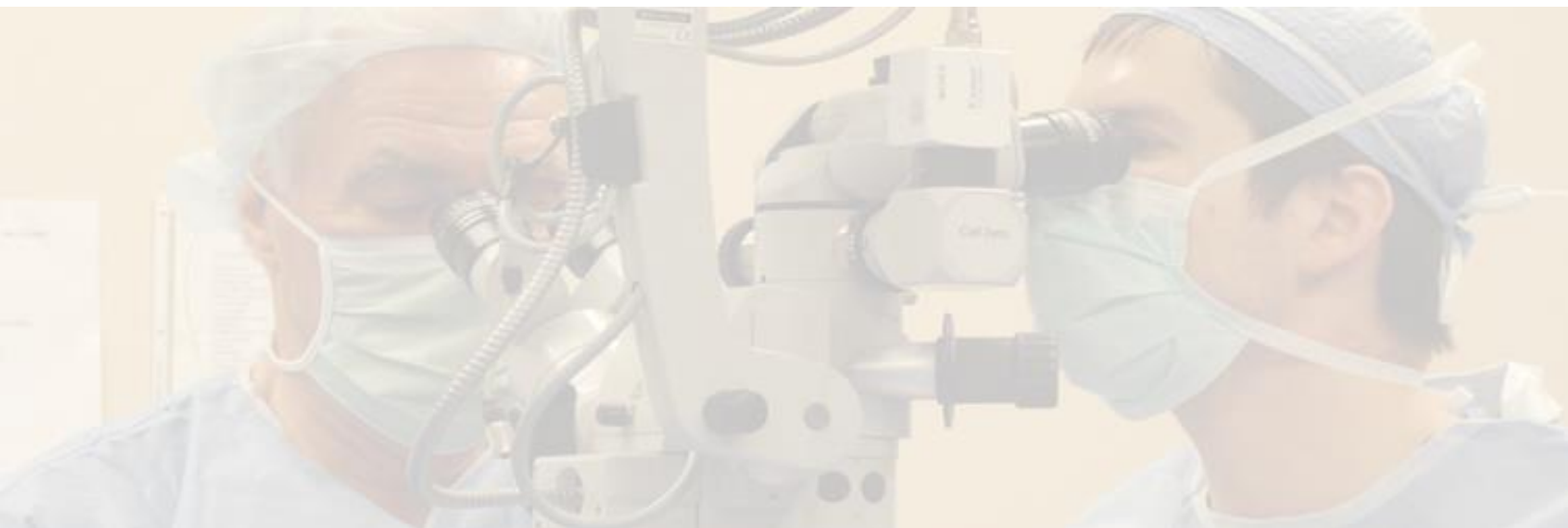




McMaster University Division of Ophthalmology Resident Manual



Inspiring Innovation and Discovery



Contents

The specialty of Ophthalmology is concerned with the screening, diagnosis, prevention and management of optical, medical, and surgical disorders of the eye. Upon completion of the Ophthalmology Resident Program, a resident is expected to be a competent Ophthalmologist capable of assuming a consultant's role in the specialty. The resident must acquire a working knowledge of the theoretical basis of the specialty, including its foundations in the basic medical sciences and research.

The Ophthalmologist must possess a sound knowledge of the general principles of surgery and medicine. Ophthalmology embraces some aspects of neurology, pathology, plastic surgery, dermatology, microbiology, and other specialties, and the graduate must have knowledge in these fields as they relate to Ophthalmology. (RCPSC)

This Resident manual provides a complete orientation to the Ophthalmology residency program at McMaster University.

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Faculty & Staff Directory

Dr. John Harvey

*Professor, Oculoplastics, Academic
Division Head, Division of
Ophthalmology, Director of
Oculoplastic, Reconstructive, Lacrimal
and Orbital Service*

For inquiries please contact Joanne
Verboom, Administrative Assistant
Phone: 905-573-7777 x38095
Fax: 905-573-4826
Email: verboom@mcmaster.ca
jtharvey@mcmaster.ca

Dr. Enitan Sogbesan

*Assistant Professor
Residency Program Director, Division
of Ophthalmology*

For inquiries please contact Shannon
Tylee, Administrative Assistant
Phone: 905-573-7777 x38311
Fax: 905-573-4858
Email: tylees@mcmaster.ca

Residency Program Coordinator:

Julia Smerilli
smerilj@mcmaster.ca
Phone: 905-573-7777 x38260

Dr. Robert Adam

Assistant Clinical Professor (Adjunct)
robertsauladam@yahoo.ca

Dr. Nina Ahuja

Associate Clinical Professor
Phone: 905-575-7050
Fax: 905-297-7597
nahujamd@gmail.com

Dr. Narendra Armogan

Assistant Clinical Professor (Adjunct)
For all inquiries please contact Allison
Majeed, Administrative Assistant
Phone: 905-212-9482 x311
narendra.armogan@utoronto.ca

Dr. Vineet Arora

Assistant Clinical Professor (Adjunct)
viarora2001@yahoo.ca

Dr. Steve Arshinoff

Assistant Clinical Professor (Adjunct)
ifix2is@sympatico.ca

Dr. Anne Beattie

Assistant Clinical Professor
Phone: 905-525-7907
Fax: 905-525-9186
anne@brb-ca.com

Dr. George Beiko

Assistant Clinical Professor (Adjunct)
georgebeiko@hotmail.com

Dr. Rajiv Bindlish

Assistant Clinical Professor (Adjunct)
rajbindlish@hotmail.com

Dr. Varun Chaudhary

Assistant Professor
For all inquiries please contact Amber
Kirk, (mat lv) Administrative Assistant
Phone: 905-573-7777 x38058
Fax: 905-573-4858
Email: akirk@mcmaster.ca

Dr. James Csordas

Assistant Clinical Professor
Phone: 905-573-7777
jcsordas@mcmaster.ca

Dr. Dalia Eino

Assistant Clinical Professor
Phone: 905-527-4975
Fax: 905-627-7553
daliaeino@yahoo.com

Dr. Mark Fava

Assistant Clinical Professor
Email: mark.fava@gmail.com

Dr. Patricia Harvey

Assistant Professor

For inquiries please contact Joanne Verboom, Administrative Assistant
Phone: 905-573-7777 x38095
Fax: 905-573-4826
Email: verboom@mcmaster.ca
ptharvey@mcmaster.ca

Dr. Khalid Hasanee

Assistant Clinical Professor (Adjunct)

Phone: 905-469-6666
Fax: 905-469-3171
khalidhasanee@gmail.com

Dr. Frederick Inch

Associate Professor

arthurinch@sympatico.ca

Dr. Gloria Isaza

Associate Clinical Professor

For all inquiries please contact Shannon Lanie Hildebrant, Administrative Assistant
Phone: 905-521-2100 x76662
Clinic: 905-521-2100 x72400
Fax: 905-521-2332
Email: laniehis@mcmaster.ca

Dr. Yasser Khan

Assistant Clinical Professor

Phone: 905-456-9500
Fax: 905-456-9508
ykhan99@yahoo.com

Dr. Lawrence Kobetz

Assistant Clinical Professor

Phone: 905- 574-4666
kobetzl@mcmaster.ca

Dr. Babek Maleki

Assistant Clinical Professor (Adjunct)

905 523 – 5437
info@DrBabakMaleki.com

Dr. Keith Mann

Assistant Clinical Professor

Phone: 905-627-4975
Fax: 905-627-7553
kdm173@hotmail.com

Dr. James Martin

Assistant Clinical Professor

Phone: 905-522-3563
jmartin23@cogeco.ca

Dr. Navdeep Nijhawan

Assistant Clinical Professor (Adjunct)

Dr. Aaron Rifkind

Assistant Clinical Professor

Phone: 905-549-6123
Fax: 905-548-0770

Dr. Amadeo Rodriguez

Assistant Professor

For inquiries please contact Grace Palumbo, Administrative Assistant
Phone: 905-573-7777 x38052
Fax: 905-573-4858
Email: gpalumbo@stjoes.ca
arodrig@mcmaster.ca

Dr. Kouros Sabri

Assistant Professor

Phone: 905-521-2100 x73509
Fax: 905-570-8968
Email: warwick@mcmaster.ca
sabrik@mcmaster.ca

Dr. Rajeshvar K. Sharda

Assistant Clinical Professor (adjunct)

1 Young St Suite 302
Hamilton ON L8N 1T8
905-527-5559
rajeshvar.sharda@gmail.com

<u>Subspecialty Section Heads</u>	
Dr. John Harvey	Division Head
Dr. Enitan Sogbesan	Residency Program Director
Dr. Varun Chaudhary	Retina, Department Chief
Dr. Dalia Eino / Dr. Anne Beattie	Comprehensive, Cataract/IOL theory
Dr. Pat Harvey	Resident Research
Dr. Khalid Hasanee	Glaucoma
Dr. Gloria Isaza	Pediatric Ophthalmology
Dr. Yasser Khan	Oculoplastics
Dr. Keith Mann	Optics
Dr. Amadeo Rodriquez	Neuro-Ophthalmology
Dr. Mark Fava	Cornea and External Disease

Residents

Dr. Brian Chan PGY5

Email: brian.chan@medportal.ca

Dr. Christopher McLaughlin PGY5

Email: christopher.mclaughlin@medportal.ca

Dr. Sarah Mullen PGY4

Email: sarah.mullen@medportal.ca

Dr. Lily Zhao PGY3

Email: lily.zhao@medportal.ca

Dr. Laura Donaldson PGY2

Email: laura.donaldson@medportal.ca

Dr. Nirojini Sivachandran PGY2

Email: nirojini.sivachandran@medportal.ca

Dr. Prima Moinul PGY1

Email: prima.moinul@medportal.ca

Dr. Carl Shen PGY1

Email: carl.shen@medportal.ca

Welcome to McMaster University's Ophthalmology Residency Program.

We are delighted to have you join us. Starting your residency can be an overwhelming process. This handout will familiarize you with our program's policies and procedures. If you need anything or have any questions, please contact the Program Coordinator.

Please forward the Program Coordinator your picture to include on our McMaster website. Also, please take a moment and look at the resident listings on the website and forward the Coordinator the necessary information, following the same format as what is currently included on the website. If you have any questions, do not hesitate to ask!

Please note this document provides general guidelines and information for starting your residency at McMaster. All rotation goals and objectives, policies and procedures, staff information, etc. can be found in our Resident Manual, which is sent at the beginning of each Academic Year and is found on our McMaster Ophthalmology Website.

Schedules/Rotations

You have received your rotation schedule from Post Grad and it is now entered into Web Eval, Medsis and in the Program Coordinator's office. You will receive the call schedule from the chief resident of each service a minimum of 2 weeks prior to start of each month. If there are ANY changes in your rotation, please notify the Coordinator immediately so appropriate changes in all computer systems can be made.

Conference Leave

Professional Days are available to attend conferences/education events. Each resident is allotted 7 Professional Leave days a year. If you are a presenter at a conference, you may be reimbursed. You will need to give the Coordinator all documents and fill out and sign an expense report form. From there, Dr. Sogbesan will approval/decline and will be submitted to finance if approved. Please note, you will be reimbursed for conference costs (registration) and travel to and from conference and accommodations for the night before conference.

Please note the documents required for reimbursement are:

- All original itemized receipts (no photocopies allowed)
- Must be submitted within 6 weeks of the end of the date of the conference that you attended.
- All flight boarding passes must be submitted
- Certificate of attendance.
- All registration fees must be accompanied with your proof of payment, such as credit card statement or copy of cheque.
- If you are a presenter, you also must include a copy of your abstract, confirmation of registration, receipt of payment and travel expenses.

Vacation Leave

Each resident is allotted 20 Vacation days and 7 Professional leave days per academic year (July 1-June 30). If you do not use your vacation before June 30th you will lose it - No exceptions.

During your PGY1 year, you are required to use the Medportal vacation system when submitting your vacation requests. PGY 2 - PGY5 when wanting to submit a request for time off, please fill out a Vacation Request RTO (Request for time off) found in the Coordinator's office. Once final approval is made from the rotation supervisor, chief resident and program director, your vacation has been approved. This includes any last minute in lieu of days that you have worked out while on rotation. Please check dates of exams before requesting vacation.

Program Reimbursements

Please see the Ophthalmology Resident Expense Policy. This document will outline expenses that are covered by the program.

Evaluations

It is mandatory to complete an online evaluation at the end of each rotation block. These are found on the One45/Webeval website. It is also mandatory for the staff to complete an evaluation on you for each rotation. **One45/Web Eval** is the online evaluation tool that you will be required to use to complete all evaluations. It is mandatory to complete your evaluations, otherwise vacation requests, conference reimbursement and moving on to your next rotation may be denied.

OR/Clinic Procedure Log

We require that each resident has an up to date OR log/Clinic Procedure log. This can be done by inputting it into an excel spreadsheet.

Surgical Foundations

This is protected academic time and attendance is mandatory. Jane Klie (program assistant – Surgical Foundations) has been given your contact information and will contact you with the details for this program.

Academic Half day

This is protected academic time and are mandatory. Please note if a session is rescheduled for another afternoon you are required to be in clinic on said Wednesday. If the Academic ½ day session is rescheduled to an evening scheduled you are entitled to the Wednesday afternoon as protected academic time.

Rounds/Journal Clubs

Rounds take place every Wednesday morning in the KEMP Auditorium from 7:30-8:30am located at CAHS. Clinical Rounds are also scheduled during this time which gives residents the opportunity to discuss cases, ethics, research, etc. Journal Clubs take place Monday nights at LoPresti's Hamilton and begin at 7:30pm.

Please note: Rounds are not scheduled for the first Wednesday of each month and Journal Clubs are scheduled bi-monthly. A schedule will be forwarded to you and you are required to attend. Email reminders will be sent out prior to each schedule Rounds and Journal Clubs.

Bi-Annual Resident Meetings

Bi-annually you will meet with your Program Director. The following will be discussed at the meeting: rotations, conferences attended, research, review of OR/clinic log, any exam results, your special interests, career plans, vacation plans and current evaluation status. This also provides a time to discuss any program issues or concerns.

Research

Research Coordinator: Dr. P Harvey. Dr. P. Harvey organizes Research Rounds every 2nd Friday of each month

It is the goal of the research arm of our division to teach residents during the PGY1-5, how to explore a particular area of Ophthalmology to ask a question that has not been answered. Then by collecting appropriate data, synthesizing the information and developing a hypothesis, they can then design a prospective research project that will seek to answer the question. This may be a basic science question or a clinical trial. There are resources to help with epidemiology and statistical design in the department of surgery to help with this task. They would then get ethics approval and recruit patients, collect data and evaluate their data to come to a conclusion. This should be ready to be presented at Stringer Day in June of the PGY3 or PGY4 year. Following this it should be written up and submitted for publication, with the resident as the principle investigator.

Please refer to the Research Document (Found in the Resident Manual)

Misc. Information

Dr. Sogbesan's office is located at the CAHS SJH King Street East Eye Clinic (2757 King Street E.)

Helpful Tips for PGY1 Residents

- Contact the Postgrad office and stay on top of CPSO and CMPA membership paperwork BEFORE July 1st
- Parking at SJH Stoney Creek site — contact Maria ext 4816 regarding tokens (site is not covered by the parking transponder)
- Remember to register for AAO and COS, will get free subscription to journals and other perks
- Get a T2200 tax form on Medportal or speak to payroll.
- Please check emails often as everything that you will be notified about will be sent via email first.
- Always carry your photo ID with you when on hospital property.

For various support mechanisms for your time here at McMaster University, please refer to the Postgraduate Medical Education Office's "**Resident Wellness Support Systems**" booklet. Always keep in mind that the Program Director is here to help support and guide you through our residency program.

Please also review the Ophthalmology Resident Safety Policy (found in the Resident Manual forwarded at the beginning of each academic year and posted on the Ophthalmology Website)

Program Coordinator Information

The Program Coordinator is located at SJH CAHS King St Campus, Room 2401.1. If you have any questions regarding the program, travel, expense reports, vacation, evaluation, rotation scheduling, policy and procedures etc. please call, email or drop in.

Program Coordinator

Julia Smerilli
Ophthalmology Residency Education Office
CAHS- St. Joseph's King St. Site
Room 2401.1
2757 King St E
Hamilton, ON L8G 5E4
Phone : (905) 573-7777 x 38260
Email: smerilj@mcmaster.ca

Ophthalmology Resident Attendance Policy

Rotation

- Residents are to be in clinic 8am-5pm
- If staff are away/off while a resident is on their rotation, the resident is expected to join another clinic.
- If clinic is done early residents are to be back in the King St Clinic. If in Brampton/Toronto – if clinic is finished late afternoon, the resident is not expected to return, however; if it is early afternoon resident IS expected at clinic.
- When on surgery rotation: If surgery finishes early, residents are to go back to clinic/ stay on site to read/research
- If a clinic is unable to accommodate the resident is expected to be on-site reading or research. Research evaluations are to be completed during each rotation and signed off by research supervisor and rotation supervisor.

Academic ½ Day

- If the session is taking place in the evening residents are entitled to have Wednesday afternoon as protected time.
- If the session is cancelled and no rescheduled date or rescheduled for another afternoon – residents are to be in clinic

Department of Surgery/ Postgraduate Meetings

- It is the responsibility of the Chief resident to ensure that all departmental meetings / postgraduate events are attended by him/her or an elected resident.

Surgical Foundations

- Attendance at the surgical foundations session is mandatory unless approved by Program Director. Jane Klie is your Surgical Foundations contact.

Multidisciplinary Academic Half-Day (MAD Day)

- The Postgraduate Medical Education Office organizes quarterly MAD days each academic year. Attendance at these events is mandatory. The MAD days presents residents across all disciplines a forum to meet, discuss and learn about issues in all disciplines of medicine. They are intended to focus on the Non-Medical Expert CanMEDS roles. Typical topics can include: career and financial planning, professionalism, overcoming barriers, resident stress and harassment.

Rounds

- Morning teaching rounds and Wednesday rounds – attendance is expected unless otherwise approved

Resident Expense Policy

Residents are required to provide all receipts and necessary paperwork for all resident expenses. Please see the Resident Expense Form, which is to be filled out by the resident for the checklist of items that are required in order to be reimbursed.

Please note the documents required for reimbursement are

- All original itemized receipts, no photocopies allowed and must be submitted within 6 weeks of the end of the date of the conference/course/purchase
- All flight boarding passes must be submitted
- Certificate of attendance
- Registration fees with proof of payment (credit card statement or copy of cheque.
- If you are a presenter, you also must include a copy of your abstract, confirmation of registration, receipt of payment and travel expenses.

Items that are reimbursed

- \$1000 towards the purchase of lenses
- AAO text books
- TORIC: Accommodation and Course Registration
- Lancaster – Accommodation and Course Registration
- San Antonia Review Course: Accommodation/Travel to and from/Registration
- Conferences: ONLY reimbursed if resident is PRESENTING. (Transportation, lodging(night before) & registration and poster printing fees)
- Halifax Ethics Course: Travel (to and from), Accommodation (night prior) and Registration

Items that are currently being reimbursed are subject to availability of funding

Vacation Policy

- PGY1s use the Medportal Vacation System while on off-service rotations.
- PGY2-PGY5 Residents fill out the Request for time off sheet and obtain signatures from: Chief Resident, Rotation Supervisor and Program Director
- Residents are entitled to 4 weeks' vacation (20 days) and 7 Professional days per academic year (July 1- June 30). If vacation/professional leave is not used within an academic year residents cannot "carry over" into the new academic year.
- Residents are to give vacation requests 4 weeks in advance of said vacation and no vacation requests are to be submitted after March 1st.
- Residents are to take 1 week maximum vacation per each rotation in addition to any conferences/research, approved by rotation supervisor/research supervisor and Program Director.
- Resident vacation and absences are to be noted on the call schedule

Job Description of the Ophthalmology Chief Resident

Clinical Responsibilities

- Assist and supervise residents in daily clinical care
- Ensure adequate chart documentation occurs on all patients and residents complete clinical duties and follow clinic procedures.
- Act as the liaison between eye clinic staff/ faculty and all other residents.
- If any issues do arise, the Chief Resident is responsible for solving and reporting to the Program Director.
- Responsible with the organization of the resident clinic. S/he will organize the schedule with supervising staff and assign residents to daily resident clinics and submit the resident clinic schedule to Eye Clinic staff.

Other

- Attendance at teaching rounds, Wednesday Grand Rounds, Journal Club, and Academic Half Day is mandatory. S/he must attend unless absence is approved by Program Director.
- Relaying resident concerns to the Program Director
- Representation of the resident body within Departmental meetings. If Chief resident is unable to attend (with approval from Program Director) it is his/her responsibility to elect a resident to attend on his/her behalf.

Administrative Responsibilities

Call Schedule

- The Chief resident must make the on-call schedule and publish it according to PARO guidelines

Vacation Planning

- The Chief resident will handle vacation requests and make note of each residents' vacation on the call schedule.

Rounds

- Organize morning rounds

Chief resident is responsible for forwarding all schedules to Program Coordinator & Program Director (i.e. Morning Rounds, Vacation, On-Call).

Chief Resident will be evaluated every 4 months to determine position renewal

Ophthalmology Program Policy on Resident Safety

Preamble

Residents/Clinical Fellows have the right to work in a safe environment during training. The purpose of this document is to provide a policy regarding workplace safety for postgraduate trainees in Ophthalmology at McMaster University. The purpose is also to demonstrate the Ophthalmology program's commitment to postgraduate trainees' protection and safety in the workplace.

The responsibility of resident safety is shared between the resident/clinical fellow, the training program and the Faculty of Medicine. This document does not supersede the Postgraduate Medical Education Resident Safety Policy.

Scope

This policy is intended for all Ophthalmology Residents and Clinical Fellows and applies during residents' medical education activities that are related to the execution of residency duties.

It covers resident safety in the areas of travel, patient encounters and after-hour consultations and emotional well-being.

Responsibility of the resident/fellow

It is the responsibility of the trainee to participate in required safety sessions and abide by the Safety Codes of the designated area where s/he is training.

Responsibility of the Ophthalmology Program

It is the responsibility of the program to ensure information about occupational safety is available for all clinical trainees and to act promptly to address identified safety concerns and incidents.

Program Specific Policies

The clinical trainee must report any situation where personal safety is threatened and should contact security at participating training sites. Clinical trainees should keep their immunizations and TB skin test up to date.

The Postgraduate Trainee should go to the nearest Emergency Room and **identify themselves as a Resident / Clinical Fellow and request to be seen on an urgent basis.** The Postgraduate Trainee must complete, within **24 hours**, an Injury/Incident Report (forms should be available in the local Emergency Room).

Common Used Lasers in Ophthalmology

Type of Laser	Radiation Type / Wavelength (nm)	Example of Application
Argon (gas laser)	Visible, blue/ 488	Sealing blood vessels in retina, plastic surgery
Argon (gas laser)	Visible, green/ 514	Sealing blood vessels in retina, plastic surgery
Nd:YAG* (Q-switched - solid state laser)	Visible, red/ 632	Ophthalmology: cutting tissues
Helium-Neon (gas laser)	Visible, red/ 632	Alignment: for aiming invisible beams

In Ontario - The injury/incident form should be submitted to the hospital where the injury took place. That hospital will be responsible for administering the claim. Residents should not assess violent or psychotic patients without security or a supervisor being present and also being aware of accessible and safe exits and where the emergency button is located in the clinic room (CAHS St. Joseph’s Healthcare Eye Clinic). Wash hands regularly.

Laser Safety

Laser protection policies

Room

- “Laser In Use” warning sign must be turned on at all times when laser in use
- Windows and door covers must be in place at all times when laser in use
- Users and assistants must be aware of location of fire extinguishers
- A secure locked designated place for the laser key must be maintained
- A designated place for laser accessories must be maintained.

Personal Protection

- Appropriate eye protection must be used at all times when laser in use
- Protective clothing and gloves must be used as needed when laser in use
- All users must be properly trained and educated in use of laser equipment

Laser Equipment

- Inspection and maintenance of laser equipment including electrical outlets, power cords, laser logs etc, are to be maintained at regular intervals by the equipment specialist designated by the Hamilton Regional Eye Institute
- Any concerns noted by users regarding safety of laser equipment must be reported immediately to the Eye Clinic Manager, Tammy Robinson at 905-522-1155 Ext 38787, or designate.

Safety Related to Travel

When residents are travelling for clinical or other academic assignments by private vehicle, it is expected that they maintain their vehicle adequately and travel with appropriate supplies and contact information. Provincial laws will be adhered to regarding cell phone use. Residents are not expected to travel long distances during inclement weather for clinical or other academic assignments. If such weather prevents travel, the resident is expected to contact the Program Office immediately. Assignment of alternative activity is at the discretion of the Program Director.

Ophthalmology residents doing home call and arriving for work after hours should be aware of their environment before leaving their car, and have a cell phone available to contact security if it is deemed that an escort is required. If a resident feels potentially threatened they should not leave their car but should leave the area promptly. In the rare event this occurs the resident should notify the attending staff on call.

Overseas travel immunizations and advice should be organized well in advance when traveling abroad for electives or meetings. Postgraduate Trainees must complete the Field Trips and Electives Planning and Approval process when planning to do an elective outside of North America to ensure compliance with standards and best practices for the safety of all Postgraduate Trainees.

<http://www.workingatmcmaster.ca/link.php?link=eohss%3Aeohss-events-electives>

After- Hours Consultations

- Residents should not work alone after hours in health care or academic facilities without adequate support.
- Emergency buttons are located in each clinic room at the CAHS- St. Joseph's Healthcare Eye Clinic.
- Residents are to notify security staff upon arrival at the CAHS – St Joseph's Healthcare Eye Clinic. Security staff will be present when a resident is alone with a patient in the eye clinic after hours.

For various support mechanisms for your time here at McMaster University, please refer to the Postgraduate Medical Education Office's "Resident Wellness Support Systems" booklet. Always keep in mind that the Program Director is here to help support and guide you through our residency program.

Harassment Policy

- <http://postgrad.medportal.ca/policies/harassment.aspx>
- Please see a number of links in the section, "Safety Away from the Workplace" (e.g. policies from PARO, McMaster and CPSO are included in this section)

Appeals Process

Please visit the Postgraduate Medical Education website for more information on the appeals process: <http://fhs.mcmaster.ca/postgrad/policies.html>

Resident Well-Being, Stress Management and Harassment

The McMaster Postgraduate Medical Education website provides you with information concerning overall mental and physical health.

Resources here include:

- McMaster contacts for resident health and well-being
- Family Physicians willing to accept residents as patients
- Employee and family assistance programs
- Human Rights and Equity
- General Well-Being and Personal Safety
- Help Lines (Professional Association, Crisis and Suicide Lines, Sexual Assault Hotline)
- Career Counselling
- Financial Planning
- Fitness
- General Well-Being
- Intimidation and Harassment
- Medico-Legal
- Mental Health and Addiction
- Sexual Abuse, Assault, Boundaries

For more information, please see the Postgraduate website on resident well-being: http://fhs.mcmaster.ca/postgrad/trainee_well_being.html as well as the 2015 Resident Well-Being Manual that is also posted in the Resident room: <http://fhs.mcmaster.ca/postgrad/documents/SupportSystemsforPostgraduateMedicalTrainees2015.pdf>

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, Ontario L8N 3Z5
Hamilton Health Sciences

Human Resources – Employee
Health Telus Sourcing Solutions
120 King Street West, Suite 200
Hamilton, Ontario
Phone: 905-387-9495, ext. 63900

St. Joseph's Healthcare
Occupational Health and Safety Services
50 Charlton Avenue East
Hamilton, Ontario L8N 4A6
Phone: 905-522-1155, ext. 33344

Links available on Medportal

1. Occupational Health and Safety Act:
http://www.elaws.gov.on.ca/html/statutes/english/elaws_statutes_90o01_e.htm
2. PARO/CAHO Agreement: http://www.myparo.ca/PARO-CAHO_Agreement
3. Hamilton Health Sciences – Infection Protection and Control and Personal Protective Equipment:
<http://www.hamiltonhealthsciences.ca/Workfiles/PHYSICIANS/ICPhysician%20Orientation%20Manual%202007-08.doc%20dec4.07.doc>
4. McMaster University, Postgraduate Medical Education Support Systems Booklet:
<http://postgrad.medportal.ca/>
5. McMaster University, Postgraduate Medical Education, Communicable Diseases
6. Policy: <http://postgrad.medportal.ca/>

WORKPLACE ENVIRONMENTAL HEALTH AND SAFETY

(eg.hazardous material (biological or chemical agent named in the Occupational Health and Safety Act),indoor air quality, chemical spills)

OCCUPATIONAL HEALTH

(e.g., immunization policies, blood borne pathogens, respiratory protection)

Both McMaster University and its employees are jointly responsible for implementing and maintaining an Internal Responsibility System directed at promoting health and safety, preventing incidents involving occupational injuries and illnesses or adverse effects upon the natural environment.

The University is responsible for the provision of information, training, equipment and resources to support the Internal Responsibility System and ensure compliance with all relevant statutes, this policy and internal health and safety programs. Managers, Supervisors, Deans, Directors, Chairs, Research Supervisors are accountable for the safety of postgraduate trainees who work/study within their area of jurisdiction.

Postgraduate trainees are required by University policy to comply with all University health, safety and environmental programs such as Workplace Hazardous Materials Information and Safety (WHMIS).

The Faculty of Health Sciences and the teaching hospitals each are responsible for ensuring that postgraduate trainees are adequately instructed in infection prevention and control as it relates to communicable diseases.

The Faculty and the teaching hospitals will provide an introductory program on routine practices /standard precautions, infection prevention and control that is consistent with current guidelines and occupational health and safety. In addition, the Faculty and the teaching hospitals will inform postgraduate trainees as to their responsibilities with respect to infection prevention and control and occupational health and safety.

Affiliated teaching hospitals are required to comply with the Communicable Disease Surveillance Protocols for Ontario Hospitals developed under the Public Hospital Act, Regulation 965. Compliance with these Protocols requires the hospitals, in liaison with the University's academic programs, to provide instruction in infection prevention and control and occupational health and safety. Refer to Policy regarding Communicable Diseases and Occupational Health for Applicants to and Trainees in Undergraduate and Postgraduate Medicine - <http://www.fhs.mcmaster.ca/postgrad/> (See Policies)

The Faculty Postgraduate Medical Education Office collects the immunization data on all Postgraduate Trainees on behalf of the teaching hospitals.

Some related links for further reference

External Courses proposed for Residents

Although McMaster's half day program is rigorous and complete, we believe in sending residents to supplement their education with exposure to highly rated external courses. Each year of the residency will involve at least one main external course:

PGY1 — Toronto Ophthalmology Residency Introductory Course (TORIC): This course provides a basis for incoming PGY2 residents. It is a comprehensive basic science course taught over six weeks by leading educators and clinicians from across Canada.

PGY2/3 - Lancaster/Stanford: Basic science course over a 7 or 8 weeks time frame at the end of PGY2 & beginning of PGY3 years.

PGY4 — American Academy of Ophthalmology: Residents will attend the Annual conference at least once during residence, typically in PGY4.

PGY5 — San Antonio Review Course, or equivalent: This one week review course is preparation for the Fellowship exam that is very popular with North American residents.

Residents will also attend the Canadian Ophthalmological Society (COS) Annual Conference (rotating locations)

Local Annual Conferences and Academic Days — Southern Ontario is home to 5 of Canada's 11 Ophthalmology residency program and attendance at the local continuing education clinical conference days will be encouraged. These include Sally Letson (Ottawa), Walter Wright (Toronto), Jack Crawford (Toronto), Paul Stringer (Hamilton), University of Western Ontario Clinical Day in Ophthalmology

Divisional Research Day — Division of Ophthalmology also hosts an annual research day for residents and faculty to present work in lecture and in poster format.

Research Activity in Division of Ophthalmology

It is the goal of the research arm of our division to teach residents during the PGY1-5, how to explore a particular area of Ophthalmology to ask a question that has not been answered. Then by collecting appropriate data, synthesizing the information and developing a hypothesis, they can then design a prospective research project that will seek to answer the question. This may be a basic science question or a clinical trial. There are resources to help with epidemiology and statistical design in the department of surgery to help with this task. They would then get ethics approval and recruit patients, collect data and evaluate their data to come to a conclusion. This should be ready to be presented at Stringer Day in June of the PGY3 or PGY4 year. Following this it should be written up and submitted for publication, with the resident as the principle investigator.

Criteria that will make this research acceptable:

- A well-defined question with staff input into its relevance
- A study size in terms of numbers so that the project can be completed in a 2-3 year timetable
- A budget that is within Dept. of Surgery guidelines for funding (5,000.00 for the project) or have some external pre-approved source of funding should be defined.
- This research should originate and be completed with McMaster faculty during the residency program. It should not be research that has been previously accomplished.
- If fellows, staff or medical students are involved, the resident must clearly be the principle in the research.
- Authorship guidelines according to the department of surgery should be agreed upon at the beginning of the work.
- All research activity needs to be reported in writing to the Division Research Rep to the Department of Surgery Research Advisory Committee so the research activity of our division can be adequately reported and defended at that Committee.

Timetable for resident research

PGY 1 → Discussion of the principles of clinical based medicine, the value of research and an outline of the division's expectations. The resident, when attending department functions i.e. Journal club etc. should begin to explore research ideas with members of the staff to determine areas of interest or possibilities for good questions to ask. It would be good if the resident were able to be close to a decision on their question by the spring of their PGY1 year.

PGY2 → When the resident enters the ophthalmology program, it would be helpful if the question they are asking has been vetted by appropriate staff and supervision decided. Study design, consent, resource requirements,

budget etc should be decided, written and submitted for REB approval. By June of PGY2 this phase should be completed.

- PGY3 →** Patient recruitment or animal purchase should be started and completed within the next 12 to 18 months. Q3 monthly updates to Research Coordinator copied to resident's file should be done.
- PGY4 →** Data collection phase to be completed by December-January of the PGY4 year. Analysis and statistical analysis should be completed ready for presentation at the Stringer Day in June of this year.
- PGY5 →** The manuscript should be prepared and submitted before the PGY 5 leaves the call schedule to study for their exams.

Faculty Responsibility

- All faculties should be given the opportunity to do research with a resident.
- Therefore it seems reasonable that a faculty member should not be the principle supervisor for more than one resident consecutively.
- If at all possible research in a subspecialty area should include all faculty members in that division who want to make a contribution to participate to encourage department collegial activity.
- One faculty member needs to be identified as the responsible faculty for each project.
- Evaluation of supervision should take place at the end of each project.
- Support of faculty by research coordinator as a non-authored advisor as well as various Department of Surgery resources can be made available.
- When a project problem arises, this needs to be brought to the attention of the program director and/or the research representative to trouble-shoot/ remediate when the timetable is not met.

End of Rotation Resident Research Progress Report

Resident: _____ Date: _____

Rotation: _____
Start Date: _____ End Date: _____

Rotation
Supervisor: _____

Research Project
Supervisor: _____

Faculty Resident Research Coordinator: Dr Pat Harvey

Name of Research
Project: _____

Status of Project at Start of Rotation (use additional pages if needed):

Current Objectives / Action Items (use additional pages if needed):

Status of Project at End of Rotation (use additional pages if needed):

Time Log (use additional pages if needed):

<u>Date</u>	<u>Hours</u>	<u>Activity</u>
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Next Steps:

Resident Comments (may include adequacy of supervisor support; areas requiring further assistance if any, etc)

Rotation Supervisor

I agree with time allotted towards research as per time log provided above by resident:

YES / NO

Comments:

Rotation Supervisor Signature: _____

Date: _____

Research Project Supervisor

I agree with the status update and next steps: YES / NO

Comments:

Project Supervisor Signature: _____

Date: _____

Faculty Resident Research Coordinator

I agree with next steps: YES / NO

Comments:

Faculty Research Coordinator Signature: _____

Date: _____

Faculty comments reviewed by Resident: YES / NO

Resident Signature: _____

Date: _____

Submitted to Program Coordinator for review by Program Director and filing

Date: _____

Ophthalmology Program: Expectations for Surgical Procedures

Below are minimum guidelines only. Residents will have opportunity to perform further procedures and more advanced techniques depending on skill level. Please note residents must continue logging procedures after the minimum numbers are met.

Category	Minimum
Cataract – full cases	500
Malyugan ring/iris hooks	5
ICTR placement	No minimum requirement
Anterior Vitrectomy	No minimum requirement
YAG posterior capsulotomy	20
Sulcus placement of IOL	1
Cornea	
Scraping	10
Foreign body removal	5
PTK	No minimum requirement
PKP	No minimum requirement
Lasik	No minimum requirement
PRK	No minimum requirement
Pterygium removal	10
Anterior stromal micropuncture	2
Biopsy	No minimum requirement
Corneal transplantation, to include a combination of the following: PKP (full thickness graft) Endothelial keratoplasty (DSEK/DMEK) DALK Keratoprosthesis	10
Glaucoma	
Trabeculectomy	5
AC tap	5
Shunts	No minimum requirement
Laser PI	20
SLT	5
Laser suture lysis	1
Pediatric Ophthalmology	
Strabismus repairs	50 muscles
Cataracts	No minimum requirement
Peds lacrimal probing and irrigation	3
Retina	
Posterior vitrectomy	5
Laster retinopexy	20
Intravitrael injections	10
Endophthalmitis intravitreal tap and inject	5
Oculoplastics	
Enucleation/Evisceration	1

Entropion	5
Ectropion	5
Ptosis repair (fasanella, levator advancement)	1
Blepharoplasty (upper lid, lower lid)	1
Pentagonal wedge resection	1
Puntoplasty	1

PATIENT ASSESSMENTS / FOLLOW-UPS

On-call Coverage – First Call by Staff:

- Weekdays: 8am to 4pm

- ***All consults to On-call Staff MD received between these hours must be seen by Staff MD in his/her clinic on that day or the next day at his/her discretion.***
 1. Calls are *not* to be deferred for the resident to be called again by the answering service after 4pm.
 2. Patient referrals may *not* be collected for the resident to assess after 4pm. *The only exception is in-patient consults* - please notify the on-call resident upon receiving the call so that he/she may plan his/her on-call evening accordingly.
 3. Residents may be called to assess a potential ruptured globe during daytime hours, provided there is a conversation between the On-call Staff MD and the resident's clinical supervisor at the time so that all are aware.
 4. On-call resident, or resident(s) in Resident Clinic may be called to perform corneal scrapings, provided he/she is willing and/or already in clinic.
 5. On-call Staff MD is responsible for all on-call patient referral assessments requested during hours of First Call by Staff.

On-call Coverage – First Call by Residents

- Weekdays: 4pm to 8am the following morning
- Weekends: 4pm Friday to 8am Monday

- ***All consults seen by residents while on-call are officially under the care of the On-call Staff MD at the time of initial patient referral. Resident transfer of patients to the On-call Staff MD's office must be accepted, with follow-up arranged as per the resident's request in the transfer note, and/or at the On-call Staff's discretion.***
 6. Moving forward residents are expected to document the On-call Staff's name on their dictations at each assessment, so as to eliminate confusion regarding the initial MRP for any given on-call patient.
 7. Residents are *not* responsible for arranging transfers to colleagues once the transfer to the On-call Staff MD has been made, and are not expected or required to do so.
 8. Residents will provide On-call Staff MD with a summary of all patients seen over the weekend to ensure MD is aware of all patients who were seen, and for whom follow-up needs to be arranged (please see attached template).
 9. On-call Staff MD is responsible for all on-call patient referral assessments requested and performed by a resident during hours of First Call by Resident.

[TEMPLATE] OPHTHALMOLOGY ON CALL PATIENTS – DIRECT TO OPHTHALMOLOGY

Clinic Day/Date _____ SAT, Feb xx _____ MRP _____ Dr _A. Aaaa
 (Created by Manreet Alangh R3)

Time	Patient	Ref By:	Follow up	Seen
1330	LAST NAME, First name 48M Dx - ?migraine aura	Dr. Referring HGH ER	Request Dr. A. Aaaa to see in 1-2 months for baseline VF + r/a	
1345	LAST NAME, First name 60M Dx – macular hole	Dr. Referring St. J UC	Referred to Dr. Retina	
1400	LAST NAME, First name 46M Dx – Bleph OU, OS staph marginal vs K ulcers	Dr. Referring St. J ER	Request Dr. A. Aaaa to see early next week Alangh SUN 3:00	
	LAST NAME, First 63M Left subconj heme Dx – no show	Dr. Referring HGH ER	Pt. no showed	
NOTES(for resident):				
	Urgent Care Fax # 905 573 4813			

OPHTHALMOLOGY ON-CALL PATIENT TRANSFER FORM

Physician On-call:

Resident On-call:

Date of Initial On-call Assessment:

*This patient requires follow-up in your office in _____ days / weeks
Please have your office contact the patient to arrange an appointment time.*

Referring Physician:

Patient Name:

Patient Address:

Patient Date of Birth:

Patient Health Card Number:

Case Summary:

Discussed with Physician-on-call: Yes / No Date: _____

Residency Program Overall Goals & Objectives

Intent of Objectives

The objectives outline the minimum requirements of a graduate in Ophthalmology following five years of residency training. Individual differences in talent and capacity should be recognized and, when possible met to the fullest extent by the Program. The objectives provide guidance for resident evaluations; failure to meet expectations may be cause for remediation or dismissal. The Residency Program will provide opportunities for learning through didactic means as well as observation and hands-on experience.

General Goals of Residency Training

To produce a high quality Ophthalmologist, a multi-faceted individual who has:

Medical Expert

- The knowledge and ability to exercise sound clinical judgment in dealing with ophthalmic medical, surgical and optical problems.
- The insight to recognize his/her limitations
- The ability and knowledge required to adequately prepare for and successfully pass Royal College of Physicians and Surgeons of Canada examinations for ophthalmology

Communication

- The ability to communicate with patients and their relatives regarding ophthalmic conditions, their management and potential consequences.

Collaborator

- The ability to relate productively with other medical professionals and allied staff
- The desire and ability to share his/her knowledge and the enthusiasm to teach future generations of doctors and allied staff.

Manager

- The management and prioritization skills necessary to run an effective professional practice.

Scholar

- The desire and ability to continue to update his/her knowledge.
- The motivation and energy to further develop the knowledge and practice of ophthalmology through research

Professional

- The highest ethical standards of the profession

Health advocate

- Familiarity with the culture of advocacy on behalf of patients and sensitivity to issues such as culture, age and ethnicity.

ROTATION SPECIFIC OBJECTIVES

The following objectives are to be used as an outline of the academic content of the McMaster Ophthalmology Residency Program by subspecialty and by year.

They have been produced to help residents delineate subject matter for which they are responsible.

Residents should be sure they have mastered the appropriate subject matter by specialty and by year. It should be emphasized that these are minimal standards and the resident may feel free to master other subjects as well as these subjects in more detail.

The Residency Education Committee will use these objectives to be sure that individual rotational objectives are met as the residents rotate to the various McMaster teaching hospitals.

INTERNAL MEDICINE (PGY-1)
CLINICAL TEACHING UNIT (WARD)

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotations in the general Internal Medicine Clinical Teaching Units. Specifically, a first-year resident will function as the primary physician of his/her patients under the supervision of the senior residents and attending physicians, and the primary goals reflect the acquisition of basic clinical skills.

Medical Expert

- Be able to elicit, present, and document a history that is relevant and appropriate to the presenting complaints.
- Be able to perform an accurate general physical examination and focused examination of the involved systems, with particular emphasis on:
 - Evidence-based physical examination skills (see JAMA Rational Clinical Exam series)
 - Multi-system conditions
- Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of common clinical scenarios – cardiovascular, respiratory, gastrointestinal, rheumatologic, hematologic, nephrologic.
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of common clinical conditions. – cardiovascular, respiratory, gastrointestinal, rheumatologic, hematologic, nephrologic.
- Understand the indications for and complications of central venous catheter insertion, arterial blood gas, lumbar puncture, paracentesis, thoracentesis, and knee joint aspiration.
- Be able to perform central venous catheter insertion, arterial blood gas, lumbar puncture, paracentesis, thoracentesis, knee joint aspiration, EKG interpretation, and inspection and interpretation of urinary sediment.
- Be able to interpret EKG's and arterial blood gas results.
- Demonstrate an understanding of the issues surrounding the transfer of unstable patients to a monitored unit.
- Demonstrate an understanding of the issues surrounding the appropriate and timely discharge of patients from the hospital.

Communicator

- Demonstrate effective gathering of the patient's history from the patient and their families.
- Communicate information regarding treatments to the patient in a clear, accurate manner.
- Provide clear, accurate and suitably detailed consultation and progress notes.
- Participate in patient handover with clear and relevant communication of the patient's status outlining potential areas of medical concern.

Collaborator

- Recognize the role of allied healthcare professionals in the management of the patient.
- Participate effectively as a member of an interdisciplinary healthcare team.

Manager

- Participate in coordinating the relevant elements of patient care to ensure safe, transition from the inpatient service.
- Develop time management skills to reflect and balance priorities for patient care, sustainable practice, and personal life.

Health Advocate

- Identify opportunities for patient counselling and education regarding their medical conditions.
- Educate patients regarding lifestyle modifications that may prevent disease including modification of cardiovascular risk factors.

Scholar

- Actively participate in teaching rounds.
- Access and critically appraise sources of medical resources to answer clinical questions and support decision making.

Professional

- Be able to apply knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Maintain patient confidentiality.
- Demonstrate respect and compassion in interactions with patients and their families.
- Respond promptly and appropriately to clinical responsibilities including but not limited to calls and pages.
- Recognize the scope of his/her abilities and ask for supervision and assistance appropriately.

EMERGENCY MEDICINE

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Emergency Medicine. Besides the general problems seen in the ER, the Ophthalmology residents should pay attention to problems affecting the eyes. This includes infections (conjunctivitis and corneal ulcers), inflammations (iritis, endophthalmitis), sudden loss of vision (eg. optic neuritis) and trauma to the eye and surrounding ocular adnexa.

The resident is expected to:

Medical Expert

- Be able to elicit, present, and document a history that is focused and relevant to the clinical presentation of patients in the emergency room.
- Be able to perform an accurate physical examination that is focused and relevant to the clinical presentation.
- Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of a broad range of clinical presentations in acute and undifferentiated form. Specifically, be able to focus on the common or dangerous problems first, with reference to rare but interesting diagnoses only as appropriate.
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of a broad range of clinical conditions in acute and undifferentiated form.
- Understand the indications for and complications of, and be able to perform central venous catheter insertion, lumbar puncture, arterial puncture and blood gas analysis, abdominal paracentesis, endotracheal intubation, thoracentesis, joint aspiration, electrocardiographic interpretation, and inspection and interpretation of urinary sediment.
- Demonstrate an understanding of the indications for admission to an internal medicine ward in a tertiary-care hospital.
- Demonstrate an understanding of the issues surrounding the transport of critically ill patients within the hospital and to other centers.

Communicator

- Demonstrate targeted gathering of relevant history from patients and/or their families in the emergency room.
- Effectively obtain collateral information from patients' families in the emergency room.
- Ensure that patients know the diagnosis and management plan including follow up plans.
- Provide succinct, informed clinical notes and verbal handover when completing a clinical shift.

Collaborator

- Demonstrate targeted gathering of relevant history from patients and/or their families in the emergency room.
- Effectively obtain collateral information from patients' families in the emergency room.
- Ensure that patients know the diagnosis and management plan including follow up plans.
- Provide succinct, informed clinical notes and verbal handover when completing a clinical shift.

Manager

- Improve ability to perform focussed histories and physical examinations in the time- limited environment of the emergency room.
- Recognize pressures on the Emergency Department and seeks to find ways to optimize personal efficiency while working within the Department.

Health Advocate

- Identify and engage in opportunities for patient counselling and education regarding their medical conditions.
- Ensure timely access to relevant consultations and investigations.

Scholar

- Access medical information resources to answer clinical questions and support decision-making.
- Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Treat all patients with dignity, civility and respect.
- Demonstrate integrity in all interactions with colleagues.
- Ensure prompt completion of clinical, administrative and curricular tasks.

Recognize scope of his/her abilities and ask for supervision and assistance appropriately. Understand issues including consent and capacity, substitute decision makers, and advanced directives for the acutely-ill patient.

NEUROLOGY

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Neurology.

The resident is expected to:

Medical Expert

- Be able to elicit, present, and document a history that is relevant and appropriate to the clinical presentation.
- Be able to perform an accurate physical examination, with emphasis on:
 - Upper vs. Lower motor neuron findings
 - Tremors
 - Pupils (Adie's, Argyll-Robertson, Marcus-Gunn)
 - Optic nerves
 - Examination of all cranial nerves, including palsies of all nerves with common causes
- Focused mental status examination
- Cerebellar examination
- Posterior column examination
- Compare/Demonstrate radiculopathy and peripheral nerve disease (C5, C6, C7, L4, L5, S1 nerve roots and appropriate peripheral nerves)
- Interpret gait abnormalities
- Altered level of consciousness (including Glasgow Coma Scale)
- Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of the following scenarios:
 - Optic Neuritis
 - Pseudotumor cerebri
 - Migraine headaches
 - Tremors
 - Autonomic Insufficiency
 - Polyneuropathy, mononeuritis multiplex, and peripheral neuropathy
 - Seizure: first episode, recurrent, and status epilepticus
 - Dementia, including Normal Pressure Hydrocephalus
 - Acute spinal cord compression
 - Alcohol abuse and withdrawal
 - Subarachnoid hemorrhage
 - Acute neuromuscular weakness
 - Brain tumours
 - Stroke Altered mental status
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of the following conditions:
 - Optic Neuritis
 - Pseudotumor Cerebri
 - Migraine headaches

- Approach to stroke/transient ischemic attacks (and stroke syndromes): diagnosis,
- Primary and secondary prevention, treatments
- Multiple Sclerosis: findings, diagnosis, treatment
- Parkinson's Disease
- Myasthenia Gravis
- Guillain-Barre
- Amyotrophic Lateral Sclerosis
- Meningitis and encephalitis
- Acute spinal cord compression
- Understand the indications for and complications of lumbar puncture, CT scan, and MRI (both with and without contrast).
- Be able to perform a lumbar puncture for cerebrospinal fluid analysis and interpretation.

Communicator

- Present clear, concise and appropriate verbal summaries of case history, examination findings, diagnostic impression and management plan.
- Maintain clear, concise and appropriate written and electronic records of patient encounters and plans.
- Counsel and deliver understandable information to patients and their families regarding various aspects of common neurological disorders (e.g. diagnosis, non-invasive and invasive investigations, management plan and prognosis).
- Discuss ethical and end-of-life issues with patients and their families related to common neurological disorders.

Collaborator

- Understand the role of allied health professionals in the assessment and management of patients with neurologic diseases.
- Participate in multidisciplinary team meetings caring for patients with neurological disease (e.g. dementia, epilepsy, multiple sclerosis, motor neuron disease).

Manager

- Understand the role of allied health professionals in the assessment and management of patients with neurologic diseases.
- Participate in multidisciplinary team meetings caring for patients with neurological disease (e.g. dementia, epilepsy, multiple sclerosis, motor neuron disease).

Health Advocate

- Educate patients regarding lifestyle modifications that may prevent specific neurological conditions (e.g. stroke).

- Ensure timely access to relevant consultations and investigations.

Scholar

- Access and critically appraise medical information resources to answer clinical questions and support decision-making.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Treat patient with dignity, civility and respect, regardless of race, culture, gender, ethnicity, age, or socioeconomic status.
- Demonstrate integrity in all interactions with colleagues and patients.
- Ensure prompt completion of clinical, administrative and curricular tasks.

ENDOCRINOLOGY

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Endocrinology.

Medical Expert

- Be able to elicit, present, and document a history that is relevant and appropriate to the clinical presentation.
- Be able to perform an accurate physical examination, with emphasis on:
 - The eye with special attention diabetic retina
 - Thyroid orbitopathy
 - Thyroid gland
 - Extrathyroidal signs of thyroid disease
 - Diabetic feet
 - Gynaecomastia
 - Signs of dyslipidemia
 - Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of the following scenarios:
 - Diabetic retinopathy
 - Thyroid orbitopathy
 - Dyslipidemias
 - Thyroid nodule
 - Pituitary nodule
 - Chronic corticosteroid therapy
 - Incidental adrenal mass
 - Hypercalcemia and hypocalcemia
 - Hypogonadism, male and female (including amenorrhoea and loss of libido)
 - Hirsutism
 - Gynaecomastia
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of the following conditions:
 - Diabetes mellitus 1 and 2: first visit, treatment, follow-up, complications, perioperative and in hospital management
 - Management of diabetes in pregnancy
 - Diabetic ketoacidosis and hyperosmolar non-ketotic states
 - Hypoglycaemia
 - Hyperthyroidism (including Graves' disease and thyroid storm)
 - Hypothyroidism (including myxedema coma)
 - Acromegaly
 - Adrenal insufficiency (including Addisonian crisis and peri-operative management)
 - Cushing's syndrome (including Cushing's disease)
 - Pheochromocytoma
 - Conn's disease

- Osteoporosis
- Hyperparathyroidism Paget's disease
- Panhypopituitarism prolactinoma
- Diabetes insipidus
- Understand the indications for and complications of thyroid biopsy, static and dynamic testing of pituitary, thyroid, and adrenal function.

Communicator

- Engage in relevant and patient centered counselling for patients with a variety of endocrine disorders (adrenal, pituitary, thyroid diseases etc).
- Facilitate education to assist patients with diabetes self-management
- Communicate effectively with other health professionals about patients.

Collaborator

- Identify the need to and benefit of consulting other physicians and health-care professionals involved in endocrine care.
- Contribute effectively to interdisciplinary team activities.

Manager

- Consider cost-effective approaches to investigation and management of endocrine disorders.
- Be able to work efficiently and effectively.

Health Advocate

- Educate and counsel patients and families regarding the role of lifestyle modification in the control of endocrine disease (eg diabetes, osteoporosis).
- Assist patients with endocrine disorders to access information on their diseases.
- Ensure timely access to relevant consultations and investigations.

Scholar

- Access and critically appraise medical information resources to answer clinical questions and support decision-making.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Treat patients with dignity, civility and respect.
- Demonstrate integrity in all interactions with colleagues and patients.
- Ensure prompt completion of clinical, administrative and curricular tasks.
- Demonstrate insight into personal strengths and weaknesses.

DERMATOLOGY

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Dermatology.

The resident is expected to:

Medical Expert

- Be able to elicit, present, and document a history that is relevant and appropriate to the dermatologic system.
- Be able to perform an accurate physical examination of the dermatologic system, with emphasis on:
 - Diseases affecting the eyes (pemphigus, pemphigoid etc.)
 - Diseases affecting the eyelids (rosacea etc.)
 - Systemic disease affecting the eyes (lupus etc.)
 - Nail findings as manifestations of systemic disease
 - Skin findings as manifestations of systemic disease
 - Features of senile keratosis (differentiate from melanoma)
 - Differentiate venous from arterial insufficiency
 - Recognize cellulites and differentiate it from common mimickers
 - Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of the following scenarios:
 - Hyperpigmented lesions (differentiate from melanoma)
 - Petechia, purpura (palpable and non-palpable), and ecchymoses
 - Bullous skin disease
 - Urticaria
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of common dermatologic conditions.
- Understand the indications for and complications of skin biopsy and cryotherapy.

Communicator

- Demonstrate effective methods for gathering historical information from patients.
- Effectively communicate information regarding the skin disease, management options and treatment plans to patients.
- Convey oral and written medical information effectively with regards to the patient encounter.

Collaborator

- Work effectively with primary services to optimize the medical care of the patient.
- Recognize the role of allied healthcare professionals in the management of patients with skin disorders.

Manager

- Develop the ability to perform focussed histories and physical examination in the time- limited environment of outpatient clinics.
- Prioritize consultations effectively based on patient based and system based factors.
- Manage clinical, administrative and/or educational commitments to ensure optimal patient care

Health Advocate

- Identify opportunities for patient counselling and education regarding their medical conditions.
- Educate patients regarding lifestyle modifications that may prevent disease skin disease, including avoidance of sun exposure and use of sunscreens.
- Work with primary care services to optimize the flow of patients through the health care system.

Scholar

- Identify areas in resident's own practice that can be changed to improve the processes and outcomes of care.
- Accesses relevant medical information resources to answer clinical questions and support decision-making.
- Appraise the quality of medical information resources.
- Apply new medical knowledge to the clinical question with consideration of whether the evidence can be generalized to an individual patient.

Professional

- Respond promptly and appropriately to clinical responsibilities including but not limited to consultation requests, calls and pages.
- Recognize the scope of his/her abilities and ask for supervision and assistance appropriately.
- Demonstrate professional attitudes in interactions with patients and other healthcare team members.

NEURORADIOLOGY

Medical Expert

- The Ophthalmology resident is expected to achieve competence in the areas described below during the rotation in Neuro-Radiology.
- Attain knowledge of the bony anatomy of the skull.
- Attain knowledge of the soft tissue anatomy of the brain including major blood vessels.
- Learn the principles and science related to CT scan, MRI and ultrasound.
- Understand the benefits and limitations of each of these studies
- Review the common findings related to orbital tumors, thyroid orbitopathy, tumors involving the optic pathway, changes related to cerebrovascular accidents and multiple sclerosis.

Communicator

- Be able to communicate effectively with patients and their families with respect to their medical conditions.
- Be able to interact effectively with other health-care professionals.
- Be able to document the patient's condition accurately with emphasis on the relevant issues, using drawings or sketches as necessary and appropriate for further clarification.

Collaborator

- Be able to identify the need to and benefit of consulting other physicians and health-care professionals.
- Be able to contribute effectively to interdisciplinary team activities.

Manager

- Be able to use information technology to optimize patient care.
- Be able to use health-care resources cost-effectively.
- Be able to work efficiently and effectively.

Health Advocate

- Be able to educate and counsel patients and families regarding reducing risks of head trauma and injury.

Scholar

- Be able to critically appraise sources of medical information.
- Be able to educate patients and their families regarding their medical condition.

- Be able to teach medical students, residents, and other health-care professionals.
- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project, should the opportunity arise.

Professional

- Be able to apply knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Be able to apply knowledge of the legal codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Be able to recognize and resolve ethical issues as they arise in clinical practice.
- Be able to recognize and deal with unprofessional behaviours in clinical practice.

PLASTIC SURGERY

Medical Expert

- The Ophthalmology resident is expected to achieve competence in the areas described below during the rotation in Plastic Surgery:
- Anatomy of the head and neck with specific attention to the eyelids.
- Basic history and physical examination related to Plastic Surgery.
- Infections affecting the eyelids such as periorbital cellulitis and burns.
- Tumors involving the head and neck including the TNM classification of tumors.
- Basic surgical principles of Plastic Surgery.

Communicator

- Be able to communicate effectively with patients and their families with respect to their medical conditions.
- Be able to interact effectively with other health-care professionals.
- Be able to document the patient's condition accurately with emphasis on the relevant issues, using
- drawings or sketches as necessary and appropriate for further clarification.

Collaborator

- Be able to identify the need to and benefit of consulting other physicians and health-care professionals.
- Be able to contribute effectively to interdisciplinary team activities.
- Work effectively, collegially and respectfully with other physicians, allied health professionals and clinic staff while recognizing the expertise of these team members.

Manager

- Be able to use information technology to optimize patient care.
- Be able to use health-care resources cost-effectively.
- Be able to work efficiently and effectively.

Health Advocate

- Be able to educate and counsel patients and families regarding reducing sun exposure and the use of sunscreens.
- Make an effort to educate patients on issues that pertain to disease prevention (eg. smoking cessation for wound healing).
- Provide detailed and clear verbal or written post-operative/admission follow-up instructions to maximize patient outcomes following treatment.

Scholar

- Be able to critically appraise sources of medical information.
- Be able to educate patients and their families regarding their medical condition.
- Be able to teach medical students, residents, and other health-care professionals.
- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project, should the opportunity arise.

Professional

- Be able to apply knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Be able to apply knowledge of the legal codes and norms of behaviour that govern the behaviour of physicians in clinical practice
- Be able to recognize and resolve ethical issues as they arise in clinical practice.
- Be able to recognize and deal with unprofessional behaviours in clinical practice.

PEDIATRIC ER

The Ophthalmology Resident is expected to achieve competency in the areas described below during their Pediatric ER rotation. Besides the general problems seen in the ER, the Ophthalmology residents should pay attention to problems affecting the eyes. This includes infections (conjunctivitis and corneal ulcers), inflammations (iritis, endophthalmitis), sudden loss of vision (eg. optic neuritis) and trauma to the eye and surrounding ocular adnexa.

Medical Expert

The resident will acquire knowledge to:

- Be able to elicit, present, and document a history that is focused and relevant to the clinical presentation of patients in the emergency room.
- Be able to perform an accurate physical examination that is focused and relevant to the clinical presentation.
- Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of a broad range of clinical presentations in acute and undifferentiated forms
- Be able to focus on the common or dangerous problems first, with reference to rare but interesting diagnoses only as appropriate.
- Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of a broad range of clinical conditions in acute and undifferentiated forms
- Understand the indications for and complications of central venous catheter insertion, lumbar puncture, arterial puncture and blood gas analysis, abdominal paracentesis, endotracheal intubation, thoracentesis, joint aspiration, electrocardiographic interpretation, and inspection and interpretation of urinary sediment.
- Demonstrate an understanding of the issues surrounding the transport of critically ill pediatric patients within the hospital and to other centers.

Communicator

- Demonstrate targeted gathering of relevant history from patients and parents/family in the emergency room.
- Ensure that patients and parents/family know the diagnosis and management plan including follow up plans.
- Demonstrate empathy and compassion for parents'/families' concerns for the patient.
- Provide succinct, informed clinical notes and verbal handover when completing a clinical shift.

Collaborator

- Work collaboratively with allied healthcare professionals in the emergency room patient.
- Consult judiciously and effectively.
- Liaise with family members, other physicians or health care agencies to ensure safe transition of care for patients being discharged from the emergency department.

Manager

- Improve ability to perform focussed histories and physical examinations in the time-limited environment of the emergency room.
- Recognizes pressures on the Emergency Department and seeks to find ways to optimize personal efficiency while working within the Department.

Health Advocate

- Educate and counsel patients and families regarding factors that impact on their health status.
- Identify cases that require child advocacy and discuss with clinical supervisor to develop management plan, consultations to appropriate health services as needed.

Scholar

- Access medical information resources to answer clinical questions and support decision-making.
- Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Treat all patients, parents, families with dignity, civility and respect.
- Demonstrate integrity in all interactions with colleagues.
- Ensure prompt completion of clinical, administrative and curricular tasks.
- Recognize the scope of his/her abilities and ask for supervision and assistance appropriately.
- Understand issues including consent and capacity, substitute decision makers, and advanced directives for the acutely-ill patient.

OTOLARYGOLOGY

Medical Expert

- The Ophthalmology resident is expected to achieve competence in the areas described below during the rotation in Otolaryngology.
- Attain knowledge of the bony anatomy of the skull with attention to the anatomy of the bony orbit and paranasal sinuses.
- Attain knowledge of the soft tissue anatomy of the face, sinuses and nose with attention to innervation of these structures.
- Learn the principles of examination of the head and neck.
- Learn the imaging studies commonly used such as CT scan and MRI.
- Review the common diseases such as infections, inflammations, neoplasms.

Communicator

- Be able to communicate effectively with patients and their families with respect to their medical conditions.
- Be able to interact effectively with other health-care professionals.
- Be able to document the patient's condition accurately with emphasis on the relevant issues, using drawings or sketches as necessary and appropriate for further clarification.

Collaborator

- Be able to identify the need to and benefit of consulting other physicians and health-care professionals.
- Be able to contribute effectively to interdisciplinary team activities.

Manager

- Be able to use information technology to optimize patient care.
- Be able to use health-care resources cost-effectively.
- Be able to work efficiently and effectively.

Health Advocate

- Be able to educate and counsel patients and families regarding reducing sun exposure and the use of sunscreens.

Scholar

- Be able to critically appraise sources of medical information.
- Be able to educate patients and their families regarding their medical condition.
- Be able to teach medical students, residents, and other health-care professionals.

- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project.

Professional

- Be able to apply knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Be able to apply knowledge of the legal codes and norms of behaviour that govern the behaviour of physicians in clinical practice.
- Be able to recognize and resolve ethical issues as they arise in clinical practice.
- Be able to recognize and deal with unprofessional behaviours in clinical practice.

OPHTHALMOLOGY PGY-1

Medical Expert

The resident will acquire the knowledge:

- Physical Optics (nature of light, transmission and absorption)
- Geometrical Optics (vergence, dioptries, spherical/cylindrical lenses, astigmatism, thin/thick lenses, equivalent/vertex power, spherocylindrical notation, Hirschberg and Krimsky reflexes)
- Refractive components of the eye
- Ametropia, anisometropia
- Accommodation (physiology, cycloplegia, relative rate of onset, duration, potency of various agents, assess appropriateness for cycloplegia, effect of age and presbyopia)
- Infection control principles and practices in the Eye Clinic.
- The resident will develop clinical skills:
- Be able to take a good ophthalmic and appropriate medical history
- Appropriately assess emergency/trauma patients and demonstrate understanding of critical aspects/limitations of the exam in these and in red eye patients
- Assessment of visual function (malingers, visual acuity, Snellen), visual fields (confrontation/automated) and colour vision (Ishihara and AO-HRR plates)
- Inspection of glasses (evaluation, source of problems, measuring sphere/cylinder/reading add)
- Measurement of vertex and pupil distance
- Retinoscopy, Exophthalmometry
- Basic slit lamp exam, tonometry
- Direct and indirect ophthalmoscopy
- Safely remove superficial/non-central corneal foreign bodies

Communicator

- The resident will display effective doctor-patient communication skills:
- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision-making and management
- Obtain informed consent when appropriate
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

- The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

- The resident will utilize health care resources effectively:
- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient care

Health Advocate

- The resident will be a patient advocate when appropriate:
- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate
- Can identify modifiable risk factors for eye disease (trauma, nutrition, smoking etc.)

Scholar

- The resident contributes to the knowledge of others and develops a plan for self-improvement:
- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medical information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

- The resident will carry out duties in a professional manner:
- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up

INFECTIOUS DISEASES

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Infectious Diseases. The Ophthalmology residents should pay attention to problems affecting the eyes.

The resident is expected to:

Medical Expert

- Through daily evaluation of new infectious diseases consults, follow-up rounds on previously seen patients, daily teaching rounds, and "plate rounds", the residents should obtain the following basic skills:
- The ability to obtain a thorough history focused around the infectious diseases question posed.
- Complete a thorough examination of the patients, focusing on signs indicating an infectious process, but also recognizing signs of other diseases mimicking infections:
 - Symptom evaluation and diagnosis:
 - Fever
 - Weight loss
 - Rigors
 - Night sweats
 - Malaise
 - Sore throat
 - Painful /red eye
 - Ear pain
 - Cough
 - Dyspnea
 - Headache
 - Abdominal pain
 - Nausea and vomiting
 - Flank pain
 - Back pain
 - Diarrhea
 - Joint pain and swelling
 - Rash
 - Dysuria and increased urinary frequency
 - Hematuria
 - Vaginal discharge
 - Penile discharge
 - Post-exposure prophylaxis evaluation
 - Recognize major pathogens on microscopic examination.

- Formulate a reasonable treatment plan as well as the thorough understanding of the use of antimicrobial agents.
- Through the daily evaluation of new infectious diseases consults, follow-up rounds on previously seen patients, daily attending rounds, and additional academic sessions including case conferences and didactic lectures, the trainee should be able to evaluate the following clinical syndromes:
 - The febrile patient; specifically presenting in association with rash or as fever of unknown origin,
 - Upper and lower respiratory tract infections,
 - Urinary tract infections
 - Bacteremia and endocarditis
 - Central nervous system infections
 - Skin and soft tissue infections
 - Bone and joint infections
 - Sexually transmitted diseases
 - Sepsis syndromes
 - Nosocomial infections, including postoperative wound infections
 - Human immunodeficiency virus infection and acquired immunodeficiency syndrome
 - Infection in the immunocompromised or neutropenic host
 - Infections in solid organ transplant recipients (for residents rotating on the Transplant service)
- The resident should also gain expertise in the following special areas:
- The appropriate use and management of antimicrobial agents in a variety of clinical settings, including the hospital ambulatory practice and the home,

Communicator

- Effectively gather historical information from patients and substitute decision-makers.
- Perform patient centered pre- and post-test counselling for patients undergoing HIV testing.
- Communicates clearly and accurately recommendations to physicians while in the role of a consultant.

Collaborator

- Recognize and respect the roles of members of the interdisciplinary infectious diseases team, including infectious diseases pharmacists and infection control practitioners and the medical microbiologist.
- Participate in multi-disciplinary care for patients with complex infectious diseases.

Manager

- Prioritize and carry out responsibilities in the inpatient and outpatients settings.

- Participate in discussions related to cost-effective patient care, including discussions of the merits of utilizing costly antimicrobial therapy in unique clinical circumstance.
- Utilize information technology to facilitate self-directed learning around cases.

Health Advocate

- Identify opportunities for patient counselling and education, including recommendations for immunization.
- Identify advocacy issues in their patients (e.g. housing and drug coverage issues in the HIV/AIDS population).
- Develop skills to educate patients about safer sexual practices.

Scholar

- Access medical information resources within the infectious disease literature to answer clinical questions and support decision making.
- Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Treat patients with dignity, civility and respect, regardless of race, culture, gender, ethnicity, age, or socioeconomic status.
- Demonstrate integrity in all interactions with colleagues and patients.
- Ensure prompt completion of clinical, administrative and curricular tasks.
- Maintain confidentiality issues including required practices around HIV diagnosis disclosure.

RHEUMATOLOGY

The Ophthalmology Resident is expected to achieve competency in the areas described below during their rotation in Rheumatology.

The resident is expected to:

Medical Expert

- Be able to elicit, present, and document a history that is relevant and appropriate to the clinical presentation.
- Demonstrate the ability to evaluate new patients for the presence of autoimmune or inflammatory conditions. This ability includes:
 - Conducting a thorough and targeted review of systems to estimate the likelihood of various autoimmune and inflammatory disorders.
 - Performing a thorough and accurate musculoskeletal examination that includes demonstration of the ability to detect swollen or otherwise abnormal joints.
 - Performing a thorough generalized examination to detect signs of autoimmune disease including rashes, mucosal ulcers, nailfold capillary abnormalities, skin thickening, muscle weakness, osteoporosis, interstitial lung disease.
- Recommending and interpreting appropriate diagnostic testing for acute and chronic complaints.
- Residents will develop the skills necessary to co-manage patients with established inflammatory/autoimmune diseases. This ability includes:
 - Being able to describe and, when appropriate, use validated disease measures (e.g. RAPID3, HAQ, DAS, CDAI, SLEDAI) to inform therapy decisions.
 - Ordering correct laboratory surveillance for medication toxicity at the appropriate intervals.
 - Understanding the indications for and correctly recommending laboratory surveillance for disease activity and disease complications.
 - Learning the general indications, basic mechanisms of action, and dosing of disease modifying anti-rheumatic drugs (DMARDs) for rheumatoid arthritis.
 - Listing the categories of biologic DMARDs for rheumatoid arthritis and other disorders, and understanding the targets of these therapies and their proposed mechanisms of action.
 - Residents will learn and practice rheumatology procedural skills including:
 - The ability to independently perform arthrocentesis and injection of the knee.
 - The ability to perform injection of the rotator cuff and/or shoulder. The resident may also gain experience with arthrocentesis/injection of other joints and bursae including the trochanteric and olecranon bursae, ankles, 1st MTPs, elbows, wrists and fingers.
- Diseases and conditions seen include:

- Osteoarthritis
- Rheumatoid Arthritis
- Crystalline arthritis
- Acute inflammatory arthritis including septic arthritis and reactive arthritis associated with infectious diseases
- Seronegative inflammatory arthritis (psoriatic arthritis, ankylosing spondylitis, inflammatory bowel disease-associated and undifferentiated spondyloarthropathies)
- Systemic Lupus Erythematosus and related conditions including anti-phospholipid antibody syndrome
- Scleroderma (CREST syndrome and progressive systemic sclerosis)
- Inflammatory myopathies (Polymyositis, inclusion body myositis, dermatomyositis)
- Sjogren's syndrome
- Systemic necrotizing vasculitides (Giant Cell Arteritis, Polyarteritis Nodosa,
- Granulomatosis with polyangiitis (Wegener's), Henoch-Schonlein purpura, Churg
- Strauss Syndrome, cryoglobulinemic vasculitis and others)
- Polymyalgia Rheumatica
- Extra-pulmonary sarcoidosis
- Regional musculoskeletal pain
- Fibromyalgia syndrome
- Paget's disease of bone
- Osteoporosis and osteopenia

Communicator

- Demonstrate effective gathering of the patient's rheumatologic history including the nature and location of pain, the impact of disease on activities of daily living.
- Discuss effectively the treatment plans with the patient including potential rationale, benefits and risks.
- Communicate appropriately with members of the health care team when seeing patients with chronic, complex disease in the outpatient setting.

Collaborator

- Be able to identify the need to, and benefit of consulting other physicians and health-care professionals.
- Be able to contribute effectively to interdisciplinary team activities.

Manager

- Develop time management and organizational skills required to balance priorities for patient care within the inpatient and ambulatory settings.

- Describe cost-appropriate principles in the use of DMARDs for rheumatic conditions.

Health Advocate

- Recognize the need for patient access to rheumatologic therapies, and some of the barriers which may affect access to these treatments.
- Identify rheumatology resources available to patients and communities.

Scholar

- Access medical information resources within the infectious disease literature to answer clinical questions and support decision making.
- Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question.
- Apply clinical evidence, as appropriate, in the provision of patient care.

Professional

- Demonstrate professional attitudes and behaviours in interactions with patients and other healthcare professionals, including honesty, integrity, commitment, compassion, respect and altruism.

COMPREHENSIVE OPHTHALMOLOGY ROTATION
COMPREHENSIVE OPHTHALMOLOGY PGY – 2

Medical Expert

The resident will acquire the knowledge:

- Principles of Refraction including:
 - Physical Optics (nature of light, interference, coherence, polarization, diffraction, scattering, transmission and absorption) Geometrical Optics (vergence, diopters, Snell's law, refraction, reduced vergence, index of refraction, object/image relationships, real/virtual images, multiple lens systems, image position, graphical analysis, cardinal points of a lens, power of a curved surface, spherical/cylindrical lenses, astigmatism, conoid of Sturm, thin/thick lenses, equivalent/vertex power, spherocylindrical notation, transposition, lateral/axial/ angular magnification, lens aberrations including spherical, chromatic, coma, astigmatism of oblique incidence, radial astigmatism, curvature of field and caustic curve, reflection including specular/diffuse, plane/curved surface, critical angle, Purkinje-Samson images, Hirschberg and Krimsky reflexes, photometry, illumination, laser optics)
- Refractive components of the eye
- Optics of ametropia (principles of correction for ametropia, consequences of optical corrections, spherical errors, simple/mixed/compound astigmatism, meridional magnification, anisometropia)
- Accommodation (physiology, cycloplegia, relative rate of onset, duration, potency of various agents, assess appropriateness for cycloplegia, effect of age and presbyopia)
- Optics of ophthalmic instruments (lensometer, placido disc, direct/indirect ophthalmoscope, cross cylinder, retinoscope, pinhole, stenopeic slit, red-green test, Maddox rod, applanation tonometer, gonio/fundus/laser lenses, slit lamp microscope, corneal topographer, OCT, optical biometer, HRT, automated refractor)
- Optics of ophthalmic devices (meniscus lens, bifocal lens including flat/round/progressive, object
- displacement, image jump and induced phorias, antireflective coatings, absorptive lenses)
- Assess the visual requirements for driving
- Assess transient refractive errors (etiology and prognosis)
- The resident will develop clinical skills:
- Assessment of visual function (malingers, visual acuity, Snellen, contrast sensitivity), visual fields (confrontation/automated) and colour vision (Ishihara and HRR plates)
- Inspection of glasses (evaluation, source of problems, measuring sphere/cylinder/reading add)
- Measurement of vertex and pupil distance
- Retinoscopy

- Retinal assessment with 78/90D lens
- Subjective refraction
- Basic slit lamp exam, tonometry and gonioscopy
- Direct and indirect ophthalmoscopy
- Inspection of glasses (evaluation, source of problems, measuring sphere/cylinder/reading add)
- Appropriately assess emergency/trauma patients and demonstrate understanding of critical aspects/limitations of the exam in these and in red eye patients
- The resident will acquire surgical skills:
 - Removal of chalazia and small skin lesions
 - Laser iridotomy and capsulotomy
 - Corneal scraping- Microbiological lab procedures: prepare and read smears, prepare appropriate cultures, knowledge of lab resources
 - Corneal foreign body/rust ring removal
 - Simple lid laceration repair
 - Cathotomy/Catholysis
 - Removal of aberrant eyelashes
 - Bandage contact lens placement
 - Corneal suture removal

Communicator

- The resident will display effective doctor-patient communication skills:
- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

- The resident will display good collaborator team skills:
- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

- The resident will utilize health care resources effectively:
- Manage time and resources effectively

- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

- The resident will be a patient advocate when appropriate:
- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate

Scholar

- The resident contributes to the knowledge of others and develops a plan for self-improvement:
- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)
- Medical student teaching and supervision
- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project.

Professional

- The resident will carry out duties in a professional manner:
- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up

COMPREHENSIVE OPHTHALMOLOGY PGY - 3

Medical Expert

The resident will acquire knowledge including:

- Principles of prescribing glasses with prisms including prismatic optics (deviation/displacement, prism diopter, doubling prisms, Prentice's rule, Fresnel prisms)
- Principles of prescribing low vision aids (magnifiers, telescopes, high plus lenses, stand and video magnifiers, orientation and mobility services)
- Principles of prescribing glasses for occupational/safety needs (toxic effects of light, absorption lenses, polycarbonate lenses)
- Principles of assessment of low vision and contrast sensitivity (Low vision measurements, design of acuity charts, log MAR, definition of visual handicap and legal blindness)

The resident will develop clinical skills:

- Assessment and management of strabismus (use of orthoptic/neutralizing prisms, phorias and tropias, vergence problems, prescribing prisms)
- Assessment of occupational/safety needs
- Automated visual field testing
- Use of the automated refractor
- The resident will acquire surgical skills:
 - AC paracentesis
 - Tap and inject for endophthalmitis
 - Trauma repair techniques

Communicator

The resident will display effective doctor-patient communication skills:

- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate

Scholar

- The resident contributes to the knowledge of others and develops a plan for self-improvement
- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)
- Medical student teaching and supervision
- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project.

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability & be conscientious eg. punctual and provide appropriate patient follow-up

COMPREHENSIVE OPHTHALMOLOGY PGY - 4

Medical Expert

The resident will acquire the knowledge to:

- Determine the correct IOL implant power (IOL formulas, sources of error and relevance)
- Manage high anisometropia and aphakia including aniseikonia (limits of tolerance, causes, correction)
- Manage monocular diplopia
- Understand principles of prescribing specific glasses parameters (base curves, induced prisms, etc.)
- Manage surgical correction of astigmatism
- The resident will develop clinical skills:
 - Keratometry and pachymetry
 - A scan examination (contact and immersion)
 - Assessment of potential acuity pre-op (PAM, OCT, HRT tests)
 - Assessment of glare (glare testers)
 - Assessment of aniseikonia
- The resident will acquire surgical skills:
 - Intravitreal injections
 - Trauma repair techniques
 - Standard cataract surgical techniques

Communicator

The resident will display effective doctor-patient communication skills:

- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources and act in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient
- Local site scheduling and supervision of junior residents, administration, consultation screening

Health Advocate

The resident will be a patient advocate when appropriate:

- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate

Scholar

- The resident contributes to the knowledge of others and develops a plan for self-improvement
- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)
- Be able to contribute to the development of new knowledge, through the completion of or participation in a research project.

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up.

COMPREHENSIVE OPHTHALMOLOGY PGY-5

Medical Expert

The resident will acquire the knowledge to:

- Understand and manage PRK and LASIK refractive surgery (indications, consent, complications, success and complication rates, laser types, machine parameters, keratomes)
- Understand the principles of prescribing regular, toric, keratoconus and bifocal contact lenses including patient education and lens care

The resident will develop clinical skills:

- Corneal topography and wave-front analysis (PGY-4 and PGY-5)
- Assessment of functional visual loss

The resident will acquire surgical skills:

- Trauma repair techniques
- Advanced cataract surgical techniques

Communicator

The resident will display effective doctor-patient communication skills:

- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient

- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)
- Medical student teaching and supervision

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up

RETINA PGY-2

Medical Expert

The resident will acquire the knowledge to:

- Perform a history and complete eye examination
- Assess the visual field by confrontation and with Amsler grid
- Intraocular pressure measurement
- Examine the pupils, the cornea, the iris, the lens, vitreous and retina.
- To grade the anterior chamber cells, vitreous cells and keratic precipitates.
- Perform indirect examination of the fundus, gonioscopy, fundus exam with Goldman contact lens
- The resident should understand the principles behind the usage of anti-inflammatory agents and cycloplegics in the treatment of acute uveitis.
- Basic knowledge of ocular immunology
- Physiology of the uvea
- Terminology used in uveitis and intra-ocular tumours
- Classification of uveitis and intra-ocular tumours
- Personal and familial history
- Signs of uveitis and intra-ocular tumours
- Goals of management
- Laboratory examinations
- Non-specific treatment of uveitis
- Interpret fundus photography, fluorescein angiography and optical coherence tomography (OCT)
- Interpret visual fields and the Amsler grid
- A and B scan ultrasonography

The resident will acquire clinical skills to treat:

- Kerato-uveitis
- Acute uveitis
- Posterior synechiae
- Increase intraocular pressure associated with uveitis
- Direct ophthalmoscopy
- Indirect ophthalmoscopy and scleral depression
- Fundus drawing
- Slit lamp biomicroscopy of fundus (contact and non-contact method)
- Trans-illumination
- Use of indirect ophthalmoscopy in examination of infants
- Basic proficiency in B-scan ultrasonography

Communicator

The resident will display effective doctor-patient communication skills:

- Establish a comfortable and professional rapport with the patient and family

- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Will recognize the benefits and limitation of automated or remote diabetic screening – telemedicine and non-ophthalmic screening and how this impacts delivery of services to vulnerable populations

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Will recognize cost versus benefits of new anti VEGF therapy (society and the patient)

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Will understand one or more effective approaches to discuss adverse events with patients – specifically dropped nucleus or other complications post cataract surgery

RETINA PGY-3

Medical Expert

The resident will acquire the knowledge and ability to:

- Accurately classify presenting uveitis (location, type, level of activity)
- Draw (in colour) the fundus of a patient based on clinical exam.
- Measure clinically an inflammatory lesion or tumour of the fundus.
- Understand the ultrasonographic characteristics of serous retinal detachment, choroidal melanoma, metastatic tumour, and vascular tumour.
- Perform A and B scan ultrasonography.
- Classify and utilize the various immunomodulating therapies.
- Demonstrate proficiency in interpretation of fluorescein angiography, OCT and ultrasonography.
- Demonstrate proficiency in interpretation of electrophysiology and psychophysical testing.
- Evaluate age related macular disease and other disciform processes.
- History and symptoms
- Use of Amsler grid
- Interpretation of treatable cases
- Identification of treatable cases
- Counselling of patients for follow-up, including possible involvement of the fellow eye
- Understand recommendations of the following studies: Treatment of AMD with
- Photodynamic Therapy (TAP), Vertiporfin in Photodynamic Therapy (VIP),
- Anti-VEGF Antibody for the Treatment of Predominantly Classic Choroidal
- Neovascularization in AMD (ANCHOR), Minimally Classic/Occult Trial of the
- Anti-VEGF Antibody in the Treatment of Neovascular AMD (MARINA),
- Comparison of Age Related Macular Degeneration Treatments Trial (CATT)
- Evaluate retinal vascular disease - diabetic retinopathy
- Recognize background vs. proliferative retinopathy
- Understand recommendations of the Diabetic Retinopathy Study (DRS) and the
- Early Treatment of Diabetic Retinopathy Study (ETDRS)
- Indication for vitrectomy and diabetic retinopathy
- Indication for and interpretations of ultrasonography
- Evaluate retinal detachment
- Distinguish rhegmatogenous, tractional and secondary types
- Status of macula
- Status of vitreous
- Fundus drawing - indirect ophthalmoscopy with identification of Retinal landmarks such as the equator, ora serrata, and vitreous base
- Scleral depression
- Indication for vitrectomy
- Indication and contraindications for pneumatic retinopexy

The resident will acquire clinical skills to:

- Diagnose and treat the following uveitic clinical entities:
- Anterior Uveitis
- Idiopathic Iridocyclitis
- HLA-B27 + Iridocyclitis
- Juvenile Rheumatoid Arthritis
- Fuch's Iridocyclitis
- Herpes Simplex Keratouveitis
- Ankylosing Spondylitis
- Intraocular lens related uveitis
- Reiter's Syndrome
- Herpes Zoster Keratouveitis
- Syphilis
- Traumatic Iridocyclitis
- Inflammatory Bowel Disease
- Glaucomatocyclitic Crisis
- Tuberculous Iridocyclitis
- Posterior Uveitis
- Toxoplasma Retinochoroiditis
- Retinal Vasculitis
- Idiopathic Posterior Uveitis
- Presumed Ocular Histoplasmosis Syndrome
- Toxocariasis
- Cytomegalovirus Retinitis
- Idiopathic Retinitis
- Serpiginous Choroidopathy
- Acute Posterior Multifocal Placoid Pigment Epitheliopathy (APMPPE)
- Acute Retinal Necrosis
- Birdshot Choroidopathy
- Leukaemia / Lymphoma
- Large Cell Lymphoma
- Ocular Candidiasis
- Tuberculous Uveitis
- Lupus Retinitis
- Panuveitis
- Idiopathic Panuveitis
- Sarcoidosis
- Vogt-Koyanagi-Harada
- Behcet's Disease
- Phacogenic Uveitis
- Sympathetic Ophthalmia
- Brucellosis

- Continue development of skills in indirect ophthalmoscopy with demonstrated proficiency inscleral depression and identification of peripheral retinal disease.

The resident will acquire surgical skills:

- Vitreous tap and injection eg. endophthalmitis protocol
- Vitreous injection of therapeutic medications
- Laser photocoagulation: retinal tears, panretinal laser photocoagulation (PRP) for ischemic retinal disease

Communicator

The resident will display effective doctor-patient communication skills:

- Establish a comfortable and professional rapport with the patient and family
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Obtain informed consent
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Will recognize the benefits and limitation of automated or remote diabetic screening – telemedicine and non-ophthalmic screening and how this impacts delivery of services to vulnerable populations

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Will recognize cost versus benefits of new anti VEGF therapy (society and the patient)

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Will understand one or more effective approaches to discuss adverse events with patients – specifically dropped nucleus or other complications post cataract surgery

RETINA PGY-4 & PGY-5

Medical Expert

The resident will acquire the knowledge and ability to:

- Recognize the indications for anterior chamber tap, vitreous and retinal biopsies in cases of chronic Uveitis that do not respond to usual therapies.
- Describe the various ocular tumours (melanoma, retinoblastoma, metastases, etc.) and their diagnostic methods.

The resident will acquire clinical skills to:

- Understand the different methods of treatment of chronic Uveitis, their indications and applications.
- Understand the particularities about ocular surgery in patients with Uveitis.
- Explain radiation treatment of intra-ocular tumours (external beam and plaque application) and the findings of the Collaborative Ocular Melanoma Study (COMS) ongoing clinical trial of choroidal melanoma (COMS study)
- The resident must be able to perform an anterior chamber tap, a vitreous biopsy, injection of medication through the pars plana, and enucleation.
- Medical management - for medical retinal diseases, e.g. retinitis of different etiologies

The resident will acquire surgical skills:

- Laser photocoagulation
 - Diabetic retinopathy (PRP for proliferative disease. Focal laser for diabetic macular edema)
 - Central retinal vein occlusion, branch retinal vein occlusion, sickle cell disease
 - Age-related macular degeneration: determination of treatable lesions
- Cryotherapy
 - Retinal hole/tear
 - Peripheral cryotherapy eg. Coats disease
- Pneumatic Retinopexy
- Identification of tear, treatment of tear, AC tap, injection of intraocular gas
- Anterior vitrectomy - particularly for indications of urgent application, i.e. unexpected difficulty in cataract surgery
- Posterior vitrectomy: all residents should participate in preoperative evaluation and postoperative management, as well as assist in surgery
- Scleral buckle (primary, uncomplicated cases).

NEURO-OPHTHALMOLOGY PGY-2 AND PGY-3

Medical Expert

The resident will acquire the knowledge:

- basic neuro-ophthalmic anatomy
- the principles of the assessment of the afferent visual system
- the principles of the assessment of the efferent visual system
- the principles of cranial nerve and basic neurological exam
- the principles of neuroimaging relevant to the practice of ophthalmology
- the PGY-2 resident will be firmly grounded in the concepts learned during the basic science course including the anatomy and physiology of the eye.

The resident will acquire clinical skills:

- complete a proper and concise neuro-ophthalmic history
- show competence in visual assessment, colour vision, confrontational field testing and stereoacuity
- perform a complete slit lamp exam
- perform a proper fundoscopic examination
- perform a proper assessment of ocular motility including ductions, versions, cover testing and different functional classes of eye movements
- show competence in cranial nerve as well as basic neurological examination
- be able to localize the problem taking into account clinical findings, visual field defects

The resident will acquire practical clinical skills:

- based on the interview-clinical findings determine what and when to order selecting the appropriate complementary testing (electrophysiology, visual fields, laboratory, neuroimaging)
- develop a differential diagnosis for common neuro-ophthalmic signs and symptoms

Communicator

- Establishes therapeutic relationships with patients seen in the neuro-ophthalmology clinic
- Can obtain and synthesize a relevant history from patients and their families and present it in an accurate and concise fashion
- Will be aware of how to approach the initial discussion of a space occupying CNS lesion or Multiple Sclerosis or permanent blindness in one or both eyes in a respectful and sensitive manner
- Will be aware of Ontario's minimal visual standards for driving and will be able to demonstrate how to discuss loss of driving privileges with patients in a respectful and sensitive manner.

Collaborator

- Can consult effectively with subspecialty physicians and physicians from other services with respect to the spectrum of neuro-ophthalmic diseases seen in the clinic
- Can effectively interact with the staff physician in determining the diagnosis and management of patients seen in clinics

Manager

- Is able to utilize the resources of the clinic wisely in the management of the spectrum of patients seen in the resident clinics

Health Advocate

- Identifies and offers-facilitates advice with respect to modification of potential vascular risk factors or other systemic processes that may result in visual deterioration
- Will understand the high value patients place on the ability to drive and will be aware of the appeal process for those with borderline vision. Resident will be able to explain this process to the patient.

Scholar

- Has shown the ability to do independent study with respect to neuro-ophthalmology
- Has demonstrated good attendance and participation in neuro-ophthalmology rounds

Professional

- Exhibits proper personal and interpersonal behaviour with staff and fellow residents in clinic
- Is an honest, ethical and compassionate physician
- Is punctual for teaching sessions, rounds, and clinics

NEURO-OPHTHALMOLOGY PGY-4 AND PGY-5

Medical Expert

- Emphasis of these final two years is placed on the resident ability to recognize the most common neuro-ophthalmic entities understanding the pathophysiologic basis of the neuro-ophthalmic exam and different findings. Residents are expected to localize the problem along the different parts of the afferent-efferent visual system. Based on these findings, they should be able to elaborate a differential diagnosis.
- The resident will acquire clinical skills: to recognize anisocoria, RAPD, fundoscopic manifestations of neuro-ophthalmic disorders, visual field defects, ocular motor abnormalities, cranial nerve disorders and basic systemic neurological problems to properly interpret ancillary testing
- -provide teaching and direction regarding patient care and treatment to junior residents

The resident will acquire practical clinical skills:

- diagnosis, management and treatment of the most common neuro-ophthalmic entities with minimal supervision from staff
- develop a differential diagnosis for common neuro-ophthalmic signs and symptoms

Communicator

- Establishes therapeutic relationships with patients seen in the neuro-ophthalmology clinic
- Can obtain and synthesize a relevant history from patients and their families and present it in an accurate and concise fashion
- Will be aware of how to approach the initial discussion of a space occupying CNS lesion or Multiple Sclerosis or permanent blindness in one or both eyes in a respectful and sensitive manner
- Will be aware of Ontario's minimal visual standards for driving and will be able to demonstrate how to discuss loss of driving privileges with patients in a respectful and sensitive manner.

Collaborator

- Can consult effectively with subspecialty physicians and physicians from other services with respect to the spectrum of neuro-ophthalmic diseases seen in clinic
- Can effectively interact with the staff physician in determining the diagnosis and management of patients seen in clinics.

Manager

- Is able to utilize the resources of the clinic wisely in the management of the spectrum of patients seen in the resident clinics

Health Advocate

- Identifies and offers-facilitates advice with respect to modification of potential vascular risk factors or other systemic processes that may result in visual deterioration
- Will understand the high value patients place on the ability to drive and will be aware of the appeal process for those with borderline vision. Resident will be able to explain this process to the patient.

Scholar

- Has shown the ability to do independent study with respect to neuro-ophthalmology
- Has demonstrated good attendance and participation in neuro-ophthalmology rounds

Professional

- Exhibits proper personal and interpersonal behaviour with staff and fellow residents in clinic
- Is an honest, ethical and compassionate physician
- Is punctual for teaching sessions, rounds, and clinics

PEDIATRIC OPHTHALMOLOGY PGY-2

Medical Expert

The resident will acquire the knowledge:

- Strabismus of the ocular system
- Embryology of the eye & orbit
- Anatomy of the changing ocular & orbital structures
- Anatomy & physiology of the oculomotor system
- Physiology of accommodation & the changing optics of the child's eye
- Physiology of normal & abnormal visual development
- Pharmacology of cycloplegics (atropine, cyclopentolate tropicamide, phenylephrine, homatropine), etc. & pediatric dosages
- Basic genetics (RP, LCA, etc.)
- Microbiology of neonatal infections (e.g. torch, ophthalmia neonatorum, etc.)

The resident will acquire clinical skills:

- Diagnosis & management of pediatric refractive errors including the prescription of optical corrections
- Diagnosis of motility disorders (strabismus, palsies)
- Diagnosis & management of amblyopia
- Management of neonatal ocular infections, periorbital and orbital cellulitis
- Diagnosis & management of tearing disorders in children
- Specific questioning of parents relating to pregnancy, delivery, development, and family history of the child being examined
- Assessment of vision in the preverbal child
- Assessment of eye movements
- Principles of measurement of strabismus deviations
- Refraction in children
- Introduction to the indirect ophthalmoscopic examination of infants

The resident will acquire surgical skills:

- Sterile surgical technique, basic prepping & draping of patient
- Assist at strabismus surgery on occasion (to include familiarity with)
- Minor eyelid procedures (e.g. chalazion removal)
- Minor nasolacrimal duct procedures (e.g. probing)
- Assist at some examinations under anaesthesia

Communicator

The resident will display effective doctor-patient communication skills:

- Will be taught how to speak with parents effectively and respectfully and how to minimize anxiety
- Will understand how to speak with children – information presented at the correct level

Collaborator

The resident will display good collaborator team skills:

- Will be taught how to work closely and effectively with orthoptists, respecting limits and abilities

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

- The resident will be a patient advocate when appropriate:
- Will understand the importance of eye safety in children's sports and how to encourage this at the team, school and governance level

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

- The resident will carry out duties in a professional manner:
- Will understand how informed consent in children is different from adults and when to seek consent directly versus via substitute decision maker (i.e. parent)

PEDIATRIC OPHTHALMOLOGY PGY-3

Medical Expert

The resident will acquire the knowledge:

- Surgical anatomy of the changing ocular & orbital structures
- Pathophysiology of sensorial adaptations & abnormal visual development
- Electrophysiology (including ERG, VER, EOG)
- Pharmacology of certain anaesthetic agents & conditions which relate to pediatric ocular surgery
- Pathology of congenital ocular malformations, pediatric ocular and orbital tumours
- Management of all strabismus & neuro-ophthalmic ocular deviations
- Management of ptosis & related disorders
- Management of pediatric intraocular & orbital tumours
- Management of Uveitis in children
- Diagnosis & management of inherited retinal degenerations
- Diagnosis of pediatric cataracts, glaucoma, and leukocoria
- Understanding the ophthalmic manifestations of pediatric systemic disease
- Identification and understanding of ROP
- Expertise in the assessment of vision of the preverbal child
- Expertise in the assessment of eye movements
- Complete facility in the measurement of strabismus deviations and the assessment of any associated sensory adaptation, including orthoptic assessments
- Clinical experience in the assessment of the child who is uncooperative or developmentally delayed
- Expertise with the indirect ophthalmoscopic examination of infants including involvement in ROP screening

The resident will acquire practical clinical skills:

- Satisfactory execution of horizontal strabismus surgery & some vertical/oblique surgery
- Syringing & probing of the nasolacrimal duct
- Assist at examinations under anaesthesia & pediatric intraocular surgery
- Some ptosis procedures
- Draw and understand pedigrees (AD, AR and XR inheritance)

PEDIATRIC OPHTHALMOLOGY PGY-4 AND PGY-5

Medical Expert

The resident will acquire the knowledge and demonstrate:

- Expertise in pediatric glaucoma, infections and inflammations and tumours

The resident will acquire clinical skills for:

- Management of intraocular infections
- Management of pediatric cataracts & glaucoma

The resident will acquire surgical skills:

- Vertical, oblique, and re-operative strabismus procedures
- Levator resection and frontalis sling for ptosis
- Pediatric cataract surgery
- Ocular lacerations & surgical lid procedures

CORNEA AND EXTERNAL DISEASE PGY-2

Medical Expert

The resident will acquire the knowledge:

- Normal anatomy, physiology, immunology, pharmacology, biochemistry of the anterior segment of the eye including:
 - Cornea
 - Iris, anterior chamber angle, crystalline lens, and anterior vitreous
 - Conjunctiva
 - Ocular adnexa
 - Lid Margins
 - Lid Skin
 - Physiology and biochemistry of the tear film
 - Principles of regular and irregular astigmatism and its management
 - Principles of ocular surface inflammation and infection
 - Principles of corneal transparency, optics, refractive power
 - Principles of assessing visual potential via refraction, contact lens over-refraction, pinhole, stenopeic slit
 - Pathology of cornea and ocular adnexa
- Preoperative evaluation of cornea prior to intraocular procedures including
 - cataract surgery
 - Scleritis/episcleritis
 - Corneal edema (clinical evaluation, ddx, management)
 - Ocular surface disorders: keratoconjunctivitis sicca, exposure, toxicity (medications, chemical burn)
 - Anterior Uveitis systematic approach, syndrome identification, management
 - Lacrimal system disorders (e.g., dacryocystitis, canaliculitis, obstruction in infants)

The resident will acquire clinical skills to:

- Integrate knowledge, clinical findings and diagnostic data to arrive at a plausible differential diagnosis, and diagnosis
- Perform, interpret and document findings from diagnostic tests including:
 - Ocular surface staining (e.g. fluorescein, rose Bengal)
 - Tonometry in presence of corneal abnormalities (tonopen)
 - Measurement of corneal thickness (pachymetry)
 - External ocular and periocular examination in room light (e.g. skin, sclera)
 - Portable slit lamp examination
 - Measurement of corneal astigmatism via keratometry, keratoscopy, placido disc, topography
 - PAM/interferometry
 - Corneal sensitivity testing
 - Tear evaluation: Schirmer test, break-up time, dyes, tear meniscus
 - Slit lamp examination of the anterior segment of the eye

The resident will acquire surgical skills:

- Diagnostic corneal scraping for suspected infectious keratitis
- Corneal / conjunctival foreign body removal (e.g. upper lid)
- Incision & drainage of minor lid lesions (hordeolum, chalazion)

Communicator

The resident will display effective doctor-patient communication skills:

- Will be able to discuss planning of tissue donation with patients and will understand the process of obtaining proxy consent for tissue donation at time of death

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility and effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient care

Health Advocate

The resident will be a patient advocate when appropriate:

- Will understand the issues in regards to patient vs society rights and obligations in regards to use of Eye Bank tissue (corneal transplants, etc.)
- Will understand the process of organ donation as it is practiced in Ontario and as it is practiced in certain developing world sites.

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning (case-based from clinical patients)
- Apply the principle of critical appraisal to sources of medical information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up

CORNEA AND EXTERNAL DISEASE PGY-3

Medical Expert

The resident will acquire the knowledge to:

- Investigate and diagnosis diseases of the cornea and external ocular structures including:
 - Infectious keratitis: bacterial, fungal, viral, acanthamoeba
 - Dry eye: etiology & ddx, systematic approach, management
 - Trauma of the anterior segment (hyphema, open globe, iridodialysis, lens dislocation))
 - Acute and chronic conjunctival inflammations, infections (adult and neonatal) (allergic, vernal, chlamydia, GC, toxic/medicamentosa, medications)
 - Contact lens related complications: toxicity, GPC, infections, neovascularization etc.
 - Drug selection and complications (antibiotics, steroids, diagnostics, etc.)
 - Lid margin disorders: blepharitis, other infections, tumors
 - Cornea/anterior segment findings in systemic disease
 - Corneal dystrophies: epithelial (e.g., map-dot), stromal (e.g., macular), endothelial (e.g., Fuchs')
 - Neurotrophic keratopathy (dx, ddx, rx)

The resident will acquire clinical skills including:

- Microbiological lab procedures: prepare and read smears, prepare appropriate cultures, knowledge of lab resources
- Endothelial evaluation: slit lamp specular reflection, thickness of cornea, evaluate specular photomicrographs
- Selection and management of antibiotics, steroids for infections/inflammation and their preparation
- Read cultures, plates
- Evaluate donor material for keratoplastyAppropriate use of diagnostic techniques including: A and B-Scan ultrasound of the eye, topography and keratometry

The resident will acquire surgical skills including:

- Tarsorrhaphy
- Pterygium surgery
- Punctal occlusion (plugs, cautery)
- Tissue glue (Tisseel, cyanoacrylate)
- Superficial keratectomy (eg band keratopathy)
- Conjunctival laceration

CORNEA AND EXTERNAL DISEASE PGY-4 and PGY-5

Medical Expert

The resident will acquire knowledge of:

- Anterior segment neoplasms (e.g., conjunctival melanosis etc.)
- Corneal complications of IOL and other surgical procedures
- Corneal/conjunctival degenerations
- Ectatic disorders (e.g. keratoconus, pellucid, progressive corneal ectasia)
- Muco-cutaneous syndromes: pemphigoid, SJS etc.
- Ocular-dermatological associations (e.g., rosacea, genetics, infections, etc.)
- Post-surgical infections: Dx and Rx-cultures, therapy, antibiotic selections
- Abnormalities of lid closure/blink mechanisms
- Long-term impact of chronic disease on patient/family/society

The resident will acquire clinical skills:

- Corneal topography (understanding and interpretation)

The resident will acquire surgical skills:

- Repair of lid, cornea / scleral laceration (and when to refer)
- Management of post-surgical wound leaks (medical & surgical)
- Anterior segment foreign body removal
- Iris repair
- Excisional biopsy (eg CIN)
- Anterior stromal micropuncture for recurrent erosions
- Have knowledge of the following procedures: (may or may not perform)
- Keratoplasty (eg penetrating, endothelial, lamellar)
- DM reattachment with air tamponade
- Keratorefractive surgery (eg LASIK, PRK)
- Corneal Intacs / Rings
- Iridocyclectomy
- Corneal / scleral patch grafts
- Conjunctival transplant
- Limbal stem cell transplant
- Amniotic membrane transplant
- Collagen crosslinking (eg keratoconus)Keratoprosthesis (eg Boston K-Pro)

GLAUCOMA PGY-2

Medical Expert

The resident will acquire the knowledge:

- Anatomy, physiology, biochemistry of:
 - Drainage system including trabecular and uveoscleral
 - Optic nerve
- Mechanism and modalities of intraocular pressure measurement
- Clinical classification of glaucoma including the different subtypes of open angle (pre-trabecular, trabecular, post-trabecular) and angle closure (anterior pulling, posterior pushing) glaucoma.
- Basic pharmacology of glaucoma medications

The resident will acquire clinical skills:

- Ability to diagnose the various glaucomas and specifically acute glaucoma.
- Ability to assess a patient for the various risk factors (age, past medical history, past ocular history, medications, pachymetry, gonioscopy) and manifestations (visual fields, optic nerve imaging) of glaucoma.
- Ability to measure intraocular pressure using multiple modalities (Goldmann applanation tonometer, tonopen, Perkins, digital palpation)
- Management of emergency acute glaucoma.
- Develop a notion of the medical management of glaucoma.

The resident will acquire technical skills:

- Tonometry: applanation, Schiotz, Perkins, tonopen
- Gonioscopy: slit lamp, Koeppe (surgical)
- Visual Fields: confrontation, Goldman and automated perimetry
- Optic nerve head assessment: direct ophthalmoscope, contact lens exam

The resident will acquire surgical skills:

- Laser: peripheral iridotomy using YAG laser
- YAG laser Capsulotomy

Communicator

The resident will display effective doctor-patient communication skills:

- Will understand and demonstrate discussion of glaucoma as a chronic progressive condition vis a vis adherence to therapy and follow-up as it pertains to outcome efficacy.

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Will understand the pros and cons of heroic measures in end stage glaucoma and how this impacts patients and society in regards to equitable access to resources

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Resident will understand the influence of industry on decision making and how this may positively or negatively affect the patient vis a vis: financial side effects.

GLAUCOMA PGY-3

Medical Expert

The resident will acquire the knowledge:

- Epidemiology of glaucoma
- Pharmacology of glaucoma
- Pathology of glaucoma
- Natural history of the glaucoma entities (primary and secondary)
- Indications of treatment:
 - Medical
 - Surgical
- Complications and side effects of treatment
- Adequate follow-up of this chronic disease

The resident will acquire clinical skills to:

- Formulate appropriate management of the glaucoma considering:
- Diagnosis
- Associated ocular problems
- Associated medical problems
- Visual needs of the patient
- Explain condition to the patient
- Implement and follow up of management
- Initiate medical therapy recognizing indications contraindications and complications (ocular and systemic) of various medications.

The resident will acquire surgical skills:

- Introduction to laser surgical techniques of glaucoma management (peripheral iridotomy using YAG and Argon lasers, selective laser trabeculoplasty +/- pupilloplasty, iridoplasty and cyclophotocoagulation)
- Exposure to various glaucoma surgical procedures (needling, trabeculectomy, tube shunt surgery, microinvasive glaucoma surgery, goniosynechialysis)

GLAUCOMA PGY-4 AND PGY-5

Medical Expert

The resident will acquire the knowledge:

- Revision of all of the PGY-2 and PGY-3 knowledge

The resident will acquire clinical skills:

- Revision of all of the PGY-2 and PGY-3 clinical skills
- Diagnosis and management of postoperative glaucoma presentations

The resident will acquire surgical skills:

- Laser surgical therapy:
 - Argon and YAG laser iridotomy
 - Argon Laser Trabeculoplasty/ Selective Laser Trabeculoplasty
 - Laser suturelysis post-trabeculectomy
 - Argon laser iridoplasty
- Management of cataract in glaucoma patients
- Combined cataract extraction and Trabeculectomy
- Needling
- Tube shunt surgery
- Microinvasive glaucoma surgery
- Goniosynechialysis

CATARACT PGY-2

Medical Expert

The resident will acquire the knowledge:

- Basic science of the lens and zonules including anatomy, histology, embryology, biochemistry, physiology, genetics and pharmacology of the lens and zonule
- The optics of the phakic, aphakic and pseudophakic eye.
- The diagnosis and classification of cataracts.
- The resident will acquire clinical skills:
- The measurement of visual acuity in the cataract patient, including an understanding of the differences between various methods of assessing acuity in cataract patients and of the effects of illumination on the acuity of such patients in the examining room and in everyday life.
- Participation in animal eye wet labs to learn the fundamentals of ocular surgery such as studying the various instruments and their uses, methods of cutting ocular tissues, types of suture materials, suturing techniques, and the advantages and limitations of working through the operating microscope.

Communicator

The resident will display effective doctor-patient communication skills:

- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of patient and family in decision making and management
- Demonstrate aspects of obtaining informed consent for surgery from patients.
- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

- The resident will display good collaborator team skills:
- Delegate responsibility effectively
- Work effectively and respectfully with technicians to ensure good IOL measurements.
- Interact and work effectively with other health care professionals in the OR and clinical settings.

Manager

The resident will utilize health care resources effectively:

- Will understand the basics of waiting list management

- Will understand issues pertaining to refractive “add on” management including patient time and extra investigation issues

Health Advocate

The resident will be a patient advocate when appropriate:

- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Will understand the effect of wait lists on vulnerable populations
- Will understand how patients in certain groups have limited access to surgery (difficult anesthesia, psychiatric problems, mobility issues)
- Will understand how equity of distribution of surgical time affects access to overall ophthalmic care

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medical information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Resident will understand the ethical principles involved in IOL selection and how a differential payment model (patient pay model vs. public pay) affects physician decisions and conflict of interests.

CATARACT PGY-3

Medical Expert

The resident will acquire the knowledge:

- IOL lens materials and designs
- Principles of biometry including types, advantages, disadvantages
- Formulae for intraocular lens calculation
- Indications and contra-indications for cataract surgery.
- Options for anesthesia – local, regional, general advantages and disadvantages

The resident will acquire clinical skills to:

- Correctly identify and clinically classify cataracts preoperatively
- Identify confounding factors that may influence cataract surgery intra and post-operatively

The resident will acquire surgical skills:

- Basic cataract surgical techniques via participation in animal eye wet labs.
- YAG Laser posterior capsulotomy
- Local anesthetic injections (peribulbar, retrobulbar, regional) on cataract surgery patients, when the opportunity arises.

Communicator

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Professional

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CATARACT PGY-4 AND PGY-5

Medical Expert

The resident will acquire the knowledge:

- Features that identify high-risk cataract surgical patients
- Features of intraoperative and postoperative complications and how to avoid them
- Preoperative, intraoperative, and postoperative planning for patients having cataract surgery with ocular comorbidities

The resident will acquire clinical skills:

- Identification and management of intra-operative conditions and complications of cataract surgery including:
 - Iris prolapse
 - Small pupil
 - Posterior capsular break
 - Vitreous prolapse
 - Aqueous misdirection syndrome
 - Suprachoroidal haemorrhage
 - Identification and management of post-operative complications of cataract surgery including:
 - Endophthalmitis
 - Uveitis
 - Secondary glaucoma
 - Pseudophakic bullous keratopathy
 - Wound leakage
 - Cystoid macular oedema
 - Lens displacement
 - Choroidal effusion
 - Retinal detachment
 - Posterior capsular opacification

The resident will acquire surgical skills:

- Advanced techniques of cataract surgery including:
- Advanced phacoemulsification techniques (e.g. stop and chop, phaco chop, etc)
- Use of intraocular devices (e.g. malyugin ring, ICTR, etc)
- Management of posterior capsular break +/-Anterior vitrectomy

Communicator

- The resident will display effective doctor-patient communication skills:
- Provide clear and thorough explanation of diagnosis, investigation and management
- Encourage full participation of the patient and family in decision making and management
- Demonstrate aspects of obtaining informed consent for surgery from patients.

- Verbally present the patient’s problems clearly, concisely and correctly in the clinical setting and written records
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Work effectively and respectfully with technicians to ensure good IOL measurements.
- Interact and work effectively with other health care professionals in the OR and clinical settings.

Manager

The resident will utilize health care resources effectively:

- Will understand the basics of waiting list management
- Will understand issues pertaining to refractive “add on” management including patient time and extra investigation issues

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Scholar

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- Develop and implement a plan for self-directed learning
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- Attend and contribute to learning events (e.g. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Resident will understand the ethical principles involved in IOL selection and how a differential payment model (patient pay model vs. public pay) affects physician decisions and conflict of interests.

OCULOPLASTICS, ORBIT AND ANATOMY PGY-2

Medical Expert

The resident will acquire the knowledge:

- Lid Anatomy and Canthal Anatomy
- Lacrimal Anatomy and Physiology
- Radiologic Investigations for Orbital Fractures

The resident will acquire clinical skills:

- Examination of Ocular Adnexae
- Evaluation of Skin Tumours
- Examination of the Orbit
- Exophthalmometry
- Nasal Exam

The resident will acquire surgical skills:

- Cathotomy/Catholysis
- Chalazion and Superficial Lid Lesions
- Lacrimal Irrigation
- Tarsorrhaphy
- Electrolysis and/or Cryotherapy
- Eyelid and Conjunctival Biopsy
- Ectropion and entropion repair

Communicator

The resident will display effective doctor-patient communication skills:

- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Will learn to discuss realistic expectations with patients with regards to surgical outcome. Special attention is paid to patient self-image, language skill and level of understanding.
- Resident will understand how to discuss surgical outcomes with dissatisfied patients.
- Accurate and timely documentation

Collaborator

The resident will display good collaborator team skills:

- Will have exposure to and understand the multidisciplinary approach to some oculoplastic surgical problems involving other surgical specialties
- Will understand key aspects of working with other services on orbit/eyelid tumor resection and reconstruction

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient

Health Advocate

The resident will be a patient advocate when appropriate:

- Identifies situations where patient advocacy is required (eg. facilitating access to low vision and ocularist services)
- Acts as a patient advocate

Scholar

The resident contributes to the knowledge of others and develops a plan for self-improvement:

- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious

OCULOPLASTICS, ORBIT AND ANATOMY PGY-3

Medical Expert

The resident will acquire the knowledge:

- Orbital Anatomy
- Orbital C-T Scan and MRI
- Orbital Ultrasound

The resident will acquire clinical skills:

- Forced Duction Tests
- Optic Nerve Evaluation in Orbital Disease
- Orbital Trauma
- Ocular Adnexal Trauma

The resident will acquire surgical skills:

- Punctal Surgery
- Lacrimal Probing in Children
- Lacrimal Intubation
- Full Thickness Eyelid Reconstruction
- Basic suturing of the lids
- Ectropion, entropion and ptosis repair

Communicator

The resident will display effective doctor-patient communication skills:

- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Will learn to discuss realistic expectations with patients with regards to surgical outcome. Special attention is paid to patient self-image, language skill and level of understanding.
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Professional

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- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious

OCULOPLASTICS, ORBIT AND ANATOMY PGY-4, PGY-5

Medical Expert

The resident will acquire the knowledge:

- Revision of the objectives of the PGY-2 and PGY-3 years
- The resident will acquire clinical skills:
- Revision of the objectives of the PGY-2 and PGY-3 year

The resident will acquire surgical skills:

- Procedures Done
 - Ectropion
 - Entropion
 - DCR
 - Enucleation or Evisceration
 - Ptosis Repair
 - Blepharoplasty

Procedures Assisted or Reviewed:

- Complex Eyelid Reconstruction
- Repair of Eyelid Malpositions in Graves'
- Repair of Canalicular Lacerations
- Harvesting of Skin Grafts, Cartilage or Fascia Lata
- Secondary Orbital Implants including Dermis Fat Grafts
- Mucous Membrane Grafts
- Orbital Fracture Repair
- Orbital Exenteration
- Orbital Biopsy
- Lateral Orbitotomy
- Orbital Decompression

Communicator

The resident will display effective doctor-patient communication skills:

- Verbally present the patient's problems clearly, concisely and correctly in the clinical setting and written records
- Will learn to discuss realistic expectations with patients with regards to surgical outcome. Special attention is paid to patient self-image, language skill and level of understanding.
- Resident will understand how to discuss surgical outcomes with dissatisfied patients.
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- Will understand key aspects of working with other services on orbit/eyelid tumor resection and reconstruction

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best interest of the patient
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Health Advocate

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- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

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- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious

OPHTHALMIC PATHOLOGY PGY-2 TO PGY-4

Medical Expert

The resident will review the following resources to acquire knowledge:

- Section 11 of AAO BCSC annually.
- Yanoff and Fine's Ocular Pathology
- Ophthalmic Pathology – Spencer, Zimmerman
- Regarding molecular biology techniques including PCR, genetic studies, immunohistochemistry

The resident will acquire clinical skills:

- Reviewing kodachrome slides
- Basic molecular biology techniques (e.g. cell culture, immunohistochemistry, etc)

Collaborator

The resident will display good collaborator team skills:

- Delegate responsibility effectively
- Interact effectively with staff and peers
- Interact effectively with other health care professionals

Manager

The resident will utilize health care resources effectively:

- Manage time and resources effectively
- Make cost effective use of health care resources while acting in the best in the best interest of the patient
- Understand the principles of practice management
- Effective use of information technology to optimize patient care

Health Advocate

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- Develop and implement a plan for self-directed learning
- Apply the principle of critical appraisal to sources of medial information
- Attend and contribute to learning events (eg. seminars, rounds)

Professional

The resident will carry out duties in a professional manner:

- Show respect toward patients
- Show respect toward other health care professionals
- Demonstrate reliability and be conscientious eg. punctual and provide appropriate patient follow-up

RESEARCH (PGY-2 TO PGY-5)

Medical Expert

The resident will acquire the knowledge:

- Basic epidemiology
- Clinical study design
- Evaluation of clinical practice.
- Knowledge translation (quality improvement) methodology such as rapid improvement cycle
- Critical appraisal of scientific literature.

Communicator

The trainee will demonstrate skill in conveying the objectives of the study or quality improvement project, the evidence supporting the proposal and the results of the study through:

- Preparation of written proposals for each and quality improvement projects
- Preparation of written reports (abstracts, publications and internal reports) describing the result of the project

Collaborator

- The trainee will demonstrate ability to work with team members to conduct the study or implement the change in practice.

Manager

- The trainee will develop skills required to evaluate clinical practice and to evaluate the resources and barriers for a successful research study or quality improvement project.

Health Advocate

- The trainee will demonstrate skills required to optimize the delivery of clinically effective care.

Scholar

- The trainee will develop skills to critically appraise clinical trial proposals, best evidence and knowledge translation techniques.

Professional

- The trainee will demonstrate ethical and sound scientific judgement with respect to the conduct of clinical trial and quality improvement projects.

CanMEDS (PGY-2 TO PGY-5)

Medical Expert

The resident will acquire knowledge to:

- Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical care
- Establish and maintain clinical knowledge, skills and attitudes appropriate to their practice
- Perform a complete and appropriate assessment of a patient
- Use preventive and therapeutic interventions effectively
- Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic
- Seek appropriate consultation from other health professionals, recognizing the limits of their expertise.

Communicator

The resident will acquire knowledge to:

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

Collaborator

The resident will acquire knowledge to:

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

Manager

The resident will acquire knowledge to:

- Participate in activities that contribute to the effectiveness of their healthcare organizations and systems
- Manage their practice and career effectively
- Allocate finite healthcare resources appropriately
- Serve in administration and leadership roles, as appropriate.

Health Advocate

The resident will acquire knowledge to:

- Respond to individual patient health needs and issues as part of patient care
- Respond to the health needs of the communities that they serve
- Identify the determinants of health of the populations that they serve
- Promote the health of individual patients, communities and populations.

Scholar

The resident will acquire knowledge to:

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

Professional

The resident will acquire knowledge to:

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