

Clinical Immunology and Allergy Resident McMaster University

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Introduction

Welcome to Clinical Immunology and Allergy residency at McMaster. Over the next 2 years, you will learn all areas of the field including autoimmunity, immunodeficiency and allergy. You will have a wide exposure to clinical cases in the clinics, on-call and also on the wards. There is a wide variety of clinics at St. Joseph's Hospital and McMaster University Medical Centre including Pediatric and Adult Allergy, Pediatric Immunology, Adult Immunology, Adult Lupus clinic and Adverse Reactions Clinic. You will also spend time in the Clinical Immunology lab and there is time for electives and research.

In your senior year, you will have the opportunity to participate in the Senior Resident Clinic which helps prepare you for running your own clinic so when you finish your training you can hit the ground running.

Allergy and Immunology is a great career in a field that is rapidly changing and growing – from the lab and in the clinics. The need for well-trained physicians in our field is great and our goal is to prepare you for a rewarding and exciting career. This handbook is put together to help guide you along the way but of course when questions come up feel free to ask us or Jenn.

Jackie, Mike & Dave

Clinical Immunology and Allergy Clinics

The Allergy/Clinical Immunology rotation will include primarily outpatient clinics with some inpatient exposure. Most clinics take place at MUMC with adults being in 4Y (Boris Clinic) and children in 3F, 2G. The remaining clinics are held at the Adverse Reactions Clinic located at the Firestone Institute for Respiratory Health at St. Joseph's Hospital. It is your responsibility to ensure you attend all clinics for which you are scheduled. **If you are unable to attend a clinic, please let the attending staff and chief resident know.**

Adverse Reactions – St. Joseph's Healthcare – This clinic provides exposure to the diagnosis and management of adverse reaction to medications and stinging insects. This is the only clinic where allergy testing to Penicillin and Venom is provided on an outpatient basis at McMaster, as such both children and adults are seen here. Residents will also have exposure to drug challenges as well as prescribing and delivering venom immunotherapy.

Pediatric Allergy Clinics – McMaster – This clinic provides residents the opportunity to focus on the presentation, diagnosis, and management of allergic disease in the pediatric population. There is exposure to food allergy, atopic dermatitis, environmental allergy, and asthma. There is also a focus on the impact of disease on both the child and entire family. There is ample opportunity here to develop one's role as a health advocate. There are also opportunities to perform skin testing, as well as observe and execute oral challenges.

Pediatric Immunology – McMaster – This clinic allows residents to become familiar with the complex presentation, investigation, and management of suspected or established primary immunodeficiency and immune dysregulatory conditions. We will develop an approach to suspecting immune disorders, workup of different presentations, interpretation of test results, and ongoing therapeutic options.

Pediatric Bone Marrow Transplant - This is a long-term follow up clinic for patients who have undergone Bone Marrow/Stem Cell transplantation. In this setting, we will explore the immune implications of transplant, long-term sequelae of HSCT, and management of those issues.

Adult Allergy and Immunology– These clinics provide excellent mix of allergy presentations (e.g., environmental allergies, urticaria, angioedema) as well possible immunodeficiency, vasculitis and connective tissue diseases. Most of these clinics are a mix of all aspects of the specialty.

Senior Resident Clinics – The general philosophy of the Clinical Immunology and Allergy program is learning and teaching in the setting of graded responsibility. This clinic is for residents in their final year of training with enough base knowledge as determined by the Program Director and their performance on core and other rotations. This clinic is an excellent mix of allergy presentations (e.g., environmental allergies, urticaria, angioedema), which is entirely managed by the residents. There is staff supervision, but the resident is

expected to act as a junior attending with progressively less supervision but appropriate backup.

Oral Challenge Clinics – These clinics provide opportunities for senior residents to manage multiple oral challenges in conjunction with an allergy nurse. Level of responsibility will be tailored to the stage of training of the individual resident.

McMaster Allergy and Immunology Clinic Schedule – schedule may be adjusted on a week by week basis *these clinics have all been altered by the COVID-19 Pandemic and may be at least partially virtual in 2020*****

McMaster University Medical Centre (MUMC); 4Y= Adult (Boris Clinic)

MUMC 3F = Pediatrics; MUMC 2G = Pediatrics

SJH = St Joseph’s Hospital Firestone Clinic (adverse reaction clinic); Adult and Pediatrics

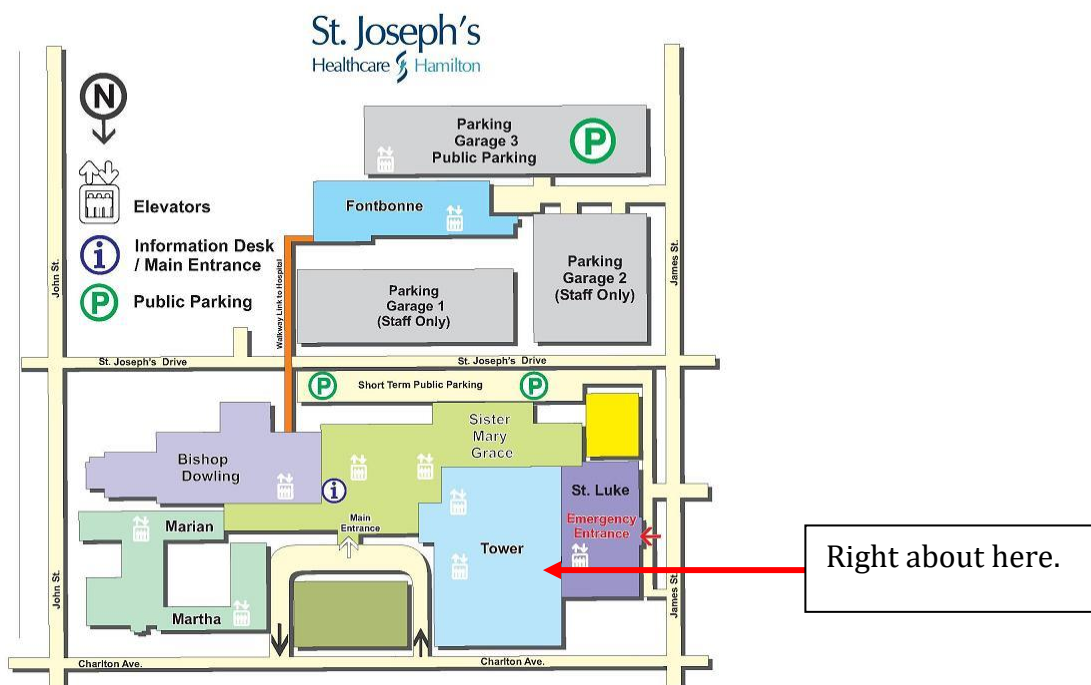
	Monday	Tuesday	Wednesday	Thursday	Friday
Morning (9am unless indicated)	Waserman MUMC 4Y	Waserman SJH Keith SJH Choe /Quirt MUMC 4Y (8:30 am)	Cyr MUMC 4Y Waserman SJH Keith SJH Brager 2G (8:30 am)	Waserman MUMC 3F Denburg MUMC 4Y Brager 2G (8:30am)	Keith (MUMC 4Y (8:30 am) Messieh MUMC 4Y (8:30 am) Haaland MUMC 4Y (8:30am) Quirt MUMC 4Y (8:30am) Fahmy MUMC 4Y (8:30am) Senior adult resident clinics MUMC 4Y (8:30am) Brager / Senior Peds resident clinic MUMC 3F (8:30am)
Afternoon (1:30pm unless	Keith MUMC 4Y (1:00pm)	Waserman MUMC 4Y	Fahmy MUMC 4Y	Waserman MUMC 3F	Haaland MUMC 4Y

indicated)			Brager MUMC 3F (12:30pm)		Brager MUMC 3F
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Clinic Locations

MUMC: McMaster University Medical Centre, 1200 Main St. West. The **Boris Clinic** in 4Y is located on the 4th floor near the yellow elevators. The 3F pediatric clinic is located on the 3rd floor between the red and purple elevators. The 2G pediatric clinic is located on the second floor near the main entrance.

St. Joseph's Hospital is located at 50 Charlton Avenue East. Parking is in the Fontbonne building connected to the main hospital, with entrance off of James Street. The **Firestone clinic** is located in the Juravinski tower near the corner of James and Charlton on the main floor. Within the hospital you will find it near the main Tim Hortons.



Note: Tuesday and Wednesday morning clinics for Dr. Waserman and Dr. Keith are Adverse Reactions Clinic and therefore take place at St. Joseph's hospital. This is a tentative schedule as clinics may move based on staff availability.

Consult service:

Inpatient consultations may be received from any of the Hamilton Health Sciences sites, as well as St. Joseph's Hospital. Consults are triaged via an Allergy & Immunology resident or directly through attending staff if a fellow is not on call. Residents may take calls from physicians in the community or directly from patients. All telephone advice should be discussed with the attending on call or, if possible, the attending who follows that patient. All telephone advice will be documented.

Administrative Duties:

On the first day a learner's rotation, the fellow in that clinic will orient the learner regarding the organization of the rotation, including clinics, academic half days and answering any questions the learner has. The fellow responsible for orienting the learner will be indicated on the rotation schedule. The orientation package will be emailed to all allergy residents and reviewed in the first month. There is a formalized checklist that should be completed with each incoming rotator, and this should be retained by the rotator to bring to their final evaluation.

There are various administrative duties including the chief resident, coordination of journal clubs and planning the teaching schedule. Also, each year there is an elected resident representative for the postgraduate training and education committee. Each resident is expected to have some administrative role during their training. These roles will be discussed in more detail throughout your PGY4 year.

Educational Sessions: Residents will also participate in the Allergy/Clinical Immunology weekly rounds, and resident teaching sessions. **(You are expected to attend all bolded sessions)**

1. **Fridays, 12:00 to 1:00 PM - Allergy/Clinical Immunology Grand Rounds.**
MUMC 4E20 (Generally, all Grand Rounds from September – June).
2. **Fridays 1:15PM-1:30PM – Interesting cases of the week (location indicated on clinic schedule)**
3. **Fridays 1:30-2:30 Resident Half-day (location indicated on clinic schedule).**
These rounds are directed teaching for Allergy & Immunology fellows and rotators. Sessions may be clinical or basic science-oriented. Schedule is sent via e-mail and

sessions will take place in TBD for upcoming year. .

4. **Fridays 2:30-3:00. Basic Immunology review (location indicated on clinic schedule).** These are geared toward Clinical Immunology residents to learn basic immunology concepts.
5. **Primary Immunodeficiency Video conferences.** These occur every 2 months. The dates/times/location will be emailed to you.
6. **Subspecialty resident half-days.** These occur about 4 times per year and focus on non-medical expert CANMEDs areas for subspecialty residents. Location varies with each session, and you will be emailed in advance with details.
7. Tuesdays, 9:00 to 11:00 AM– Respiriology half-day. Rotating residents can attend these rounds run by the Dept of Respiriology provided you do not have a scheduled clinic. Location is in the Campbell Auditorium at St. Joseph’s Hospital (level 2).
8. Wednesdays 1:00 PM - Pediatric and Internal Medicine academic half-days.
9. Thursdays 8:00-9:00 AM – St. Joseph’s Hospital Department of Medicine Grand Rounds, Miller Amphitheatre, 2nd floor Juravinski Tower.
10. Thursdays, 8:00 to 9:00 AM- Department of Medicine Grand Rounds, MUMC 4E20.
11. Thursdays, 8:00 to 9:00 AM - Department of Pediatrics. Grand rounds MDCL 3020.
12. Any additional teaching sessions, videoconferences will be announced separately.

Residents in their chief rotation will be responsible for the rotator curriculum. This consists of 2 half hour teaching sessions aimed at rotators covering allergy and immunology topics. If the chief resident is unable to give these sessions, they may delegate to another fellow in the program. These sessions are indicated on the block clinic schedule.

The general philosophy of the Allergy/Clinical Immunology rotation will be learning and teaching in the setting of graded responsibility. For most of the rotation, in addition to direct staff supervision, a PGY-4 or PGY-5 in Allergy/Clinical Immunology will be involved in teaching and supervision. Rotators are required to be directly observed for two clinical encounters per week of their rotations. Fellows will be involved in completing these evaluations as directed by the staff in each particular clinic.

Dictations:

Residents are expected to create notes and letters for patients they have seen in the clinic or as consults. For clinic patients at the McMaster site this is typically done via Patient Link electronic medical records system. The exception is for Dr. Denburg, Dr. Messieh and Dr. Haaland who prefer HHS central dictation to be used. For the Adverse Reaction Clinic, or for St. Joseph’s inpatient consults, this is done via Dovetail. For HHS inpatients, you will be

provided a dictation number. Instructions for the dictation system can be found at:
<http://fhs.mcmaster.ca/otolaryngology/documents/dictating101.pdf>

Recommended Readings:

The 2010 Primer on Allergic and Immunologic Diseases is available on the Journal of Allergy and Clinical Immunology's website with open access. The website is
http://www.jacionline.org/issues/contents?issue_key=S0091-6749%2810%29X0004-5.

Another helpful and concise resource is the supplement by the Journal of the Canadian Society of Allergy and Clinical Immunology entitled "**Practical guide for Allergy and Immunology in Canada**":
<https://aacijournal.biomedcentral.com/articles/supplements/volume-14-supplement-2>

A useful resource is the Primer of Rheumatological Diseases published by the Arthritis Society of Canada, which is available through the McMaster Health Sciences library as an online resource.

The McMaster Health Sciences Library and the online HHSC website carries Middleton's textbook of Allergy and Immunology, which is a comprehensive and reputable resource.

Other Resources and References:

1. **Allergy: Principle and Practice, Middleton and Reed.**
2. **Janeway: Immunobiology, Kenneth Murphy.** – PRIMARY RESOURCE USED FOR BASIC IMMUNOLOGY TEACHING / READING.
3. Current Therapy in Allergy, Immunology, and Rheumatology (5th Edition 1996), Lichtenstein and Fauci.
4. Training Program Directors Reading List - sponsored by the American Academy of Allergy, Asthma, and Immunology. (www.aaaai.org)
5. American College of Allergy, Asthma, and Immunology Practice Parameters. (www.acaai.org)
6. MKSAP Allergy and Immunology (3rd Edition 2000) and full series.
7. We have a Google account with key resources for fellows to review – the login details for this account will be provided by the Chief resident.

Other Resources and References:

1. Nelson's Textbook of Pediatrics (19th Edition, 2011), Behrman's Kliegman.
2. Immunologic Disorders of Infants and Children (2004), Stiehm and Fulginiti.

3. Textbook of Pediatric Rheumatology (2005), Cassidy & Petty.
4. **Journals:** Journal of Allergy and Clinical Immunology. Annals of Allergy, Immunology Today, New England Journal of Medicine, Annals of Internal Medicine Clinical and Experimental Allergy (online).

2-YEAR CURRICULUM FOR CLINICAL IMMUNOLOGY AND ALLERGY PROGRAM:

The general goal of the Program is to develop the postgraduate student in a flexible fashion adapted to the requirements of the Royal College and the particular applicants. A sound background of immunology theory and practice are supplied, including a foundation for basic or applied research in allergy and immunology. Laboratory training in a wide range of techniques appropriate to the practice of clinical immunology and allergy is also considered part of the educational Program.

Block	1	2	3	4	5	6	7	8	9	10	11	12	13
Yr 1	C	C	C	C	C	C	C	S	C	RES	C	C	S
Yr 2	Lab	CM	S	S	S	S	C	C	CM	IMM	C	S	S

**C= CORE S= SELECTIVE RES= RESEARCH CM= COMMUNITY
IMM= IMMUNODEFICIENCY**

A block equals four (4) weeks of time, which may be completed longitudinally. There must be clinical time spent in Clinical Immunology and Allergy throughout both years of training.

Some learning experiences may be completed longitudinally rather than in the form of a block. The amount and structure of these training experiences should be discussed with the program director to ensure they are providing adequate exposure to a given area.

→The order of the rotations can be determined by the resident with a minimum of **Six (6) CORE** blocks in first year and **Three (3) CORE blocks** in second year. All fellows are on CORE for the December/Holiday block in both years.

There will be some half-days when you are not booked into a specific clinic. You are expected to be doing work / study in Clinical Immunology and Allergy during these times and you should be available / reachable during these times.

CORE = Clinical Immunology and Allergy related to Internal Medicine and Pediatrics at McMaster (Minimum Twelve (12) Blocks). The core rotation involved clinics in both pediatric and adult clinical immunology, and allergy. These clinics occur at two hospital sites: McMaster University Medical Centre (MUMC) and St. Josephs Healthcare- Charlton Site (Firestone Clinic). *(Clinics are described earlier in this document)*

LAB = Clinical immunology diagnostic laboratory (Total 1 Block). This rotation is mainly based out of the Hamilton General Hospital where the immunology lab currently resides. Residents will learn about common immunological laboratory methods and principles under the guidance of the lab staff. A guide to this rotation will be provided to you at its start.

RESEARCH = Minimum one block of research. This can be completed longitudinally. Extra months of research can be taken from selective blocks for a maximum of six (6) total blocks of research, which must include some degree of ongoing clinical experience (eg Senior Resident Clinic). It is expected that each resident will complete a scholarly project at the end of his or her two-year training period. This is defined as:

- Submission of original research or a case report for publication or presentation at a conference (including resident research day)
OR
- Presentation of original research at Division Grand Rounds

There are many opportunities to be involved with both clinical and basic science research in a variety of areas within the discipline. Research projects, in which basic or applied immunology and allergy questions are being explored, are an ongoing significant part of the training Program in this specialty area. An evaluation will be completed by the supervising physician for each project. Overall research progress will be evaluated twice yearly.

COMMUNITY = Community allergy clinics rotation –Generally, this is a rotation whereby residents can experience the day-to-day experience of working in this field within a community practice. This is an excellent opportunity to also learn about the business aspect of medicine and take on the manager role. This is generally done with allergists practicing within our community, of which many are graduates of our program.

- Minimum 1 block must be completed in Community Allergy & Immunology
- Community rotations totalling more than 2 blocks over the 2 year curriculum must be approved by the Program Director
- Maximum 2 blocks over 2 years with non-McMaster-affiliated Community preceptor (affiliation includes professor, assistant or associate clinical professor, adjunct professor)
- Maximum 2 blocks per year where resident is unable to attend Friday half day of Clinical Immunology and Allergy clinic at McMaster and academic half day (excluding Immunodeficiency rotation)

IMMUNODEFICIENCY = Pediatric Immunodeficiency (Suggested centres for training Montreal Children’s Hospital, IWK Halifax Children’s hospital, HSC). Please note PEDIATRICS STREAM need to complete two (2) blocks of immunodeficiency

SELECTIVE = Selective Rotations in any of the following with a maximum of two (2) blocks in any one of the selectives (Total Eight (8) Blocks)

3 SELECTIVES MUST BE FROM THIS TOP BOX:

- Otolaryngology/ENT Surgery
- Respiriology/pulmonary function lab
- Dermatology
- Occupational Medicine

- | |
|--|
| <ul style="list-style-type: none">▪ Rheumatology/autoimmune diseases▪ Transplant medicine which may include hematological transplantation, solid organ transplantation and/or laboratory experience |
|--|

- | |
|--|
| <ul style="list-style-type: none">▪ Research (can do Max 6 blocks)▪ Human Immunodeficiency Virus (HIV) medicine▪ General allergy/immunology clinic▪ Max one (1) block in a clinical immunology lab▪ Other training as approved by the Program Director (incl more CORE ☺) |
|--|

Rotation approvals:

All non-core rotations need to be approved by both the program director and chief resident. Deadlines for booking rotations will be provided at the start of the year.

If your block includes multiple specialties or locations, the program director must approve your schedule at least 2 weeks before the block starts.

The final details of a rotation and supervisor must be provided to Jennifer Lourenco a MINIMUM of 2 weeks before the block starts, including:

- supervisor(s) names (who should be completing your rotation ITER)
- the location of the rotation
- if you are completing multiple longitudinal training experiences, the composition of the block- i.e. 80 % Core and 20 % Dermatology

If you are doing a community rotation within the McMaster catchment (i.e. Hamilton, Niagara, Waterloo, Grand Erie, Halton, Guelph, Burlington, Brampton, Brantford, Collingwood, Penetanguishine, Etobicoke or Mississauga please let Jennifer Lourenco know 8 weeks IN ADVANCE, so that she can complete the MacCARE form and Letter of Good Standing for you in a timely manner.

http://maccare.mcmaster.ca/regional_sites.html

Call Policy
Clinical Immunology & Allergy Residency Training Program
McMaster University

Call Schedule:

The chief resident(s) will prepare the call schedule for the residents each month. This schedule will be distributed to all residents, faculty members, administrative staff and PAIRO two weeks prior to the effective date.

Frequency of Call:

As per the PARO-CAHO agreement (as of June 2012) residents may not work more than 1:3 for out-of-hospital call. The number of call per month will be prorated for any vacation, or leave of any kind, taken during that calendar month. The call schedule **must** be in accordance with the most recent PAIRO-CAHO agreement.

Subject to operational requirements, residents will not be scheduled for call duties for up to 14 days prior to a RCPSC certification exam

Weekends

Each resident must have 2 COMPLETE weekends off per 28 days; including Friday night/Saturday morning as well as Saturday and Sunday. A resident *cannot be on home all on 2 consecutive weekends*. Residents cannot be required to round (or perform other clinical duties) on weekends when not on call.

Call Responsibilities:

Residents will take calls for the in-patient consult service. This consult service provides Adult and Pediatric Allergy & Immunology, as well as, Pediatric Rheumatology coverage. While on call it is expected that residents will see consults within 24 hours of receipt of that consult. If a consult is on an emergent or urgent basis they will be seen as soon as possible. All consults will be reviewed with the attending on call. Residents will be supervised by the attending on call to the level appropriate for their level of training.

Consults may come from any of the hospitals in Hamilton. It is understood that if the consult service is busy the resident may be relieved from clinic duties. If a resident has worked past midnight while on call they will be excused from clinical duties the next day.

Residents may take calls from physicians in the community or directly from patients. All telephone advice should be discussed with the attending on call or, if possible, the attending who follows that patient. All telephone advice will be documented. If the resident does not feel comfortable giving advice in certain circumstances they may refer the person calling directly to the attending staff. If a patient requires urgent consultation or follow-up the on call resident will arrange this.

If a non-urgent consult comes in after 5pm on the last day of a resident's call the consult may be held for the resident commencing call the following morning.

For consults regarding penicillin testing, most of the time there will be leftover penicillin skin tests (prefilled syringes and record sheet) in the fridge in the fellow's office. Check the date to ensure the skin tests are not over a few weeks old or they will not be accurate. If there are no syringes in the fridge, call the hospital pharmacy and ask them to make you syringe's with Prepen and ampicillin . Bring a histamine control from the fellow's office fridge and get N. saline from the ward as the negative control. Prepen and ampicillin rules out penicillin allergy in the majority of patients so if these tests are negative we are comfortable going ahead with an oral challenge. If you have any further questions regarding this please ask the senior fellows.

The fellow on call is responsible for updating the online handover list at the end of his or her on call block and providing direct verbal handover to the following on call resident.

Special Circumstances

For Away Rotations (Mandatory or Elective):

While on rotation at another university residents are not expected to take call at McMaster University.

For Community Rotations, Laboratory Rotations, Research Rotations, Elective Rotations emphasis must be placed on the learning objectives of that rotation. Thus, residents are not expected to take weekday call. Residents are expected to participate in Friday teaching sessions on these rotations unless they are out of the region. (Fridays are considered a day back on your home service when you are on elective or selective in the region) If coverage is needed residents on these rotations will be asked to cover the consult service for one weekend (Fri/Sat/Sun) per block. Consults should not be held for the weekend for this reason.

ON CALL STIPEND

As per the PARO-CAHO agreement, each resident shall receive a stipend for each on-call shift. For Home call, this is \$52.50 per call. These shifts need to be entered into the HHS stipend system no later than 30 days after the end of the month the shift was worked. (Eg. The on call shift of June 6 must be entered by July 30). There are no exceptions, so please enter your calls on time! If there are any issues with this process please contact Human Resources, Postgrad, or PAIRO.

The website to enter calls worked is <https://hhsstipend.hhsc.ca/>. Your password is your Employee ID number found on your paycheck.

Resident Multi-site Call Travel Reimbursement Form

This form is for residents working city-wide or multi-site (at least 2 sites) call to claim reimbursement for travel costs (gas mileage) or for those without an HHSC/SJH parking

pass taxi/parking receipts incurred while travelling between hospital sites during their call shift and are required to be in the hospital between 6pm and 6am. Please find the form and further information at

<http://postgrad.medportal.ca/documents/ResidentMulti-SitetravelFormJuly262011.pdf>.

MOONLIGHTING POLICY: (see attached at end of document)

It is recognized that McMaster PGME cannot restrict, from a practical point of view, those residents with an independent practice certificate but this activity must not interfere with the training program.

Please find the McMaster University policy on Moonlighting at:

fhs.mcmaster.ca/postgrad/documents/MOONLIGHTINGPOLICY_2_.pdf

RESTRICTED REGISTRATION

Residents in their PGY4 year from the Internal Medicine stream can apply for restricted registration in order to participate in certain paid Internal Medicine shifts at McMaster hospital sites.

Residents require permission of the Program Director and Residency Program Committee to participate in this program. This will be granted only in exceptional circumstances. Restrictions will be placed on number and timing of shifts to ensure that the core training program experience is not compromised.

VACATION AND PROFESSIONAL LEAVE

Vacation

Residents are entitled to 4 weeks of paid vacation per year. A week of vacation is defined as five (5) working days plus two (2) weekend days. Vacation time may be delayed only where necessary having regard for professional and patient care responsibilities.

Housestaff may arrange for their vacation to be taken in one (1) continuous period or in segments provided professional and patient responsibilities are met. Requests must be made in writing at least 4 weeks in advance of the requests start day of the vacation and they are to be submitted no later than March 1st. **Requests for vacation are made via the online vacation system on the Postgraduate website.** This is accessible through your medportal account.

All requests must be confirmed or denied in writing within 2 weeks of the request being made. If denied, alternate times for vacation must be agreed to within 2 weeks. There can be no blanket policies restricting the amount of vacation in any rotation. Residents cannot be post call on the first day of vacation.

Professional Leave

Maximum of 7 working days per year (Note: weekends are not considered “working days” for this purpose.) Residents DO NOT need to be attending a seminar, course or conference to take a professional leave day, and the resident does not need to provide proof of what the day was used for.

Conference Funding

Some limited funding for conferences may be available depending on availability of program funding. Please discuss any requests with the PD about possible funding before incurring any costs.

In order to be reimbursed for these expenses, our program administrator Jenn must be provided in a timely manner with the following documents:

- Summary sheet of expenses being claimed
- Detailed receipts of purchases (credit card receipts only displaying total can be provided in addition, but are not acceptable on their own)
- Boarding passes for any flights being claimed
- Credit card statements for all credit card purchases being claimed

In addition to the funds provided by the program, residents are encouraged to apply for travel grants through the CSACI, AAAAI and ACAAI for relevant conferences.

Exam Leave:

Residents are entitled to take paid leave for the purpose of taking any Canadian or American professional certification exam. This leave time shall include the date(s) of the exam and reasonable travel time to and from the exam site. This leave is in addition to other vacation or leave time. Subject to operational requirements, residents will also be granted 7 consecutive days off during one of the four weeks preceding a RCPSC certification exam.

Holidays and Lieu Days

All Housestaff are entitled to the following recognized holidays:

- New Year's Day
- Family Day
- Easter Friday
- Victoria Day
- Dominion Day (AKA CANADA DAY)
- August Civic Holiday
- Labour Day
- Thanksgiving Day
- Christmas Day
- Boxing Day
- One Floating Holiday* **A floating holiday is a paid holiday taken at a time chosen by the resident. A program CANNOT tell a resident when to take their floating holiday.*

Residents are entitled to a lieu day if required to perform clinical duties on July 1st (Canada Day/Dominion Day) during any part of the day.

All house staff are entitled to 5 consecutive days off during the 12-day period encompassing Christmas Day and New Year's Day. These 5 days account for Christmas Day, New Year's Day, Boxing Day and two weekend days. Each resident must get either Christmas or New Year's Day off. **Residents do not get additional lieu days for working on either of the statutory holidays during the period.**

Lieu Days Where a resident works any part of one of the recognized statutory holidays, they are entitled to a lieu day to be taken at a time mutually convenient within 90 days of the holiday worked. This includes residents working home call for any portion of the 24 hours of the date of the holiday.

No lieu days for Christmas Day, New Year's Day & Boxing Day (this is included in the 5 days off over the holiday period).

Please find the McMaster Vacation Policy at

<http://fhs.mcmaster.ca/postgrad/documents/VacationPolicy2011.pdf> .

For a full listing of forms and policies available including **Tax forms** from the McMaster Postgraduate Medicine at <http://fhs.mcmaster.ca/postgrad/forms.html> and from links from your personal MedPortal.

OMBUDSPERSON:

In the event any resident has a concern that they feel they cannot approach the Program Director or the Chief resident for any reason, they can speak to the Ombudsperson. This is a member of the faculty who is not on the Residency Program Committee but can act as an advocate for the resident on any issues or concerns raised.

The Ombudsperson for the Clinical Immunology and Allergy Program is Dr. Martha Fulford.

Please also review the policies on the following topics prior to starting your training, at any time you have concerns, and at least once per year moving forward:

Harassment Policy:

http://www.mcmaster.ca/policy/General/HR/Discrimination_and_Harassment.pdf

Policy on Sexual Violence

http://mcmaster.ca/policy/General/HR/Sexual_Violence_Policy.pdf

Health and Personal Safety Policy: (see end of document for full text)

http://www.fhs.mcmaster.ca/medicine/Immunology_Allergy/residency/obj_safety.htm

Evaluation and appeals:

fhs.mcmaster.ca/postgrad/documents/EvaluationpolicyMAY292009FINAL.pdf

For a complete listing of all the policies of the Postgraduate Medicine department at McMaster University please visit: <http://fhs.mcmaster.ca/postgrad/policies.html>.

WEBSITE:

Please find all this information and so much more on our program website:

http://www.fhs.mcmaster.ca/medicine/Immunology_Allergy/residency/index.htm.

Royal College Documents:

[Royal College Examination dates](#)

[Royal College Objectives of training](#)

[Royal College Clinical Immunology and Allergy training requirements](#)

[Royal College Specific Standards of Accreditation](#)

Evaluations

In-Training Evaluation Reports (ITERS):

All evaluations are now completed online using WebEval software. **Rotation-specific evaluations** in CANMEDs format are distributed to attending staff. Evaluations address the rotation-specific goals and objectives outlined in this Syllabus. Once completed, evaluations are available immediately to the trainee. Trainees also complete **faculty and rotation evaluations** online.

ITERS will be forwarded to faculty centrally, not triggered by individual residents. For multiple consecutive core blocks, evaluations will be generated every 3 months.

Work Based Assessments (WBAs):

All residents have access to WBA evaluations within their Evaluation Dashboard in MedSIS. These evaluations are sent by the resident to faculty and staff as needed.

Multi Source Feedback (MSF) evaluation:

These are completed by non-physician allied health care members. Residents will be instructed to distribute these evaluations twice per year to the following staff members as applicable: Alvin Gutierrez, Marie Kancer, Marlies Henkel, Tosha Freitag, Monica Diana, and Jennifer Lourenco. You will receive a reminder to distribute these forms.

Written Consultation / Dictation evaluation:

Once per year, please select one consult letter to be reviewed by the faculty supervising the patient in question. You will receive a reminder to distribute this form.

Research project evaluation: Case Report Assessment or Research Project Assessment

WBAs for original research or case report should be distributed to your supervisor on completion of a scholarly project.

OSCE: At least once a year there will be mock OSCEs to assess the clinical and basic knowledge of the residents. This will also assess examination skills for future endeavors.

AAAAI ITE (In Training Exam): This is a yearly written exam (April or May) to assess knowledge and to hopefully demonstrate knowledge acquisition over the two years.

Grand Rounds presentation: you are expected to complete at least one Grand Rounds per year. Please pick a faculty to help you and to complete an evaluation.

Journal Clubs/Half-days: Evaluations will be completed for these mandatory presentations.

The Program Director meets with each trainee 4 times per year to review evaluations and discuss the trainee's performance and advancement.

Goals and Objectives:

The [Royal College Objectives of training](#) include all the Objectives for the 2 year training program. It is useful to refer back to this original document from time to time.

The Rotation Specific Goals and Objectives are important and are tailored to each specific rotation including core Pediatric and Adult Clinical Immunology and Allergy blocks, elective blocks, Lab rotation, Research blocks etc. These are available on the [Resident website](#) and are updated yearly. Please review these at the onset of any new rotation.

Overall Goals of the Residency Program

The goal of the McMaster Clinical Immunology and Allergy program is to train residents to become highly qualified experts in the subspecialty. Residents will be competent to see the full spectrum in the specialty including allergic disease, immunodeficiency and immunoregulatory disease in both pediatric and adult patient populations. Residents will be trained in the physiology, pathology, differential diagnosis, and treatment of such diseases with understanding of the therapeutic modalities including mechanisms of action, dosing, adverse effects, and costs of therapy. Residents will obtain the requisite knowledge, skills, and attitudes for effective patient-centered care and service to a diverse population including in-patient and ambulatory settings. In all aspects of specialist practice, residents will be able to address issues of gender, religion, sexual orientation, age, culture and ethnicity in a professional and ethical manner. Finally residents will become fully familiar with the methodology, application and interpretation of a wide variety of investigative/diagnostic tests applicable to the practice of Clinical Immunology and Allergy.

Rotation-Specific Goals and Objectives for Core Adult and Pediatric Clinical Immunology and Allergy Blocks

During the Core Adult and Pediatric Clinical Immunology and Allergy rotations, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Perform histories and physical examinations that are complete, accurate and well organized
- b. Demonstrate proficiency in formulation of differential diagnoses
- c. Demonstrate ability to accurately interpret results of appropriate diagnostic investigations relating to patient care in Clinical Immunology & Allergy
- d. Synthesize all of the pertinent information to arrive at complete and accurate clinical decisions
- e. Use preventive and therapeutic interventions effectively and independently
- f. Recognize the limits of their own expertise and seeks appropriate consultations from other health professionals

COMMUNICATOR

- a. Establish a therapeutic relationship with pediatric and adult patients and/or their caregivers and demonstrates and understanding of and recognizes emotional and personal needs of patients and families
- b. Provide clear and thorough explanations of diagnosis, investigations and management to patients and families
- c. Give appropriate advice (including but not limited to allergen avoidance, pharmacologic/immunologic treatment) which considers patient characteristics such as age, gender, religion, sexual orientation, age, culture and ethnicity
- d. Develop a common understanding on issues, problems and plans with patients, families and other professionals to develop a shared plan of care
- e. Prepare written documentation (including patient notes, and patient letters) that is accurate, organized and timely
- f. Demonstrate the ability to verbally present cases in an accurate, concise, and organized fashion

COLLABORATOR

- a. Interact effectively with health professionals by recognizing and acknowledging their roles and expertise
- b. Provide effective consultation relevant to Clinical Immunology and Allergy
- c. Consult and delegate effectively
- d. Establish good relationships with peers and other health professionals
- e. Collaborate effectively and constructively with other members of the health care team
- f. Demonstrate leadership in a health care team as appropriate
- g. Demonstrate understanding of issues involving disabilities, gender, race and culture when working with other team members
- h. Work with other health professionals effectively to prevent, negotiate, and resolve interprofessional conflict

MANAGER

- a. Demonstrate awareness and makes cost effective use of all forms of Clinical Immunology and Allergy health care resources based on sound judgment, and where possible evidence-based medicine
- b. Demonstrate knowledge of and willingness to be involved in, cost- containment and quality assurance programs
- c. Set realistic priorities and uses time effectively in order to optimize professional performance. Balances professional, personal and institutional commitments
- d. Demonstrate knowledge of the Canadian health care system and an awareness of the role of allergists/clinical immunologists in societal and governmental aspects of health care provision
- e. Demonstrates ability to manage clinic schedules and manage patient care priorities independently.

HEALTH ADVOCATE

- a. Advocate for and intervene on behalf of patients including appropriate preventive care and health surveillance strategies
- b. Promote active involvement of the patients and families in medical decision making
- c. Advocate for both the patient and family by working with the family to obtain needed services for care and on-going family support
- d. Recognize that the health care needs of children/adolescents are different from adults, and change throughout the developmental continuum
- e. Participate in efforts to increase public awareness of the medical conditions relevant to Clinical Immunology and Allergy
- f. Identify the determinants of health for the populations that they serve

SCHOLAR

- a. Demonstrate an understanding of and a commitment to the need for continuous learning. Develop and implement an ongoing and effective personal learning strategy with an analysis and evaluation of the relevant medical literature
- b. Give constructive feedback to both teacher and students
- c. Seek to learn from errors and aspires to excellence through self-evaluation and acceptance of the critiques of others
- d. Demonstrate the ability to critically appraise medical information. Successfully integrate information from a variety of sources
- e. Describe the principles of adult learning and helps others learn by providing guidance, teaching and by giving constructive feedback
- f. Receive feedback well

PROFESSIONAL

- a. Demonstrate honesty and integrity (including being fair, truthful and keeping one's word; meeting commitments; being forthright in interactions with patients, peers, and in all professional work whether through documentation, personal communication, presentations, research or other aspects of interaction)
- b. Demonstrate compassion and empathy (including listening attentively, responding

- humanely to the concerns of patients and family members)
- c. Demonstrate respect for others and diversity (including extends to all spheres of contact, including but not limited to patients, families, other physicians, and professional colleagues; treats all persons with respect and regard for their individual worth and dignity; is fair and non-discriminatory; aware of emotional, personal, family, and cultural influences on patient well-being and patients' rights and choices of medical care; respects confidentiality)
 - d. Demonstrate reliability, responsibility and conscientiousness (including meets deadlines, is punctual, complete assigned duties and fulfills commitments; accountable to one's patients and also to their families, accountable to society to ensure the public's needs are addressed; willingness to accept responsibility for errors)
 - e. Demonstrate an understanding of ethical practice and applies this to one's work (including accountable to one's profession to ensure that the ethical precepts of practice are upheld)
 - f. Demonstrate self-awareness/knowledge (including aware of one's own limitations and seeks advice when necessary; accept advice graciously; insightful as to the impact of one's behaviour on others and cognizant of appropriate professional boundaries)
 - g. Demonstrate altruism (including unselfish regard for and devotion to the welfare of others; self-interest or the interests of other parties should not interfere with the care of one's patients and families)
 - h. Demonstrate a commitment to physician health and sustainable practice, including balancing personal and professional priorities

Rotation-Specific Goals and Objectives for Clinical Immunology & Allergy Research Rotation

During the Clinical Immunology and Allergy Research Rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- g. Develop background knowledge about the research project
- h. Identify unanswered questions in the particular area of interest
- i. Explain the clinical relevance of their specific research project
- j. Demonstrate knowledge of how to obtain resources for a research project
- k. Understand the process for obtaining internal or external funding for research
- l. Demonstrate appropriate research skills
- m. Demonstrate an understanding of the scientific and technical principles of the research techniques/platforms

COMMUNICATOR

- g. Communicate effectively with supervisor(s) and collaborator(s)
- h. Demonstrate ability to present a concise overview of the research project
- i. Produce timely, accurate and well written research project(s)

COLLABORATOR

- i. Work effectively as part of a research team
- j. Recognize the importance of a collaborative approach to research

LEADER

- f. Demonstrate appropriate use of information technology for pertinent literature searches
- g. Manage time effectively while balancing research with clinical and other academic responsibilities

HEALTH ADVOCATE

- g. Recognize the contributions of scientific research in improving the health of patients and communities
- h. Demonstrate understanding of the importance of incorporating research ethics, with particular attention to confidentiality, in project design
- i. Obtain Research Ethics Board approval as applicable

SCHOLAR

- g. Demonstrate ability to critically appraise the scientific literature, incorporating findings into the design and presentation of the research project

PROFESSIONAL

- i. Demonstrate honesty and integrity
- j. Demonstrate reliability, responsibility and conscientiousness (including meeting deadlines, punctuality, completing assigned duties and fulfilling commitments)
- k. Demonstrate respect for others and sensitivity to gender and other social issues with members of the research team
- l. Demonstrate self-awareness/knowledge (including aware of one's own limitations and seeks advice when necessary; accept advice graciously; insightful as to the impact of one's behaviour)

Rotation-Specific Goals and Objectives for Dermatology Rotation

Trainees will be expected to acquire a working knowledge of the diagnosis and management of common dermatologic conditions relevant to the practice of Clinical Immunology and Allergy

The following sections outline the rotation expectations in CanMEDS roles within the domains of medical expert, communicator, collaborator, manager, health advocate, scholar and professional.

MEDICAL EXPERT

Key Competencies: *Physicians are able to:*

- a. Function effectively as consultants, integrating all the CanMEDS roles to provide optimal, ethical and patient centered medical care
- b. Perform a consultation, with recommendations that are organized and well documented in written and /or verbal form.
- c. Demonstrate the use of all CanMEDS competencies relevant to dermatology
- d. Demonstrate ability to prioritize professional duties when faced with multiple patients and problems

Apply fundamental knowledge, skills and attitudes to the practice of dermatology:

- a. Basic Science
- b. Overview of the immune system pertaining to the skin
- c. Therapeutics
 - topical steroids, topical immune modulators (i.e. tacrolimus)
 - Biologics including monoclonal antibody technology (cytokine, cytokine receptor) mediated therapy pertaining to skin conditions relevant to the practice of Clinical Immunology and Allergy
 - Monitoring of therapeutics agents and management of complications

Principles and Methodology of relevant laboratory tests:

- a. Laboratory tests for the diagnosis of autoimmune skin conditions diseases including measurement of inflammatory markers, autoantibodies and complement.
- b. Diagnostic techniques relevant to skin conditions, punch biopsy , with H&E and immunofluorescence

Clinical Sciences - demonstrate knowledge of etiology, pathophysiology, diagnostic methods, assessment and practical management of the following:

- a. Dermatitis (contact and atopic)
- b. Autoimmune (bullous pemphigoid, pemphigus, lichen planus, cutaneous lupus)
 - chronic urticaria
 - other (mastocytosis)

COMMUNICATOR

Key Competencies:

- a. develop rapport, trust, and ethical therapeutic relationships with patients
- b. accurately elicit and synthesize relevant information and perspectives of patients, colleagues and other professionals
- c. accurately convey relevant information and explanations to patients, colleagues and other professionals
- d. develop a common understanding on issues, problems, and plans with patients and families, colleagues, and other professionals to develop a shared plan of care
- e. Convey effective oral and written information about the dermatologic condition and the associated medical encounter

Specific Requirements:

- a. communicate effectively with all staff , allied health professionals and discuss appropriate information with patients and team
- b. establish effective relationships with patients, family members and caregivers to obtain meaningful history, conduct relevant physical exams and properly manage a patient's medical problem
- c. demonstrate effective communication skills by presenting concise, informative overviews on topics related to relevant dermatologic disorders

COLLABORATOR

Key Competencies:

- a. Participate effectively and appropriately in an inter professional healthcare team
- b. Effectively work with other health care professionals to prevent, negotiate and resolve inter-professional conflict

Specific Requirements:

- a. Contribute clinically appropriate dermatological opinions on patients referred for consultation, including arranging for specific testing, administering required therapy, and conveying clinically relevant results to referring physicians. Contribute effectively to interdisciplinary team activities held within hospital (rounds, journal clubs, etc.)

MANAGER

Key Competencies:

- a. participate in activities that contribute to the effectiveness of healthcare organizations and systems
- b. allocate finite healthcare resources appropriately

Specific Requirements:

- a. Appropriate use of IVIgG
- b. Appropriate use of biologics given in hospital and outpatient setting

HEALTH ADVOCATE

Key Competencies:

- a. Respond to individual patient healthcare needs and issues as part of patient care
- b. Respond to healthcare needs of the communities that they serve

- c. Identify the determinants of health of the populations that they serve
- d. Promote the health of individual patients, communities and populations

Specific Requirements:

- a. demonstrate an appreciation of the healthcare needs of patients with all serious dermatological conditions that necessitates admission to hospital
- b. Encourage active family involvement in decision making and ongoing management
- c. Understand how effective laboratory support is important in the management of patients with dermatological and medical problems
- d. Advocate for patients if there are obstacles in diagnosis and management as a result of limited resources

SCHOLAR

Key Competencies:

- a. Maintain and enhance professional activities through ongoing learning
- b. Critically evaluate information and apply this appropriately to practice decisions
- c. Facilitate the learning of patients, families, trainees, other health professionals, and the public as appropriate
- d. Contribute to the creation, dissemination, application, and translation of new medical knowledge and practices

Specific Requirements:

- a. Provide evidence during their case presentations to dermatology attendings, that they are acquiring an appropriate depth of knowledge of the particular dermatologic disorder. To develop critical appraisal skills specific to the dermatological literature, particularly as it applies to patient management.

PROFESSIONAL

Key Competencies:

- a. To demonstrate a commitment to their patients, profession and society through ethical practice
- b. To demonstrate commitment to their patients, profession, and society through participation in profession led regulation
- c. To demonstrate a commitment to physician health and sustainable practice

Specific Requirements:

- a. To deliver highest quality care with integrity, honesty and compassion
- b. To exhibit appropriate personal and interpersonal professional behaviour including civility and punctuality.
- c. To practice medicine ethically consistent with the obligations of a physician

Rotation-Specific Goals and Objectives for Ears, Nose and Throat (ENT)

During the ENT rotation, the resident will achieve the following in their role as:

1. MEDICAL EXPERT

- a. Build a strong knowledge base of the basic science and clinical information relevant to diseases of: nose, sinuses, middle ear, upper-airway associated lymphoid tissue and larynx, particularly those associated with allergic sensitization, environmental exposures and immunological abnormalities.
- b. Develop specific diagnostic and investigative skills including radiological examinations appropriate to the assessment of diseases in the ears, nose and throat.
- c. Acquire competence in the medical treatment modalities used in ENT diseases and become knowledgeable of surgical therapies in ENT conditions.

1.1. COMMUNICATOR

- a. Develop therapeutic relationship with patients with ears, nose and throat problems and with their families.
- b. Collect relevant information and synthesize the significant history from patients and families with regards to otolaryngological conditions particularly in those with a significant allergic and immunological component. Assess the influence of environmental cultural, social and economic factors on the illness.
- c. Listen effectively to information provided by patients, their families and other health professionals involved in the care of the individual patients with otolaryngological diseases.
- d. Deliver adequate information to the patients with otolaryngological conditions, specifically those with an allergic and immunological basis. Provide appropriate and comprehensive advice as well as instructions for environmental control, and other therapies related to ENT conditions.

COLLABORATOR

- a. In consultation with the ENT specialist and other health care professionals involved in the care of the patients with otolaryngological diseases, develop a comprehensive care-plan for the patient. While demonstrating the ability to incorporate the opinions of the ENT team, to enhance and contribute allergy/clinical immunology specific expertise to the team.

a.

MANAGER

- a. **Understand the functioning of the ENT department as part of a health care organization, utilizes its resources to the effect of balancing patient care, learning needs and outside activities.**
- b. **Make appropriate decisions when allocating finite health care resources.**
- c. Prioritize and execute tasks related to ENT care in an efficient manner.
- d. Utilize information technology to optimize patient care, maintain life-long learning.

HEALTH ADVOCATE

- a. Identify the important determinants of health affecting patients suffering from otolaryngological diseases, in particular those with allergic components.
- b. Contribute effectively to improve the health of patients and communities by adapting the management according to the patient's medical history, social circumstances, work environment, exposure to allergens or irritants.

SCHOLAR

- b. Critically appraise sources of medical information with regards to otolaryngological problems particularly those with an allergic/immunologic basis.

PROFESSIONAL

- a. **Deliver the highest quality care with integrity, honesty and compassion.**
- b. Exhibit appropriate personal and interpersonal professional behaviors.
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status.
- d. Practice medicine ethically, consistent with the obligations of a physician.
- e. Exhibits punctuality.

Rotation-Specific Goals and Objectives for Immunodeficiency Clinics

During the immunodeficiency rotation, the resident will achieve the following in their role as:

2. MEDICAL EXPERT

- a. Acquire an appropriate knowledge of basic science and clinical principles of immunodeficiency diseases both primary and secondary.
- b. Become proficient in the diagnosis, investigation and management of immunodeficiency conditions.
- c. Learn the principles and practical considerations of therapeutic modalities utilized in immunodeficiency diseases.

2.1. COMMUNICATOR

- a. Form therapeutic relationships with patients/families with immunodeficiency conditions.
- b. Obtain and synthesize relevant information from patients/families/health care professionals with regards to immunodeficiency conditions.
- c. Discuss appropriate information with the patient/family/health care professionals. Provide appropriate advice and instruction for therapies related to immunodeficiency conditions including infection treatment and control, bone marrow transplantation, and other immunomodulatory therapies.
- d. Conveys effective oral and written information around medical encounter.

COLLABORATOR

- a. Can work effectively with members of the Immunodeficiency diseases health care team to develop comprehensive care plan for the patient.

MANAGER

- a. Manages time and sets priorities to balance patient care, learning needs and personal life.
- b. Allocate finite health care resources.
- c. Utilize information technology to optimize patient care, maintain life-long learning.

HEALTH ADVOCATE

- a. Identify situations in immunodeficiency population where patient advocacy is required.
- b. Acts as a patient advocate where appropriate.

SCHOLAR

- a. Develops, implements and monitors a personal continuing education strategy with regards to relevant immunodeficiency diseases.
- b. Critically evaluates medical information and its sources with regards to immunodeficiency problems, and applies it appropriately to practice decisions.
- c. Facilitates learning of patients/families/health care professionals with regards to immunodeficiency problems.
- d. Attends and contributes to learning events where appropriate
- c.

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion.
- b. Exhibit appropriate personal and interpersonal professional behaviors.
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status.
- d. Practice medicine ethically, consistent with the obligations of a physician.

e. Exhibits punctuality.

Rotation-Specific Goals and Objectives for Laboratory Rotation

MEDICAL EXPERT

The overall objective of this period of training is to provide the resident with the necessary skills, competence and confidence to be aware of the issues that occur in biochemical laboratory analysis that may impact on the utility of laboratory results.

Operation of automated immunoassay analyzers:

- a. Understand the principles of the operation of automated analyzers
- b. Interpretation of results generated

Basic laboratory techniques and centrifugation:

- a. Methods of standardization and calibration
- b. Identification of common method interferences
- c. To detect errors and sources of error

Knowledge of the terminology used to evaluate an Analytical Method:

- Bias
- Imprecision
- Sensitivity
- Specificity
- Investigation of common interferences
- Range
- Criteria for acceptability

Describe the laboratory techniques used in Clinical Immunology and Allergy, including determination of normal values, indications and limitations, availability:

- a. Flow cytometry (cell surface markers & receptors)
 - lymphocyte enumeration (immunophenotyping)
 - cytokines
 - dihydro-rhodamine oxidation
 - total and specific-IgE
 - ELISA (EIA)
 - Bioplex ANA
 - AntiTTG (IgA)
 - Thyroid peroxidase (replacing thyroglobulin and microsomal Abs)
 - Indirect Immunofluorescent Assay (IFA)
 - ANCA
 - Mitochondrial AB, Smooth muscle Ab, Parietal cell Ab, Endomysial Ab
 - Nephelometry
 - Rheumatoid factor
 - Radial immunodiffusion (quantitative precipitin reaction)
 - C1 Inhibitor
- b. CH50
- c. Isohemagglutinins
- d. Functional Antibodies
 - Serum IgG to tetanus, diphtheria
 - Measles, mumps, rubella serology

- e. Precipitating IgG antibodies (Precipitins)
- f. Functional Lymphocyte Assay (sent out)
 - Mitogen proliferation
 - Antigen proliferation
- g. Immunoglobulin levels
- h. Complement assays (C3, C4, CH100)
- i. Immune complex assays (e.g. C1q binding)

COMMUNICATOR

Demonstrate an ability to listen effectively to laboratory staff, colleagues and patients and their families.

MANAGER

Describe the utility of diagnostic tests used in Clinical Immunology & Allergy to balance costs and availability in optimizing patient care

PROFESSIONAL

Exhibit appropriate personal and interpersonal professional behaviours

Rotation-Specific Goals and Objectives for Respiriology

During the Respiriology rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Develop solid knowledge base of the basic science and clinical information related to respiratory diseases particularly asthma, lung involvement in hypersensitivity and occupational diseases, auto-immune/rheumatological and vasculitic conditions.
- b. Gain proficiency in clinical diagnosis, investigational procedures and their interpretation relative to lower airway function and disease. Specific skills and interpretative strategies to be acquired: chest exam, pulmonary function testing, principles of bronchial challenges, sputum and exhaled, and gross interpretation of imaging studies.
- c. Acquire the principles and practical considerations of the management of respiratory diseases including the pharmacology of utilized treatment modalities.

2.2. COMMUNICATOR

- a. Establish a therapeutic relationship with patients with respiratory problems and with their families.
- b. Obtain appropriate information and synthesize the relevant history from patients and families with regards to respiratory conditions particularly in those with a significant allergic and immunological component. Assess the influence of environmental, cultural, and economic factors on the respiratory illness.
- c. Listen effectively to the information provided by patients and families and other health professionals involved in the care of the individual patients with respiratory diseases, particularly those with an allergic, autoimmune basis.
- d. Provide appropriate information to the patients with respiratory conditions, specifically those with an allergic/immunologic basis. Provide appropriate advice for environmental control, occupational exposures, asthma action plans, and problems related to respiratory conditions. Discuss appropriate information with the health care team when necessary.

2.3. COLLABORATOR

- a. In consultation with the respirologist and other health care professionals involved in the care of the patients with respiratory diseases, develop a comprehensive care-plan for the patient assessed. While demonstrating the ability to incorporate the opinions of respiratory team members to enhance and contribute clinical allergy/immunology specific expertise to the respiratory team.

MANAGER

- a. Understand the function of the Respiratory department as part of a health care organization, utilize its resources to the effect of balancing patient care, learning needs and outside activities.
- b. Make appropriate decisions when allocating finite health care resources.
- c. Prioritize and execute tasks related to respiratory care in an efficient manner.
- d. Utilize information technology to optimize patient care, maintain life-long learning.

HEALTH ADVOCATE

- a. Identify the important determinants of health affecting patients suffering from respiratory diseases, in particular those with allergic/immunologic basis.
- b. Contribute effectively to improve the health of patients by adapting the management according to the patients' medical history, social circumstances, work environment, exposure to allergens or airway irritants.
- c. Recognize and respond to those issues where advocacy is appropriate indicate how relevant allergens and airway irritants may be avoided in work places, homes, schools, etc.

SCHOLAR

- a. Develop, implement and monitor a personal continuing education strategy with regards to respiratory diseases.
- b. Critically appraise sources of medical information with regards to respiratory problems particularly those with an allergic/immunological component.
- c. Participate in the process of learning of patients, house staff, and other health professionals with regards to respiratory problems.

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion.
- b. Exhibit appropriate personal and interpersonal professional behaviors.
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status.
- d. Practice medicine ethically, consistent with the obligations of a physician.
- e. Exhibits punctuality.

Rotation-Specific Goals and Objectives for Rheumatology

The following sections outline the rotation expectations in CanMEDS roles within the domains of medical expert, communicator, collaborator, manager, health advocate, scholar and professional.

3. MEDICAL EXPERT

As Medical Experts, Clinical Immunologists and Allergists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centered care.

Key Competencies:

Physicians are able to:

- a. Function effectively as consultants, integrating all the CanMEDS Roles to provide optimal, ethical and patient centered medical care
- b. Perform a consultation, including the presentation of well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care professional
- c. Demonstrate use of all CanMEDS competencies relevant to Rheumatology
- d. Demonstrate ability to prioritize professional duties when faced with multiple patients and problems

Apply fundamental knowledge, skills and attitudes:

- a. Basic Science
- b. Overview of the immune system as pertaining to rheumatology
- c. effector mechanisms (chemokines/ cytokines/ adhesion molecules)
- d. B cell mediated immunity
- e. T cell mediate immunity
- f. Immune functions of cellular elements of immune system (platelets, T cells, B cells, granulocytes)

Pharmacology:

- steroids, IVIG, DMARDs, biologics

Therapeutics:

- cytokine, cytokine receptor mediated therapy
- recombinant molecules and humanized monoclonal antibodies
- monitoring for therapeutics agents and managing complications

Specific Diagnostics:

- Laboratory tests for inflammation and autoimmune diseases
- Autoantibody testing
- Diagnostic imaging techniques in assessment of rheumatic disease that overlap immunological conditions

Clinical Sciences - *demonstrate knowledge of etiology, pathophysiology, diagnostic methods, assessment and practical management of the following:*

- Vasculitides (small, medium , large vessels)
- Sarcoidosis
- Immune rheumatic disorders (including but not limited to SLE, Sjogrens)
- Inflammatory myositis

Principles and Methodology of lab techniques in Rheumatology related to Allergy:

- Measurement of immunoglobulins
- Serum protein electrophoresis and immunoelectrophoresis
- Measurement of immune complexes , cryoprecipitable proteins, complement
- Monoclonal antibody technology

3.1. COMMUNICATOR

Key Competencies:

- a. develop rapport, trust, and ethical therapeutic relationships with patients
- b. accurately elicit and synthesize relevant information and perspectives of patients, colleagues and other professionals
- c. accurately convey relevant information and explanations to patients, colleagues and other professionals
- d. develop a common understanding on issues, problems, and plans with patients and families, colleagues, and other professionals to develop a shared plan of care
- e. Convey effective oral and written information about medical encounter

Specific Requirements:

- a. communicate effectively with all staff , allied health professionals and discuss appropriate information with patients and team
- b. establish effective relationships with patients, family members and caregivers to obtain meaningful history, conduct relevant physical exams and properly manage a patient's medical problem
- c. understand the psychosocial aspects of caring for patients with acute, chronic and life threatening disorders
- d. understand the biomedical ethics involved in the investigation and care of patients with rheumatological disorders
- e. demonstrate effective communication skills by presenting concise, informative overviews on topics in the diagnosis of rheumatologic disorders

COLLABORATOR

Key Competencies:

- a. Participate effectively and appropriately in an interprofessional healthcare team
- b. effectively work with other health care professionals to prevent, negotiate and resolve interprofessional conflict

Specific Requirements:

- a. Contribute clinically useful rheumatological opinions on patients referred for consultation, including ordering and arranging for specific testing, administering required therapy, and

conveying results of the rheumatological opinion to referring physicians. This may require integrating results of clinical, laboratory , EMG, and radiological data

- b. Consult and collaborate with physicians, lab staff, clinic staff and other health care professionals and contribute effectively to interdisciplinary team activities held within hospital (rounds, journal clubs, etc.)

MANAGER

Key Competencies:

- a. participate in activities that contribute to the effectiveness of their healthcare organizations and systems
- b. allocate finite healthcare resources appropriately
 - specific Requirements
 - appropriate use of IVIG
 - appropriate use of biologics given in hospital setting

HEALTH ADVOCATE

Key Competencies:

- a. Respond to individual patient health needs and issues as part of patient care
- b. respond to health needs of the communities that they serve
- c. identify the determinants of health of the populations that they serve
- d. promote the health of individual patients, communities and populations

Specific Requirements:

- a. demonstrate an appreciation of the health care needs of patients with all serious rheumatological conditions that necessitates admission to hospital
- b. encourage promotion of active family involvement in decision making and continuing management
- c. understand the ways effective laboratory support is important to patients with rheumatological and medical problems
- d. advocate for patients if there are delays in diagnosis and management as a result of limited resources

SCHOLAR

Key Competencies:

- a. maintain and enhance professional activities through ongoing learning
- b. critically evaluate information and its sources and apply this appropriately to practice decisions
- c. Facilitate the learning of patients, families, students, residents and other health professionals , the public and others as appropriate
- d. contribute to the creation, dissemination, application, and translation of new medical knowledge and practices

Specific Requirements:

- a. Provide evidence in the material that they present during their presentations of cases to rheumatology attendings that they are acquiring an appropriate level of in depth knowledge pertaining to rheumatology diagnostics and a current understanding of the pathophysiology of the disorder

- b. develop critical appraisal skills specific to rheumatological literature, particularly as it applies to the physiology and pathophysiology of the particular rheumatological disorder being treated

PROFESSIONAL

Key Competencies:

- a. demonstrate a commitment to their patients, profession and society through ethical practice
- b. demonstrate commitment to their patients, profession, society through participation in profession led regulation
- c. demonstrate a commitment to physician health and sustainable practice

Specific Requirements

- a. deliver highest quality care with integrity, honesty and compassion
- b. exhibit appropriate personal and interpersonal professional behaviour
- c. practice medicine ethically consistent with obligations of a physician
- d. be courteous and punctual
- e. follow up on patients evaluated
- f. arrange additional laboratory investigations as appropriate

Rotation-specific Goals and Objectives for Senior Resident Clinic in Clinical Immunology and Allergy Blocks

During the second year of training the resident will attend and run the Senior Resident Clinic longitudinally. The resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Demonstrate proficiency in formulation of differential diagnoses
- b. Demonstrate ability to accurately interpret and follow-up on appropriate diagnostic investigations relating to patient care in Clinical Immunology & Allergy
- c. Synthesize all of the pertinent information to arrive at complete and accurate clinical decisions
- d. Use preventive and therapeutic interventions effectively and independently
- e. Recognize the limits of their own expertise and seeks appropriate consultations from other health professionals

COMMUNICATOR

- a. Establish a therapeutic relationship with pediatric and adult patients and/or their caregivers
- b. Provide clear and thorough explanations of diagnosis, investigations and management to patients and families
- c. Give appropriate advice in the clinic and on the phone if necessary
- d. Prepare written documentation (including patient notes and patient letters) that is accurate, organized and timely
- e. Demonstrate the ability to verbally present cases in an accurate, concise, and organized fashion

COLLABORATOR

- a. Interact effectively with health professionals by recognizing and acknowledging their roles and expertise including nurses, clinic clerks, administrative assistants
- b. Provide effective consultation relevant to Clinical Immunology and Allergy
- c. Establish good relationships with peers and other health professionals
- d. Collaborate effectively and constructively with other members of the health care team
- e. Demonstrate leadership in a health care team as appropriate
- f. Demonstrate understanding of issues involving disabilities, age, gender, race and culture when working with other team members
- g. Work with other health professionals effectively to prevent, negotiate, and resolve interprofessional conflict

MANAGER

- a. Demonstrate awareness and makes cost effective use of all forms of Clinical Immunology and Allergy health care resources based on sound judgment, and where possible evidence-based medicine
- b. Demonstrate knowledge of and willingness to be involved in, cost- containment and quality assurance programs
- c. Set realistic priorities and uses time effectively in order to optimize professional

- performance. Balances professional, personal and institutional commitments
- d. Demonstrate knowledge of the Canadian health care system and an awareness of the role of allergists/clinical immunologists in societal and governmental aspects of health care provision
 - e. Demonstrates ability to manage clinic schedules and manage patient care priorities independently.

HEALTH ADVOCATE

- a. Advocate for and intervene on behalf of patients including appropriate preventive care and health surveillance strategies
- b. Advocate for both the patient and family by working with the family to obtain needed services for care and on-going family support
- c. Recognize that the health care needs of children/adolescents are different from adults, and change throughout the developmental continuum
- d. Participate in efforts to increase public awareness of the medical conditions relevant to Clinical Immunology and Allergy

SCHOLAR

- a. Demonstrate an understanding of and a commitment to the need for continuous learning. Develop and implement an ongoing and effective personal learning strategy with an analysis and evaluation of the relevant medical literature
- b. Seek to learn from errors and aspires to excellence through self-evaluation and acceptance of the critiques of others
- c. Demonstrate the ability to critically appraise medical information. Successfully integrate information from a variety of sources
- d. Describe the principles of adult learning and helps others learn by providing guidance, teaching and by giving constructive feedback
- e. Receive feedback well

PROFESSIONAL

- a. Demonstrate honesty and integrity (including being fair, truthful and keeping one's word; meeting commitments; being forthright in interactions with patients, peers, and in all professional work whether through documentation, personal communication, presentations, research or other aspects of interaction)
- b. Demonstrate compassion and empathy (including listening attentively, responding humanely to the concerns of patients and family members)
- c. Demonstrate respect for others and diversity
- d. Demonstrate reliability, responsibility and conscientiousness
- e. Demonstrate an understanding of ethical practice and applies this to one's work (including accountable to one's profession to ensure that the ethical precepts of practice are upheld)
- f. Demonstrate self-awareness/knowledge (including aware of one's own limitations and seeks advice when necessary; accept advice graciously; insightful as to the impact of one's behaviour on others and cognizant of appropriate professional boundaries)
- g. Demonstrate altruism (including unselfish regard for and devotion to the welfare of others; self-interest or the interests of other parties should not interfere with the

- care of one's patients and families)
- h. Demonstrate a commitment to physician health and sustainable practice, including balancing personal and professional priorities

Rotation-Specific Goals and Objectives for Community Clinical Immunology and Allergy Block

During the Community rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Become proficient in gathering appropriate and timely information on patients (history, physical exam, investigations) and independently formulating a management plan
- b. Gain experience with administering and supervising food and drug oral challenges
- c. Gain experience in preparing and performing patch testing
- d. Become proficient in immunotherapy (SLIT and SCIT), including patient selection, dosing adjustment, mixing venom immunotherapy, and recognizing contraindications.
- e. Gain experience with biologic therapies including mixing and administration (e.g. Xolair, Nucala)
- f. Obtain knowledge regarding establishing and managing a practice including sources and cost of extracts, spirometry, patch testing, other clinic supplies and human resource management

COMMUNICATOR

- a. Communicate effectively with patient/family at a consultant level, gaining their trust and confidence
- b. Obtain appropriate informed consent on SCIT and SLIT
- c. Counsel appropriately on testing modalities e.g. oral challenges, serum specific IgE, including risks and benefits, costs of investigations in the community

COLLABORATOR

- a. Demonstrate adjustment to new team and work well with assistants, nurses and other clinic staff
- b. Seek referrals appropriately from other consultants

LEADER

- a. Function with appropriate level of autonomy for their training level with assigned patients
- b. Practice effective time management
- c. Guide allied health staff effectively and appropriately with shared patients
- d. Acquire knowledge on operating a clinic in a cost-effective manner, including developing proficiency in billing OHIP codes for allergy services rendered

HEALTH ADVOCATE

- a. Advocate for and intervene on behalf of patients, including encouraging proper environmental control, assisting with access to medications and smoking cessation resources, providing action plans for asthma and anaphylaxis
- b. Manage daily schedule so patients are seen in a timely manner

SCHOLAR

- a. Demonstrate evidence based management strategies
- b. Actively seek information from literature to address knowledge gaps

PROFESSIONAL

- a. Seek help appropriately and respectfully from consultant and other staff in clinic when needed
- b. Demonstrate respect of all team members
- c. Accept and act on feedback appropriately

Rotation-Specific Goals and Objectives for Human Immunodeficiency Virus (HIV) Medicine

During the HIV medicine rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- d. Build a strong knowledge base regarding T cell structure and function
- e. Review the mechanism of HIV infection/transmission
- f. Develop understanding of HIV testing methodologies
- g. Develop strong knowledge of the clinical information relevant to diagnosis and management of HIV
- h. Acquire competence in the medical treatment modalities for HIV, their mechanisms of action, their indications and contraindications, common side effects and management of these side effects
- i. Develop strong knowledge of the common complications of HIV including the clinical circumstances in which these typically occur

COMMUNICATOR

- a. Develop therapeutic relationships with patients infected with HIV and their families
- b. Collect relevant information and synthesize the significant history from patients and families with regards to their diagnosis of HIV, complications of their disease and treatment
- c. Listen effectively to information provided by patients, their families and other health professionals involved in the care of the individual patients
- d. Deliver adequate information to the patients regarding their diagnosis and treatment

COLLABORATOR

- a. In consultation with the Infectious Disease specialist and other health care professionals, develop a comprehensive care-plan for the patient.

LEADER

- a. Understand the function of the HIV clinic as part of a health care organization
- b. Understand the role of different health care practitioners and allied health within the HIV clinic
- c. Make appropriate decisions when allocating finite health care resources
- d. Prioritize and execute tasks related to patient care in an efficient manner
- e. Utilize information technology to optimize patient care, maintain life-long learning

HEALTH ADVOCATE

- a. Identify the important determinants of health including environmental, cultural, social and economic factors affecting patients with HIV
- b. Contribute effectively to improve the health of patients and communities

SCHOLAR

- a. Critically appraise sources of medical information with regards to HIV medicine

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion.

- b. Exhibit appropriate personal and interpersonal professional behaviors
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status
- d. Practice medicine ethically, consistent with the obligations of a physician
- e. Exhibit punctuality

Rotation-Specific Goals and Objectives for Solid Organ Transplantation Rotation

During the Solid Organ Transplantation rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Understand major histocompatibility complex structure and function
- b. Develop knowledge regarding the basic science principles of transplant rejection and tolerance
 - i. Understand alloreactive T cell activity and recognition of alloantigens
- c. Demonstrate knowledge of indications for transplant (organ site specific)
- d. Demonstrate knowledge of the management of complications of transplant, including rejection and infection
- e. Understand the principles of prevention, recognition and treatment of transplant rejection
- f. Understand the pathophysiology, presentation, prevention and management of graft vs host reactions
- g. Demonstrate knowledge of peri-transplant immunomodulatory regimens used in solid organ transplantation and their indications
- h. Describe the principles and methodology of histocompatibility typing

COMMUNICATOR

- a. Develop therapeutic relationship with transplant recipients and donors
- b. Collect relevant information and synthesize the significant history from patients and families
- c. Listen effectively to information provided by patients, their families and other health professionals involved in the care of the individual patients
- d. Deliver adequate information to the patients regarding their disease and treatment
- e. Provide appropriate and comprehensive advice as well as instructions for therapies

COLLABORATOR

- a. In consultation with the transplant team and other health care professionals involved, develop a comprehensive care-plan for the patient
- b. While demonstrating the ability to incorporate the opinions of the transplant team, enhance and contribute allergy/clinical immunology specific expertise to the team

LEADER

- a. Understand the function of the transplant team as part of a health care organization
- b. Understand the role of different health care practitioners and allied health members within the transplant team
- c. Understand the economic impact associated with organ transplantation for different indications
- d. Make appropriate decisions when allocating finite health care resources
- e. Prioritize and execute tasks in an efficient manner
- f. Utilize information technology to optimize patient care, maintain life-long learning

HEALTH ADVOCATE

- a. Identify the important determinants of health including environmental cultural, social and economic factors on transplant donors and recipients
- b. Contribute effectively to improve the health of patients and communities by adapting the management according to the patient's medical history and social circumstances

SCHOLAR

- a. Critically appraise sources of medical information with regards to organ transplantation, particularly those related to immunologic mechanisms and immunomodulatory treatments

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion
- b. Exhibit appropriate personal and interpersonal professional behaviors
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status
- d. Practice medicine ethically, consistent with the obligations of a physician
- e. Exhibit punctuality

Rotation-Specific Goals and Objectives for Bone Marrow Transplantation Rotation

During the Bone Marrow Transplantation rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Understand major histocompatibility complex structure and functions
- b. Develop knowledge regarding the basic science principles of graft rejection and tolerance
 - i. Understand alloreactive T cell activity and recognition of alloantigens
- c. Demonstrate knowledge of indications for bone marrow transplantation, both autologous and allogeneic
- d. Demonstrate knowledge of the management of complications of transplant, including rejection and infection
- e. Understand the principles of prevention, recognition and treatment of allograft rejection
- f. Understand the pathophysiology, presentation, prevention and management of graft vs host reactions (acute and chronic)
- g. Demonstrate knowledge of conditioning regimens used in bone marrow transplant for different indications
- h. Become familiar with immunomodulatory medication commonly used in transplantation
- i. Describe the principles and methodology of histocompatibility typing

COMMUNICATOR

- a. Develop therapeutic relationship with bone marrow transplant recipients and donors
- b. Collect relevant information and synthesize the significant history from patients and families
- c. Listen effectively to information provided by patients, their families and other health professionals involved in the care of the individual patients
- d. Deliver adequate information to the patients regarding their disease and treatment
- e. Provide appropriate and comprehensive advice as well as instructions for therapies

COLLABORATOR

- a. In consultation with the hematology team and other health care professionals involved, develop a comprehensive care-plan for the patient
- b. While demonstrating the ability to incorporate the opinions of the hematology team, enhance and contribute allergy/clinical immunology specific expertise to the team

LEADER

- a. Understand the function of the bone marrow transplantation team as part of a health care organization
- b. Understand the role of different health care practitioners and allied health members within the bone marrow transplantation team
- c. Understand the economic impact associated with bone marrow transplantation for different indications
- d. Make appropriate decisions when allocating finite health care resources
- e. Prioritize and execute tasks in an efficient manner
- f. Utilize information technology to optimize patient care, maintain life-long learning

HEALTH ADVOCATE

- a. Identify the important determinants of health including environmental cultural, social and economic factors on bone marrow transplant donors and recipients
- b. Contribute effectively to improve the health of patients and communities by adapting the management according to the patient's medical history and social circumstances

SCHOLAR

- a. Critically appraise sources of medical information with regards to bone marrow transplantation, particularly those related to bone marrow transplant in immunodeficiency

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion
- b. Exhibit appropriate personal and interpersonal professional behaviors
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status
- d. Practice medicine ethically, consistent with the obligations of a physician
- e. Exhibit punctuality

Rotation-Specific Goals and Objectives for Occupational Medicine

During the Occupational Medicine rotation, the resident will achieve the following in their role as:

MEDICAL EXPERT

- a. Demonstrate knowledge of the etiology, pathophysiology, assessment and practical management of occupational rhinitis and occupational asthma
- b. Demonstrate knowledge of the etiology, pathophysiology, assessment and practical management of allergic contact dermatitis as it relates to workplace exposures
- c. Develop specific diagnostic and investigative skills including radiological examinations appropriate to the assessment of diseases related to occupational exposures
- d. Understand the role of patch testing in the diagnosis of allergic contact dermatitis as it relates to occupational exposures
- e. Become proficient in technical aspects of patch testing for allergic contact dermatitis
- f. Understand the role of Occupational Medicine physicians in the prevention of occupational and environmental injury
- g. Acquire competence in the medical treatment modalities used for common occupational illnesses/injuries

COMMUNICATOR

- a. Develop therapeutic relationship with patients with occupation related illnesses
- b. Collect relevant information and synthesize the significant history from patients and families
- c. Listen effectively to information provided by patients, their families and other health professionals involved in the care of the individual patients with occupation related illness
- d. Deliver adequate information to the patients with occupation related conditions
- e. Provide appropriate and comprehensive advice as well as instructions for environmental control, and other therapies

COLLABORATOR

- a. In consultation with the Occupational health specialist and other health care professionals involved, develop a comprehensive care-plan for the patient
- b. While demonstrating the ability to incorporate the opinions of the Occupational Medicine team, to enhance and contribute allergy/clinical immunology specific expertise to the team

LEADER

- a. Understand the functioning of the Occupational Medicine department as part of a health care organization
- b. Understand the roles of different health care practitioners / allied health within the Occupational Medicine clinic
- c. Understand the economic impact associated with occupational health issues
- d. Make appropriate decisions when allocating finite health care resources
- e. Prioritize and execute tasks related to care of occupation related illness in an efficient manner
- f. Utilize information technology to optimize patient care, maintain life-long learning

HEALTH ADVOCATE

- a. Identify the important determinants of health including environmental, cultural, social and economic factors affecting patients suffering from occupation related diseases, in particular those with allergic components
- b. Contribute effectively to improve the health of patients and communities by adapting the management according to the patient's medical history, social circumstances, work environment, exposure to allergens or irritants

SCHOLAR

- a. Critically appraise sources of medical information with regards to occupational medicine problems particularly those with an allergic/immunologic basis

PROFESSIONAL

- a. Deliver the highest quality care with integrity, honesty and compassion
- b. Exhibit appropriate personal and interpersonal professional behaviors
- c. Respect diversity of age, gender, disability, intelligence and socioeconomic status
- d. Practice medicine ethically, consistent with the obligations of a physician
- e. Exhibit punctuality

Appendix B - Adult and Pediatric Clinical Immunology and Allergy Residency Program McMaster University

Resident Occupational Health and Safety Policy

1. Introduction

Resident education must occur in a physically safe environment (Royal College of Physicians and Surgeons of Canada, standard A.2.5; College of Family Physicians of Canada). The university also recognizes that safe working environment for trainees is beneficial to resident education and patient care, and that there are ethical and moral reasons for maintaining such a working environment.

The purpose of this document is to provide a policy regarding workplace safety for postgraduate trainees in Clinical Immunology and Allergy at McMaster University and to demonstrate the commitment of the residency training program in providing and maintaining healthy and safe working and learning environment for all postgraduate trainees. This is achieved by observing best practices which meet or exceed the standards to comply with legislative requirements as contained in the Ontario Occupational Health and Safety Act, Environmental Protection Act, their regulations, and the policy and procedures established by the University.

It is expected that the postgraduate trainee, the residency training program, the Postgraduate Medical Education (PGME) Office will work together with the affiliated teaching hospitals and community training sites to ensure the personal safety of all postgraduate trainees.

This policy complies with the Royal College accreditation standards A2.5 and B1.3.9 and does not supersede any University wide or PGME Policy that is already established. In this policy, “Safety” relates to the residents’ physical, emotional and professional wellbeing. See: <http://fhs.mcmaster.ca/postgrad/policies.html>

2. Scope:

This policy covers resident safety in the areas of travel, patient encounters, including house calls, after-hours consultations in isolated departments (Royal College Standard B1.3.9). This policy should allow resident discretion and judgment regarding their personal safety and ensure residents are appropriately supervised during all clinical encounters.

These policies apply only during residents’ activities that are related to the execution of residency duties.

3. Program Specific Policies:

3.1 The Resident Safety Policy needs input and acceptance from the residents through the residency education committee.

3.2 Residents need to provide rotation and faculty evaluations to help direct or establish concerns of resident safety.

3.3 The residency program administration and the Program Director need to act promptly to verify safety issues and take due action to rectify the problem.

3.4 Critical incidents involving residents must be recorded, and appropriate debriefing should occur in a timely fashion.

4. Responsibility of the Resident:

Travel

- 4.1 Residents traveling for clinical or other academic duties by private vehicle should maintain their vehicle adequately and travel with appropriate supplies and contact information. Residents should not use cell phone use or text messaging while driving.
- 4.2 If the resident has determined that it is unsafe to travel (i.e. due to extreme weather concerns), the resident may elect not to attend clinic, see a consult, or academic half day. However, they must inform their clinical supervisors as soon as possible in a professional manner.
- 4.3 Residents should ensure adequate rest after call duties before traveling home from the site of clinical duties. Call rooms are available at each training site to accommodate residents for rest before travel. Residents should discuss such arrangements with the on-call supervisor or program director.
- 4.4 Residents who are called in for clinical duties after 6 pm and before 6 am, and feel unsafe to drive post call should opt to take a taxi for transportation. Reimbursement for taxi charges will be provided upon presentation of appropriate receipts.
- 4.5 Residents are not required to attend academic half day if they are greater than 50 km away from the academic half day location nor are they required to attend on post call days. Should residents feel well rested despite being post call, they are encouraged and welcome to attend academic sessions. If not attending due to post call, residents must inform the Program Assistant (Jennfer Lourenco) of this reason for absence.

Physical Safety

- 4.6 Residents must participate in required safety sessions including Workplace Hazardous Materials Information and Safety (WHMIS), Fire safety, and abide by the Safety codes of the designated area where s/he is training.
- 4.7 Residents must observe universal precautions and isolation procedures. If necessary, a refresher or literature will be provided on universal precaution procedures.
- 4.8 Residents should familiarize themselves with the occupational and safety office. This includes familiarity with policies and procedures in reporting contact with contaminated fluids, needles, TB exposure or risk, etc.
- 4.9 Residents should keep their immunizations and TB skin testing up to date. Overseas travel immunizations and advice should be organized well in advance when traveling abroad for electives or meetings. Since the residency training program does not mandate overseas electives, the resident is expected to coordinate and finance these services.
- 4.10 Residents should not assess violent or psychotic patients without the backup of security or a supervisor and also an awareness of accessible exits.
- 4.11 Residents should not work alone at after-hours clinics, make unaccompanied home visits, perform air transport, or arrange to meet patients after hours without on-site support. This does not apply if a patient is being seen in the emergency room or on a hospital ward. A supervisor must always be present if the resident is assessing a patient in an ambulatory setting after hours.
- 4.12 If the resident feels that his/her own personal safety is threatened, s/he should seek immediate assistance and remove themselves from the situation in a professional manner. The resident should be aware of the contact for security at participating training sites. The

resident should ensure that their immediate supervisor and/or Program Director, has been notified, as appropriate. The resident can also bring their safety concerns to the attention of the PGME office (905 525 9140 Ext. 22118) during regular work hours, particularly if the Program Director is not available. If an issue arises after regular office hours, where the clinical supervisor and/or Program Director may not be available, contact Security of the institution where the trainee is based.

- 4.13 Residents doing home call and arriving after hours should be aware of their environment before leaving their car and have a cellphone available to contact security if it is deemed an escort is required. If residents feel potential threat to their safety, residents should not exit their cars and leave accordingly. In the rare event this occurs, residents should notify the clinical supervisors on call.
- 4.14 Residents must get approval from the program director when planning to do an elective outside of North America to ensure compliance with standards and best practices for the safety of all trainees. International electives must occur in a stable political environment with a qualified preceptor to provide appropriate supervision. Additionally, there must be a Canadian Consulate in that country.
- 4.15 Residents must use caution with respect to confidential personal and patient information, and exercise good judgment and professional behavior when using social media.
- 4.16 If an injury occurs while working, the injury must be reported as follows:
 - During daytime hours, while working at one of the Hamilton teaching hospitals, the trainee should go to the Employee Health Office at any of the teaching hospitals. An incident form will be provided by the Employee Health Office to the trainee. Trainees are encouraged to submit a copy of the incident form to the Program Director and the PGME Office for records.
 - During after hours, while working at one of the Hamilton teaching hospitals or if working at a training site outside of the Hamilton area, the trainee should go to the nearest emergency room and identify themselves as a resident and request to be seen on an urgent basis. The trainee must complete, within 24 hours, an Injury / Incident Report available in the local emergency room. The form should be submitted to the hospital where the injury took place, the Program Director and the PGME office for records.

Psychological Safety

- 4.17 Residents are encouraged to report incidents of intimidation, harassment and discrimination to the Program Director. Any incidents or issues brought forth to the Program Director will remain confidential and residents have the right to confidential psychological and counseling services.
- 4.18 Residents are encouraged to comment on the rotation evaluations professional issues encountered by staff and residents.
- 4.19 Professional Safety
- 4.20 Residents must not be expected to participate in any situation that would go against their professional responsibilities, ethics, or moral beliefs.
- 4.21 Residents must have adequate contact with their clinical supervisors for help during critical incidents.
- 4.22 CMPA provides legal advice and insurance for residents who have acquired coverage.

5. Responsibility of the Program

- 5.1 It is the responsibility of the residency training program and the PGME to ensure that appropriate safety sessions are available to all trainees. In addition to WHMIS, the residency training program must ensure that there is an initial, specialty, site-specific orientation available to the trainee.
- 5.2 It is the responsibility of the residency training program to ensure that individual clinics or practice settings develop a site specific protocol in the event that personal safety is breached. The protocol should include the following:
- Identify potential risks to the trainee
 - Include how the trainee would alert the supervisor if they felt at risk during an encounter, identification of potentially problematic patients at the beginning of the encounter, so they could be monitored.
 - A supervisor or co-worker must be present:
 - While the trainee is seeing a patient after hours in clinic. This would not apply if the patient is being seen in an emergency room.
 - At the end of office hours if the trainee is still with patients.
- 5.3 It is the responsibility of the residency training program to that each training site remains compliant with the program policy.
- 5.4 It is the responsibility of the residency training program to ensure a safe learning environment that is free from intimidation, harassment and discrimination. The residency training program will not tolerate such behaviors.

Resources available:

Postgraduate Medical Education Office

Phone: 905 525 9140 Ext. 22118

Fax: 905 527 2707

Faculty of Health Sciences Safety Office

Phone: 905 525 9140 Ext. 24956

Fax: 905 528 8539

Health Sciences Centre, Room 3N1C

1200 Main Street West, Hamilton, ON, L8N 3Z5

Hamilton Health Sciences

Human Resources – Employee Health

Telus Sourcing Solutions

120 King Street West, Suite 200

Hamilton, ON

Phone: 905 387 9495 Ext. 63900

St. Joseph's Healthcare

Occupational Health and Safety Services

50 Charlton Avenue East

Hamilton, ON, L8N 4A6

Phone: 905 522 1155 Ext. 33344

MOONLIGHTING POLICY

COFM policy

Moonlighting is defined as: Residents registered in postgraduate medical education programs leading to certification with the Royal College of Physicians and Surgeons of Canada or the College of Family Physicians of Canada who provide clinical services for remuneration outside of the residency program. Moonlighting has been more recently called “restricted registration for residents”.

The Ontario Faculties of Medicine does not support resident moonlighting. Moonlighting compromises postgraduate programs and undermines the educational environment.

McMaster Postgraduate Medical Education Policy on Resident Moonlighting

McMaster Postgraduate Medical Education (PGME) supports the COFM policy on Resident Moonlighting. It is recognized that McMaster PGME cannot restrict, from a practical point of view, those residents with an independent practice certificate but feel that this activity must not interfere with the training program. The program director should be informed by the resident of this activity so that s/he can monitor its effect on the resident as well as the program.

It is recognized that there is a manpower problem within health care in Ontario but it is not under the mandate of McMaster PGME to solve this problem. The McMaster Postgraduate Medical Education Program wishes to maintain an environment in which there is

1. a positive balance between education and service
2. a strong academic focus in our training programs
3. no confusion regarding the resident’s role in the clinical setting

Background:

In 2004 the College of Physicians and Surgeons of Ontario outlined a proposal for Restricted Registration for Residents.

In September 2006 the Ontario Ministry of Health and Long-Term Care identified Restricted Registration as a potential solution to Emergency Room challenges. In

Faculty of Health Science MDCL 3113 Phone 905.525.9140

Office of Postgraduate Medical Education 1200 Main Street West Ext. 22118 or 22116

Hamilton, Ontario Fax 905.527.2707

Canada L8N 3Z5 November 2006 PGE:COFM approved the submission of a proposal to the CPSO and

the Ministry.

At the request of the Minister and after consultations with stakeholders, the University of Toronto developed a pilot project for Restricted Registration with the participation of the CPSO, PAIRO and the other medical schools.

In May 2010, PGE:COFM put forth a recommendation that the Restricted Registration Pilot Project transition to a permanent program.

Restricted Registration

There is a process whereby residents are able to practice medicine with a certificate of Restricted Registration. "Restricted Registration" is a certificate offered by the College of Physicians and Surgeons of Ontario (CPSO) to Residents who meet agreed on criteria.

The Council of Ontario Faculties of Medicine have defined "Restricted Registration", another term for Limited Licensure, as "Residents registered in postgraduate medical education programs leading to certification with the Royal College of Physicians and

Surgeons of Canada or the College of Family Physicians of Canada who provide clinical services for remuneration outside of the residency program.”

For details, please refer to the website:

<http://www.restrictedregistrationontario.ca/index.html>

Approved PGEC/November 26/05

Revised May 2011