailto:gweiler@mcmaster.ca)