

McGill Ophthalmology Residency Program Manual

Message from the Residency Training Committee

Welcome to Ophthalmology!

This manual outlines the Postgraduate Education Committee's recommendations for the Residency Training Program in Ophthalmology at McGill University.

Our training program is intended to produce competent general ophthalmologists, who understand the importance of research. The criteria outlined in this manual are to ensure that each resident attains the objectives as they rotate through the various McGill University teaching hospitals. *We emphasize that these are minimal standards and that we encourage all residents to set their personal goals higher.*

A residency program is challenging from physical, mental and psychological points of view. Residents are frequently in high stress positions and many will suffer from the effects of stress or depression during the residency program. It is important for all residents to be aware that there are several services offered by the Faculty of Medicine at McGill as well as the Resident Federation (FMRQ). Every resident should visit these sites at the beginning of the residency program to view the services offered by these groups. Below are some of the ways to contact these services. Before reading the rest of the Resident Manual please refer to the last section in this residency handbook that is entitled Residents in Difficulty on page 70.

Good luck in your studies!

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PART I: Specific Objectives of Training

COMPREHENSIVE OPHTHALMOLOGY (PGY-2)

During the first 12 months, as a junior resident, you will be focusing mainly on Medical Ophthalmology.

You will be expected to:

Learn all the different techniques of eye examination and be able to accurately refract patients and prescribe glasses.

You should complete at least half of the American Academy home study course with special emphasis on:

- Anatomy Pathology
- Histology Bacteriology
- Optics Biochemistry
- Refraction Physiology

Your goals during the first year of core training should be:

Accurately recognize the presence of pathology

Be able to recognize and determine the gravity of ocular injuries and initiate treatment

Have a detailed understanding of the pharmacology and therapeutic use of ophthalmic drugs. You should have mastered the various techniques of refraction.

You should be able to accurately (and appropriately) prescribe ophthalmic lenses.

You should be able to treat all routine conditions and have a good understanding as when to appropriately refer to a sub-specialist.

You should have mastered the special techniques required to examine the visual system of a child or infant. As well you should be aware of the special situations faced by the pediatric ophthalmologist
(e.g. amblyopia, etc.)

Clinical Performance

Recognition of the presence of pathology.

Capacity to recognize and determine the gravity of ocular injuries and initiate treatment.

Pharmacology and therapeutic use of ophthalmic drugs.

Prescription of glasses.

Treatment of routine conditions and knowledge as to when to refer to subspecialist.

Accurately prescribing glasses and understanding basic optics; understand the use of low vision aids.

Ophthalmic pathology.

You should be able to perform the following:

Gonioscopy

Cover test, measurement of strabismus in cardinal positions

Schirmer test

Color vision assessment

Measurement of exophthalmos

Measurement of corneal sensitivity

Measurement of corneal astigmatism - keratometry

Assess fusional status

Visual field examination: tangent screen and Goldman visual field

Conjunctival and corneal scrapings for Gram and Giemsa Staining

Recognition of organisms in smears and plates

Do retinal drawings, scleral depression

You should understand the **principles** and as well be able to accurately use the following instruments:

Lensometer

Slit Lamp

Gonioscopy

Tonometry

Ophthalmoscopy

Retinoscopy

Cross cylinders

Prisms

Perimetry

Fundus photography

Ishihara plates

Placido disc

Keratometer

Exophthalmometer

Distometer

Prism bars

Worth 4 dot

Titmus fly test

Opticokinetic drum

Fluorescein angiography

You should understand the fundamentals of patient preparation for ophthalmic surgery, as well as being aware of the different methods used for ophthalmic anesthesia.

COMPREHENSIVE OPHTHALMOLOGY (PGY-3)

In addition to refining the aforementioned techniques, in this year you should be performing evaluations that involve:

Low vision aids

Medical and Neuro-Ophthalmology (consultations)

Oculoplastics

An introduction to Intraocular Surgery

At this point you should have:

Completed one half of American Academy Home Study Course

A thorough knowledge of all ophthalmic procedures and instruments

Been exposed to most forms of routine Ophthalmology cases in addition to subspecialty ophthalmic problems and know when to ask for assistance from third-year residents or subspecialty staff

SURGICAL OPHTHALMOLOGY (PGY-3/4)

During these two years, you will rotate through the teaching hospitals and will be exposed to intraocular surgery, strabismus surgery, Oculoplastics surgery and laser surgery.

Additional responsibilities include:

- Use of A & B scan
- Use of laser photocoagulator
- Extensive retina and vitreous examination and drawings
 - Running the ward (PGY-3/MCH PGY-4 for the adult hospitals), and organizing Grand Rounds
- Assisting in subspecialty surgery
- The fitting of contact lenses

While an expertise with the following procedures is not necessary, a graduating resident should be familiar with the indications and technical aspects of:

Keratoplasty

Vitreous Surgery

Orbital surgery

Retinal detachment

Planning for Fellowships:

Note that arrangements for postgraduate fellowship positions are generally made during your PGY-3/4 years. The Career Committee will meet with each resident in order to guide him/her with respect to career plans and possible pathways to achieve these plans.

MANDATORY ROTATIONS AND ELECTIVES (PGY-5)

The final twelve months of your residency training has been given more structure this year. There will be several mandatory rotations with the aim of strengthening the surgical skills of the final year residents. In addition, there will be a two-month elective rotation to give you an opportunity to study in areas of personal interest, possibly as a prelude to undertaking a fellowship after completion of the residency. During this final year, you will still be expected to attend regular clinics two half days a week. Attendance at teaching sessions, Grand Rounds and Journal Clubs in the hospital in which you are performing your elective is **COMPULSORY**. When planning your electives, you should consult with the Program Director, the elective supervisor and the hospital Chief where you will be assigned to be sure there are no scheduling conflicts.

Guidelines to organize your final year of training

A resident must have achieved a satisfactory standing in the PGY-2 through PGY-4 years before being eligible to undertake PGY-5 activities. Approval of the Program Committee is a prerequisite to proceeding with the PGY-5 year.

The purpose of this year is to round off the Resident's training in all areas. Emphasis is placed on completing the surgical of the program in the various subspecialties. Proposals for training in any given subspecialty area should be reviewed and approved by the appropriate subspecialty Director. The final schedule and any changes to the schedule must be discussed with and receive prior approval by the Program Director.

Assisting at surgery schedule. Fifth year residents will have their training cards issued with all four teaching hospitals listed. Residents therefore may assist at surgery at any time in any of the four McGill teaching hospitals. It is the responsibility of the fifth year residents to draw up a schedule of availability for assisting at surgery and distribute this schedule to the hospital chiefs so that they may afford themselves of opportunities to assist on Thursday mornings and when other residents are absent for meetings. This is particularly important for residents doing a Glaucoma surgery rotation.

PART II: Specific Objectives of the Teaching Programs at Adult and Childrens Sites

ADULT SITES

PGY-2 Residents

Ward

Help with admissions:

- Make sure complete history in chart

- Make sure reason for surgery is well documented

- Change dressings and follow post-op course

- Write progress notes with seniors' supervision (document post-op vision)

- Draw blood, EKG's

Operating Room

By year end be able to prep/drape a patient and be familiar with the operating room
 Know how to assist for retinal detachment repair
 Temporal/artery biopsy, chalazion removal, removal corneal foreign body, lacrimal irrigation and probing and minor lid surgery

Clinic

Learn to examine patients carefully and be able to refract accurately after 4-6 months
 Be able to see six to ten patients per clinic by end of first year
 First-year residents should not be responsible for volume of patients in clinic
 Be able to handle ophthalmologic emergencies

Consults

- Attend consultation rounds and do consults if requested by consult resident.

Teaching

- Teach Ophthalmology elective medical students the electives as required. Help them manage the Red Eye Room.

Rounds

- Make sure patients are available for examination by staff at rounds and explain to staff the pertinent problems.

Be able to present concise case histories for discussion

PGY-3 Residents

Ward

Be familiar with post-op patients
 Help senior residents with any ward problems
 Help with admissions - make sure complete history in chart

Operating Room

Must be able to prep, drape and give retrobulbar anesthesia
 Must have assisted at 10-20 intraocular procedures before starting intraocular surgery
 Must have worked on cadaver or animal eyes and have been approved by an attending staff before starting intraocular surgery.
 Must have assisted at and seen a procedure before performing it for the first time
 Assist and do plastics cases
 Do routine strabismus cases

Clinic

Be able to see 8-12 patients in a half day clinic
 Rotate through Plastics, Retina, Neuro-Ophthalmology, Glaucoma, and Cornea

Consults

In charge of consultation service

Urgent consults to be seen in Eye Clinic (or on ward if patient is immobile the day of request)

All consults to be reviewed with a staff person

Teaching

- Teach Ophthalmology elective medical students and residents

Rounds

- Be prepared to present cases and participate in discussions

PGY-4 Residents

Ward

Responsible for admissions and discharges (always arrange with staff re: discharge)

Contact staff if any post-op complications

Ensure all residents are at rounds which start at 07:30

Make sure complete history, physical and eye exam in chart

Make sure doctors' orders are completed each day

Ensure OR consent signed and properly completed (see "Operating Room")

Make sure daily progress notes are written on each patient

Arrange and be able to perform A-scans

Communicate with the Head Nurse to ensure that the ward is running smoothly

Senior resident makes ward rounds on Saturday a.m. if they have performed surgery on Friday

Second call resident responsible for all urgent problems seen by first call resident

Notifies attending staff on call

Responsible for all emergency surgery

Operating Room

Senior residents in OR on alternate weeks

Try to equalize number of cases done and number of different procedures by operating residents

Schedule post-op follow-ups when the operator is in clinic

No senior resident will do a case (public) unless he has put a note in chart including justification for surgery and has discussed the case with staffman

Unioocular public cases or any complex case may be done by the staff at their discretion

Clinic

Responsible for post-op follow-ups

Responsible for public pre-op visits

Contact staff with any clinic problems, i.e. bookings, equipment, requests etc.

Participate in any clinical research studies currently in progress

Be able to see 10 - 15 patients in a half day clinic

Consultations

Runs consult service when second-year residents are on vacation.

Teaching

Help teach and supervise first and second-year residents

Stimulate residents to read around cases and O.R.'s being done

Help teach Ophthalmology elective students

MONTREAL CHILDRENS' HOSPITAL

PGY-2 RESIDENTS

The prime function of the first-year resident is to learn the basic eye examination as it applies to children. Accordingly, his duties are based in the Eye Clinic where he will examine patients. Special areas that should be emphasized include analysis of vision in the infant and very young child, examination of eye movements and muscle balance in the strabismic patient, refraction techniques as applied to children, and use of the indirect ophthalmoscope for media and retinal assessment.

PGY-2's will assist the PGY-3 residents in the consultation service under the supervision of the attending staff. Any exposure to surgical techniques will be limited.

PGY-3 RESIDENTS

In addition to mastering the technique of the pediatric ophthalmologic examination, the PGY-3 resident will partake in the various surgical procedures, with special emphasis on extraocular muscle surgery. He should thoroughly familiarize himself not only with the operative procedure, but also with the preoperative assessment and the ensuing postoperative care. He will be primarily responsible for the indoor consultation service and will work with the attending staff to coordinate weekly grand rounds. In addition, he will be responsible for the day-to-day management of any indoor patients under the guidance of the attending staff.

ALL RESIDENTS will be responsible for pre-operative assessments, which take place during clinic hours. From time to time, they will be expected to prepare short talks for weekly didactic teaching sessions and to review articles for monthly Journal Club.

PART III: Rotation Specific Objectives

The following objectives are to be used as an outline of the academic content of the McGill 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 Training Committee will use these objectives to be sure that individual rotational objectives are met as the residents rotate to the various McGill teaching hospitals.

INTERNAL MEDICINE (PGY-1)

CLINICAL TEACHING UNIT (WARD)

The Internal Medicine Resident is expected to achieve competency in the areas described below during their rotations in the General Internal Medicine Clinical Teaching Units. It is expected that a resident's knowledge, skills, and attitudes will evolve as they progress from a first-year resident to a third-year resident. 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 a broad variety of clinical scenarios.

Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of a broad variety of clinical conditions.

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

Be able to communicate effectively with patients and their families with respect to their medical conditions. In particular, be able to communicate with patients from different ethnic backgrounds and language groups.

Be able to interact effectively with other health-care professionals.

Be able to document the patient's admission and progress accurately while in hospital with emphasis on the relevant issues.

Collaborator

Be able to identify the need to and benefit of consulting other physicians and health-care professionals. In particular, be able to recognize one's limits of knowledge and expertise.

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 the factors that impact on their health.

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 a knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to apply a 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.

INTENSIVE CARE UNIT

The Internal Medicine Resident is expected to achieve competency in the areas described below during their rotations in the Intensive Care Unit. It is expected that a resident's knowledge, skills, and attitudes will evolve as they progress from a first-year resident to a third-year resident in the Intensive Care Unit.

The resident is expected to:

Medical Expert

Be able to elicit, present, and document a history that is relevant and appropriate to the critically ill patient. In particular, be able to perfect the skill of history-taking from third parties and other sources when patients are unable to communicate given the severity of their medical conditions.

Be able to perform an accurate physical examination of the critically ill patient, with emphasis on:

Differentiating distributive shock from pump failure

Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of the following scenarios:

Shock/SIRS

Indications for and complications of inotropic and vasopressor support; knowledge of agents

Indications for and complications of mechanical cardiac support (including IABP, CVT consultation)

Respiratory failure (hypercapnoeic, hypoxaemic)

Indications for and complications of non-invasive ventilation, intubation and extubation

Indications for and complications of renal replacement therapy

Indications for and complications of enteral vs parenteral nutritional support

Indications for and complications of blood products

Elevated intra-cranial pressure

Coma, including GCS

Indications for and complications of sedation/anxiolysis/analgesia/paralysis

Interpretation of haemodynamic tracings

Demonstrate an understanding of the pathophysiology, manifestations, diagnostic work-up, and management of the following conditions:

Allergy/Immunology: Anaphylaxis

Dermatology: Stevens-Johnsons syndrome

Endocrinology: Thyroid storm, myxedema coma, Addisonian crisis, DKA/HONK

Gastroenterology:

GI bleed (including variceal hemorrhage), pancreatitis, hepatic encephalopathy

Hematology: coagulopathy and DIC, massive thrombosis and pulmonary embolism

Hypertensive urgencies and crisis

Infectious Diseases: sepsis, febrile neutropenia, severe infections in HIV infected patients

Nephrology: acute renal failure and alterations in renal output

Neurology: coma, Guillain-Barré syndrome, meningitis,

Respirology: ARDS, COPD, status asthmaticus

Other emergencies:

Poisoning: ASA, methanol, TCA, acetaminophen

Injuries: smoke inhalation and CO inhalation, electrocution

Near drowning

Hypo-and hyperthermia

Cardiac arrest/ACLS guidelines

Understand the indications for and complications of central venous access, peripheral arterial access, endotracheal intubation, Swan-Ganz catheter, and temporary transvenous pacemaker.

Be able to interpret arterial blood gas results.

Be able to perform central venous catheter insertion, peripheral arterial catheter insertion, and endotracheal intubation.

Demonstrate an understanding of the indications for admission to and discharge from a monitored unit.

Demonstrate an understanding of the issues surrounding the transport of critically ill patients within the hospital and to other centers.

Communicator

Be able to communicate effectively with patients and their families with respect to their medical conditions. Specifically, be able to communicate with critically ill patients, recognizing that these patients pose unique challenges that require unique solutions. Furthermore, be able to communicate with families of critically ill patients in order to address their concerns while being realistic in terms of prognosis.

Be able to interact effectively with other health-care professionals of all sorts that are often involved in the care of the critically ill patient.

Be able to document the patient's condition and progress accurately while in hospital with emphasis on the relevant issues, in the context of multi-system and complex patients in rapid evolution.

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 in the context of multiple demands on a resident's time while managing critically ill patients.

Health Advocate

Be able to educate and counsel patients and families regarding important factors affecting their health.

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 a knowledge of the professional codes and norms of behavior that govern the behavior of physicians in clinical practice.

Be able to apply a knowledge of the legal codes and norms of behavior that govern the behavior of physicians in clinical practice.

Be able to recognize and resolve ethical issues as they arise in clinical practice. Specifically, be able to understand and deal with the ethical issues that arise in the critically-ill patient including:

- Consent and capacity
- Level of intervention discussions and end-of-life decisions
- Substitute decision-makers
- Advance directives

Be able to recognize and deal with unprofessional behaviors in clinical practice.

EMERGENCY ROOM

The Internal Medicine Resident is expected to achieve competency in the areas described below during their rotations in the Emergency Room. It is expected that a resident's knowledge, skills,

and attitudes will evolve as they progress from a first-year resident to a third-year resident in the Emergency Room. Ultimately, the resident is expected to function as an internal medicine consultant to the emergency room and the goals and objectives of this rotation reflect this.

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

Be able to communicate effectively with patients and their families with respect to their medical conditions. Specifically, be able to communicate with acutely-ill patients. Furthermore, be able to communicate with families of acutely-ill patients in order to address their concerns.

Be able to interact effectively with other health-care professionals. Specifically, be able to communicate the reasons for consultation with sub-specialists and the need for prompt responses to such requests in the emergency room context.

Be able to document the patient's condition and progress concisely and accurately while in the emergency room with emphasis on synthesizing the relevant issues and the plan of work-up and management.

Collaborator

Be able to identify the need to and benefit of consulting other physicians and health-care professionals.

Manager

Be able to use information technology to optimize patient care.

Be able to use health-care resources cost-effectively in the emergency room context.

Be able to work efficiently and effectively.

Health Advocate

Be able to educate and counsel patients and families regarding factors that impact on their health status.

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 a knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to apply a 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. Specifically, be able to understand and deal with the ethical issues that arise in the acutely-ill patient including:

- Consent and capacity
- Substitute decision-makers
- Advance directives

Be able to recognize and deal with unprofessional behaviours in clinical practice.

NEUROLOGY

The Internal Medicine 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)
- 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:

- 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:

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

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 and progress accurately with emphasis on relevant neurological issues.

Collaborator

Be able to identify the need to, and benefit of consulting other physicians and health-care professionals, including neurosurgeons if surgery is being contemplated.

Be able to contribute effectively to interdisciplinary team activities.

Manager

Be able to use information technology to optimise 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 their families regarding the factors that impact on their health, in particular factors that impact on their risk of stroke.

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, especially family physicians who will be managing the patients as primary-care givers.

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 a knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to apply a knowledge of the legal codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to recognise and resolve ethical issues as they arise in clinical practice.

Be able to recognise and deal with unprofessional behaviours in clinical practice.

ENDOCRINOLOGY

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

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:

- Thyroid gland
- Extrathyroidal signs of thyroid disease
- Diabetic feet
- Gynaecomastia
- Signs of dyslipidaemia

Be able to provide a reasonable approach to the differential diagnosis, work-up, and management of the following scenarios:

- Dyslipidaemias
- Thyroid nodule
- Pituitary nodule (including incidentaloma)
- Chronic corticosteroid therapy
- Incidental adrenal mass
- Hypercalcaemia 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, peri-operative 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 myxoedema 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

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 clinical condition and plan accurately with emphasis on the relevant issues.

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 the role of lifestyle modification in the control of diabetes mellitus and osteoporosis.

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 a knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to apply a 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.

DERMATOLOGY

The Internal Medicine 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:

- 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 echymoses
- 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

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 a knowledge of the professional codes and norms of behaviour that govern the behaviour of physicians in clinical practice.

Be able to apply a 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 ROTATION PGY-1

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, sphero-cylindrical 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 practice 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

COMPREHENSIVE OPHTHALMOLOGY PGY - 2

Residents are encouraged to read Reinecke: **Refraction: A programmed text** before entering their first year of clinical Ophthalmology.

Further study (optional) may include Rubin: **Optics for clinicians**, Rubin and Milder: **The Fine Art of Prescribing Glasses** and Hunter and West: **Last Minute Optics**. Optics and refraction Video Lecture Series. www.lastminuteoptics.com. These books are very readable and cover refraction well.

Medical Expert

The resident will acquire the knowledge to:

Refract including the following:

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 Krinsky reflexes, photometry, illumination, laser optics)

Prescribe glasses for ametropia and presbyopia including:

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)

Opticianry (what the optician does and how)

Optics of ophthalmic instruments (lensmeter, 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)

Retinal assessment with 78/90D lens

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

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

Temporal Artery Biopsy
Laser iridotomy and capsulotomy

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

COMPREHENSIVE OPHTHALMOLOGY PGY - 3

Medical Expert

The resident will acquire the knowledge to:

Prescribe glasses with prisms including prismatic optics (deviation/displacement, prism diopter, doubling prisms, Prentice's rule, Fresnel prisms)

Prescribe low vision aids (magnifiers, telescopes, high plus lenses, stand and video magnifiers, orientation and mobility services)

Prescribe glasses for occupational/safety needs (toxic effects of light, absorption lenses, polycarbonate lenses)

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 low vision and contrast sensitivity (Low vision measurements, design of acuity charts, log MAR, definition of visual handicap and legal blindness)

Assessment of occupational/safety needs

Automated visual field testing

Use of the automated refractor

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 & 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

Prescribe specific glasses parameters (base curves, induced prisms, etc.)

Manage the 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

Specular microscope

The resident will acquire surgical skills:

AC tap, Tap and inject for endophthalmitis

Intravitreal injections

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 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)

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:

Manage PRK and LASIK refractive surgery (indications, consent, complications, success and complication rates, laser types, machine parameters, keratomes)

Prescribe 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)

Fitting of contact lenses (regular, toric, keratoconus and bifocal)

Assessment of visual disability (AMA scales)

Assessment of functional visual loss

The resident will acquire surgical skills:

PRK and LASIK surgery

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

UVEITIS AND INTRAOCULAR TUMOURS PGY-2

Medical Expert

The resident will acquire the knowledge to:

Perform a history and complete eye examination

Be able measure the visual acuity at near and distance

Refraction (objectively and subjectively)

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.

Do an indirect examination of the fundus, a 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 immunology and radiation knowledge

- 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

The resident will acquire clinical skills

The resident should be able to treat:

A kerato-uveitis
 An acute Uveitis
 Posterior synechiae
 Increase intraocular pressure associated with Uveitis

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)

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

UVEITIS AND INTRAOCULAR TUMOURS 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 tumor of the fundus.
 Understand the ultrasonographic characteristics of a serious retinal detachment, choroidal melanoma, metastatic tumor, and vascular tumor.
 Perform A and B scan ultrasonography.
 Classify and utilize the various immunomodulating therapies.

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

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)

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

UVEITIS AND INTRAOCULAR TUMOURS PGY-4**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.

UVEITIS AND INTRAOCULAR TUMOURS PGY-5

An elective in this final year of training could be done as a refinement of the resident's knowledge of Uveitis.

Fellowship in Uveitis

Twelve months: two days a weeks in clinical Uveitis and three days a weeks of reading and research (clinical research, or basic research with actual "bench work", or both).

Clinical objectives:

- Diagnose the presence of uveitis
- Know the indications of blood tests, radiographic examinations, angiography, ultrasonography, anterior chamber tap, vitreous and retinal biopsies.
- Be able to interpret correctly the tests.
- Be able to treat the acute, chronic, or recurrent uveitis.

Research objectives:

- Acquisition of scientific method
- Methodology of bibliographic research
- Critical analysis of literature

- Acquisition of computer sciences techniques: word-processing, databases, graphics.
- Basic knowledge of biostatistics
- Communication of scientific results

VITREORETINAL DISEASES AND SURGERY PGY-2

Medical Expert

The resident will acquire the knowledge and ability to:

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 perform:

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

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 collaboration with other members of the team:
 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 oculuarist services)
 Act as a patient advocate
 Be involved in advocacy for the community such as the Ophthalmology screening days

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 conscientious behaviour

VITREORETINAL DISEASES AND SURGERY PGY-3

Medical Expert

The resident will acquire the knowledge and ability to:

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

Counseling 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:

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

The resident will acquire surgical skills

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

Vitreous tap and injection eg. Endophthalmitis protocol

Vitreous injection of therapeutic medications

Scleral buckle (primary, uncomplicated cases).

Laser photocoagulation: retinal tears, panretinal laser photocoagulation (PRP) for ischemic retinal disease

VITREORETINAL DISEASES AND SURGERY PGY-4 AND PGY-5

The resident will acquire the knowledge to:

Refinement of PGY-2 and PGY-3 knowledge

The resident will acquire clinical skills:

Medical management - for medical retinal diseases, e.g. retinitis of different etiologies

The resident will acquire surgical skills:

Laser photocoagulation

a) Diabetic retinopathy (PRP for proliferative disease. Focal laser for diabetic macular edema)

b) Central retinal vein occlusion, branch retinal vein occlusion, sickle cell disease

c) Age-related macular degeneration: determination of treatable lesions

Cryotherapy

a) Retinal hole/tear

b) Peripheral cryotherapy eg. Coats disease

Pneumatic Retinopexy

Identification of tear, treatment of tear, AC tap, injection of intraocular gas

NEURO-OPHTHALMOLOGY PGY-2

Medical Expert

History taking

The resident will develop the art of taking a detailed, but selective history. The history should be directed towards the particular patient's visual symptom and how it relates to the relevant medical,

neurological and familial background. Once completed, it should be clear if the etiology of a patient's symptom or referred sign is on a neuro-ophthalmologic basis or not. In order to refine the skill of dealing with complex histories in an efficient manner, residents should assess neuro-ophthalmology patients on ward consult rounds as well as in subspecialty clinics.

Clinical skills

Neuro-ophthalmologic examination, which includes:

- Visual acuity – without correction, multiple pinhole, and best corrected (including near vision)
- Pupillary exam (size, shape, reaction to near and light, and the pharmacology of testing the pupils in the event of anisocoria or tonicity)
- Color vision (Ishihara, HRR and Farnsworth)
- Brightness and colour saturation comparison between the two eyes
- Ocular motility (movements - saccades & pursuit, alignment for near and distance viewing, forced ductions)
- Ocular adnexa assessment- lids, orbit, face, exophthalmometry
- Corneal assessment including sensation
- Fundoscopy - direct ophthalmoscopy, 90D lens, 3 mirror lens
- Gross neurological exam including carotid auscultation
- Developing a multifactorial approach to examine the patient with functional visual loss
- Visual field techniques and interpretation related to the patient's abilities- confrontation, Goldman and automated perimetry
- Tension, fatigue, and ice test
- Electrophysiology - interpretation of ERG and VER
- Neuroradiology - how to order and interpret neuro-imaging of the orbit and brain relevant to the individual patient's clinical situation

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)

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

NEURO-OPHTHALMOLOGY PGY-3

Medical Expert

The resident will refine the skills mentioned above. Upon completion of the history and exam, the PGY-3 should be able to formulate the location of the lesion, a differential diagnosis, and a plan of investigation. These skills should be applicable to a spectrum of patients from the ward and ambulatory ophthalmology clinics.

In addition to clinical skills, the PGY-3 will develop competency in lecturing about and teaching neuro-ophthalmology these skills to medical students and non-ophthalmology residents.

The resident should be able to present the history, examination, relevant neuro-radiological data and a review of the literature in reference to a patient to an attending staff and an audience in the format of a Grand Rounds presentation.

The resident will acquire the surgical skills to perform a temporal artery biopsy and manage a central retinal artery occlusion according to the current standard of practice.

NEURO-OPHTHALMOLOGY PGY-4 & PGY-5

Medical Expert

Continued exposure to neuro-ophthalmology patients in both consult rounds and subspecialty clinics is important in order to maintain a familiarity with these diagnoses.

If the PGY-5 candidate is interested, a research project involving electrophysiology or a retrospective/prospective study could be arranged.

An elective in the PGY-5 year is possible if the resident desires.

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 tropacamide, 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:

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

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 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)

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 eg. punctual and provide appropriate patient follow-up

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

The resident will acquire clinical skills:

- 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

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:

Expertise in pediatric glaucoma, infections and inflammations and tumours

The resident will acquire clinical skills:

Management of intraocular infections

Management of pediatric cataracts & glaucoma

The resident will acquire surgical skills:

Vertical, oblique, and reoperative strabismus procedures

Levator resection 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:

- Cornea
- Conjunctiva
- Ocular adnexa
- Lid Margins
- Lid Skin

Physiology and biochemistry of tears

Principles of astigmatism

Concepts of inflammation and infection (microbiology basic science)

Pharmacology

Corneal Transparency, optics, refractive power

Pathology of cornea and ocular adnexa

Preoperative evaluation of cornea before cataract surgery or other intraocular procedures-clinical (see tests)

Scleritis/episcleritis

Recognition and management of astigmatism (spectacles, contact lenses) (keratometry/keratoscopy)

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:

Integrate basic and clinical knowledge and diagnostic skills and data to arrive at an appropriate diagnosis and differential diagnosis

Recognize the importance of and be capable of performing, interpreting, and recording:

- Fluorescein/rose bengal evaluation of cornea/conjunctiva
- Tonometry in corneal abnormalities (use of tonopen)
- Measurement of corneal thickness (pachymetry)
- Exam in room light (skin, sclera etc.)
- Bedside exams-infants, ICU, nursing home (use of portable slit lamp)
- Corneal astigmatism measurement: keratometry, keratoscopy, placido disc, topography
- Assess visual potential: refraction, contact lens over-refraction, pinhole, stenopeic slit, PAM/interferometer
- Corneal sensitivity test
- Tear evaluation: Schirmer test, break-up time, dyes, tear meniscus
- Slit lamp exam of cornea layers
- Good history: cornea/external disease, related systemic disease, related eye disease
- Good, careful observer: clinical diagnostic skills (slit lamp, etc.)
- Performs indicated diagnostic procedure/lab: dye stains, cultures, etc.
- Collects all necessary clinical information:
 - a) History
 - b) Physical exam (eye)
 - c) Laboratory
- Synthesizes information
- Establishes differential diagnosis
- Recognizes level of urgency-initiates therapy if necessary
- Recognizes further need for special lab studies or consultation and proceeds
- Has good personal database of diagnostic criteria, natural history of diseases, therapeutic options, expected responses
- Knows where to turn for more information and help, when, and how (literature, consultants, etc.)
- Establishes most likely diagnosis
- Initiates therapy
- Follow-up:
 - a) Recognizes improvement
 - b) Recognizes failure
 - c) Reevaluates; discontinues therapy

- d) Refers as needed
- e) Recognizes limitations

The resident will acquire surgical skills:

- Conjunctival tumor removal (eg nevus)
- Corneal / conjunctival foreign bodies (eg upper lid)
- Incision & drainage (hordeolum, chalazion)

Communicator

The resident will display effective doctor-patient communication skills:

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- Obtain informed consent
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- 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:

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Scholar

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Professional

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Show respect toward patients
 Show respect toward other health care professionals
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Cornea And External Disease PGY-3

Medical Expert

The resident will acquire the knowledge:

Know and apply to the diagnosis and understanding of cornea and external eye disease:

Classification, natural history, treatment of cornea/external diseases including:

- Infectious keratitis: bacterial, fungal, viral, acanthamoeba
- Dry eye: etiology & ddx, systematic approach, management
- Trauma anterior segment (hyphema, use of imaging techniques)
- 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:

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 keratoplasty

The resident will acquire surgical skills:

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 the knowledge:

- Anterior segment neoplasms (e.g., conjunctival melanosis etc.)
- Corneal complications of IOL and other surgical procedures
- Corneal/conjunctival degenerations
- Ectatic disorders (eg 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:

- a) Drainage system including trabecular and uveoscleral
- b) Optic nerve

Mechanism and modalities of intraocular pressure measurement

Clinical classification of glaucoma including the different subtypes of open angle (pretrabecular, trabecular, posttrabecular) 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, Schiottz, portable tonometer, tonopen Gonioscopy: slit lamp, Koeeppe

Visual Fields: confrontation, Goldman and automated perimetry

Optic nerve head assessment: direct ophthalmoscope, contact lens exam

Laser: peripheral iridotomy using YAG laser

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 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 eg. punctual and provide appropriate patient follow-up

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:
 - a) Medical
 - b) Surgical
- Complications and side effects of treatment
- Adequate follow-up of this chronic disease

The resident will acquire clinical skills:

- 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 therapy
 (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:
 - a) Argon and Yag laser iridotomy
 - b) Argon Laser Trabeculoplasty
- Management of cataract in glaucoma patients
- Combined cataract extraction and Trabeculectomy
- Needling
- Tube shunt surgery
- Microinvasive glaucoma surgery
- Goniosynechiolysis

CATARACT PGY-2**Medical Expert****The resident will acquire the knowledge:**

The 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:

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

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Manager

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 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

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

Scholar

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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

CATARACT PGY-3**Medical Expert****The resident will acquire the knowledge:**

Basic Science Knowledge

Biometry relating to intra-ocular lenses, including an understanding of the different types of keratometers and ultrasound instruments and of the various formulae for the calculation of intra-ocular lens power, their advantages and disadvantages.

Clinical Knowledge

The advantages and disadvantages of the major types of intraocular lenses and of the materials used in their manufacture; the different haptic and optic designs and their relative merits.

The indications and contra-indications for cataract surgery.

The resident will acquire clinical skills:

The various types of local and regional block anesthesia used in eye surgery, the different anaesthetic agents, their pros and cons.

The resident will acquire surgical skills:

The observation of cataract surgery whenever possible, not only to learn the basic steps of cataract surgery but also to learn the general methods of handling delicate ophthalmic instruments, the techniques of rigid asepsis, of the surgical preparation of the orbital area and of regional block and local anesthesia.

Participation in animal eye wet labs.

Individual practice surgery whenever eye bank eyes become available, to gain further surgical expertise and to learn the characteristics of human tissue.

The performance of regional block anesthesia on cataract surgery patients.

Assisting at cataract surgery, including pediatric cataract surgery while at the Montreal Children's Hospital.

Commencement of cataract surgery in a progressive fashion in the latter part of the year.

CATARACT PGY-4

Medical Expert

The resident will acquire the knowledge:

Clinical Knowledge

The identification of high-risk patients and the planning of their management.

The resident will acquire clinical skills:

The diagnosis and management of intra-operative complications of cataract surgery.

The diagnosis and management of early and late post-operative complications of cataract surgery, including endophthalmitis, uveitis, ocular hypertension, shallowing of the anterior chamber, wound leakage, iris prolapse. Wound dehiscence, haemorrhage, cystoid macular oedema, lens displacement, choroidal effusion, retinal detachment and capsular opacification together with its treatment by neodymium laser capsulotomy and the complications of this therapy.

The acquisition of judgment depends to a large extent on the resident's fundamental intellectual capabilities, including such things as memory and powers of deductive reasoning. However, a given resident can attempt to enhance his judgment by carrying out a preoperative review of every patient with the attending staff concerned as well as with his peers, in the hope of learning from the decision-making processes of others. Equally important is an assessment of the surgery performed, preferably immediately after its completion, with the attending staff. After every case the resident should ask himself what steps in the surgery could have been done better, and try to establish the reasons why they were not. This habit should be carried out throughout his professional career, for once he begins to work on his own a rigorous self-assessment of every operation may be the only means of quality control. Videotaping surgical procedures can help to make this process even more thorough. At the point where post-surgery glasses are finally prescribed, a further review should be carried out taking into account final visual acuity, refraction and complications.

The resident will acquire surgical skills:

The performance and mastering of cataract surgery and lens implantation by techniques including phacoemulsification

Laser capsulotomy

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:

- Chalazion and Superficial Lid Lesions
- Lacrimal Irrigation
- Tarsorrhaphy
- Temporal Artery Biopsy
- Electrolysis and/or Cryotherapy
- Eyelid and Conjunctival Biopsy

Communicator

The resident will display effective doctor-patient communication skills:

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Collaborator

The resident will display good collaborator team skills:

Delegate responsibility effectively
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Manager

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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

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 years

The resident will acquire surgical skills:

- Procedures Done
 - a) Ectropion
 - b) Entropion
 - c) DCR
 - d) Enucleation or Evisceration
 - e) Ptosis Repair
 - f) Blepharoplasty
- Procedures Assisted or Reviewed
 - a) Complex Eyelid Reconstruction
 - b) Repair of Eyelid Malpositions in Graves'
 - c) Repair of Canalicular Lacerations
 - d) Harvesting of Skin Grafts, Cartilage or Fascia Lata
 - e) Secondary Orbital Implants including Dermis Fat Grafts
 - f) Mucous Membrane Grafts
 - g) Orbital Fracture Repair
 - h) Orbital Exenteration
 - i) Orbital Biopsy
 - j) Lateral Orbitotomy
 - k) Orbital Decompression

OPHTHALMIC PATHOLOGY PGY-2 TO PGY-4

Medical Expert

The resident will acquire the knowledge:

Contained in Section 11 of AAO BCSC annually.

Contained in Yanoff and Fine's Ocular Pathology

Contained in Ocular Tumors' AFIP Fascicle – McLean, Burnier, Jakobiec, Zimmerman

Contained in Ophthalmic Pathology – Spencer, Zimmerman

The resident will acquire clinical skills:

Review of Kodachrome slides

- Attendance of rounds with CPC presentations.
 - McGill didactic lectures (Thursday morning post-graduate course).
- Review of teaching slides on your own.

Review of slides in study sets

Each hospital has been provided with a **study set of 30 slides** which covers many of the important entities in ophthalmic pathology and which includes a corresponding report for each case. Furthermore, a large study set of several thousand slides has been organized into slide boxes under the heading of individual tissues (eg. malignant eyelid, conjunctiva, uveal melanoma) and is kept in the McGill Pathology Institute as our McGill Registry of Ophthalmic Pathology; these may be borrowed from our fellow at any time to be reviewed at the McGill Pathology Institute where microscopes are available for this purpose.

Review of Kodachrome slides

A study set of **175 Kodachromes** has been purchased from the AFIP along with a corresponding text covering normal **anatomy, congenital anomalies and neoplasms** and these are available at each hospital to be borrowed by the residents for residents review.

CDs with lectures and clinical pathological cases are available for review. They are selected among the cases from Henry C. Witelson Ocular Pathology Laboratory as well as, the AFIP (Dr. Zimmerman's personal collection).

An extended elective period (eg. in PGY-5) may involve research studies in ophthalmic pathology especially if these have been initiated at an earlier time.

The research projects are in different areas, such as: ocular tumors, particularly Retinoblastoma and melanoma, ocular inflammatory diseases, ocular toxoplasmosis, tumors of the eyelid and conjunctiva, Retinal stem cell research. The residents also will become familiar with molecular biology techniques, such as, PCR, Cell culture, genetic studies and immunohistochemistry.

RESEARCH (PGY-2 TO PGY-5)

Medical Expert

The resident will acquire the knowledge:

Learn to read scientific literature critically.

Propose at least one research study that will be of high enough quality to be submitted to the annual conference of the Association for Research in Vision & Ophthalmology (ARVO) or the American Academy of Ophthalmology.

The resident will acquire skills:

Display effective skills as a conference speaker.

 be responsive to feedback on abstract writing

 be responsive to feedback on oral presentation or poster at Research Day

Develop a working understanding of protocol design and statistical analysis.

The program will:

Evaluate research performance comprehensively with:

 feedback & evaluation from supervisor of research project

 feedback & evaluation by Ophthalmology Research Day committee

 input from other involved parties in a research study

Residents should be required to do no more than 2 research projects during their training. One would be sufficient if the protocol would require the resident's active involvement over a period of at least 2 years. In such a case, the resident would be involved in the following components:

 preparation of the research proposal that would be submitted for IRB review

 an appreciable amount of the data collection phase

 data analysis

 preparation for presentation of the study at an international conference AND

 submission of a journal article for publication

If a study of sufficient scope is not available, two smaller projects would be acceptable.

In all cases, the research presentation should not be equivalent to a talk at grand rounds.

PART IV: Policies

LEAVES OF ABSENCE AND VACATION

In order to request a leave, each resident must complete the Leave of Absence /Vacation Authorization Form. This form must be signed by the Chief-Resident and Program Director and submitted to the office of administrative services Room H7.53 at the Royal Victoria Hospital as soon as possible.

Study Leave

Each resident is entitled to *1 week* of study leave per year.

Study leave must be requested *2 months* before the start of the period in which the study leave is requested.

Study leave is only granted for the purposes of *studying for an exam* needed to obtain a degree, license or certificate (e.g.: LMCCs, USMLEs).

The resident must be registered for the exam in order to claim study leave. Proof of registration for the exam must be submitted to the Program Director's Office.

Study leaves are *not* cumulative and must be used in the same academic year. Unused study leave *cannot* be claimed in following academic years.

Study leaves are *not* to be used to take extra courses in Ophthalmology or to study for the OKAPS or mock orals.

Conference Leave

Residents are allowed to attend conferences, which are priority determines by seniority. Remaining residents are to be available to cover the clinics and emergencies.

It is highly recommended that the residents take the Basic Science Course in the PGY-3 year.

Maternity Leave

The resident is entitled to *20 weeks* following advance notice to the establishment. The resident must have accumulated 20 weeks of service in order to be eligible.

Paternity Leave

The resident is entitled to *5 days* from the start of the delivery process. The leave may be discontinuous.

Marriage Leave

The resident is entitled to *7 calendar days* to which he/she may add one week's leave *without pay*, four weeks' advance notice must be submitted to the Program Director.

Bereavement Leave

The resident is entitled to *5 days* for a spouse or child; *3 days* for a parent, sibling, mother or father-in-law, daughter or son-in-law; *1 day* for sister or brother-in-law or a grandparent. The resident must advise the Program Director and the Chief Resident that they are taking time off to be with their family.

Sick Leave

The resident is entitled to a maximum of *9 days* per academic year and must contact the senior resident.

Leave of Absence

The resident is entitled to a maximum of *12 months* with authorization of the faculty. The resident must also submit his/her request to the Associate Dean's Office.

Vacations and Statutory Holidays

Each resident is entitled to 4 weeks of vacation time per year, possibility of carrying forward 10 days to the following year.

Residents will *not* be expected to take call on the weekend their vacation commences. For example, if the resident asks for Mon. May 1st to Sun. May 7th, the resident must not be put on-call between April 28th-30th.

Vacations must be requested before the start of the academic year, by the deadline set by the Program Director, in writing.

No vacations will be granted during the peak periods from February – May inclusive. Any vacation requests within the three weeks preceding either the Mock Orals and the OKAPS exams will be refused.

There will be limited vacation time available around ARVO week and the AAO. Preference will be given on the basis of seniority.

The Christmas/New Year period is *not* to be considered as part of eligible vacation time. All residents on the roster for this period are expected to take their share of call during this time. A resident may request vacation time around the holiday period (before or after), but this is subject to the approval of the Program Director. If a resident requests their vacation time during the holiday period, then the entire requested vacation time will be taken of their 4 week vacation allotment. *However*, they will be given *4 days* back at some time during the year to cover the following statutory holidays: Christmas Day, Boxing Day, New Year's Day and "Day After New Year".

The following periods are *not* taken off regular vacation leave:

Christian residents are entitled to the Easter holidays and to either Christmas or New Year's Day

Jewish residents are entitled to the Jewish High Holidays (Passover, Rosh Hashanah & Yom Kippur)

Muslim residents are entitled to the Eid holidays

Residents who are not entitled to the above-mentioned days off are expected to cover the call schedule and duties on these days.

If the "holidays" fall within a requested vacation time, the resident may extend their vacation by that number of days. The Program Director must receive notification of this situation in *writing* prior to the date of the holiday or else the resident will forfeit their right to the extra days.

Priority for vacation time around busy times of the year will be given according to seniority, but is also based on previous years' experiences. For example, if a resident has been granted Ramadan two years running, they may be refused vacation time during Ramadan even if they have seniority.

With the exceptions listed above, residents who are on call during statutory holidays are *not* entitled to take a day back to make up for working the statutory holiday. The underlying principle is as follows:

Ophthalmology residents have a great deal more conference leave compared to residents of other programs;

Most programs only grant five days off during Christmas, while ophthalmology residents have significantly more time off during this period.

Under exceptional circumstances, if a resident requires to modify the dates of requested vacation, the change will be considered and all attempts will be made to accommodate the change of date. However, final approval for vacation dates rests with the Program Director. If a change of vacation time is approved by the Program Director, it is the responsibility of the resident to inform the following people: Program Coordinator, Chief Resident, the senior resident responsible for preparing the "On-Call" schedules, and the clinic secretary. This notification must be given in writing within one week of receipt of approval for the change of vacation date(s). Failure to do so may jeopardize the resident's chances to reschedule their vacation for their convenience.

ON-CALL SCHEDULE

Work Day - maximum 12 hours per day. If the resident is on-call, maximum of 24 hours in a row.

Weekend – two weekends off per 28-day period; begins at 17:00 hours Friday and ends at 08:00 hours Monday; not more than 2 working weekends running.

On-Call at home - maximum of 9 on-call periods per 28 days.

ROLES OF THE CHIEF RESIDENT AND ASSISTANT CHIEF RESIDENT

The Chief Resident represents all residents in general meetings with staff doctor. He/she is the first person to contact for grievances, council regarding preparation for exams and basic science courses, including requests for all leaves of absence. Part of the Chief Residents functions are as follows:

- Ensure that conflicts between residents/residents and residents/staff are resolved
- Enforce departmental policies
- Coordinates grand rounds for the department
- Prepares rotation schedules
- Prepares vacation schedules

The Assistant Chief Resident is responsible for the On-Call schedules and taking attendance at teaching and Grand Rounds. He/She also assists the Chief Resident in their duties whenever necessary.

Election of the Assistant Chief Resident The election takes place in March of each year, a candidate is chosen from the current PGY-3's. The PGY-3 residents nominate one of their peers then hold a vote amongst them. The Program Director and the Chief Resident have final approval the candidate. The prior year's Assistant Chief Resident is automatically promoted to Chief Resident in the up-coming year.

ELECTIVES OUTSIDE OF QUEBEC

Electives undertaken in unaccredited settings outside of Québec can occur and be recognized by the Collège des médecins du Québec under the following conditions:

1. The total duration of the unaccredited elective rotations must not exceed three months for specialty trainees (programs which are 4 years or more) and one month for Family Medicine trainees or programs which are 3 years or less.
2. The Program Director and the residents plan the elective period prospectively.
3. The Associate Dean must be notified at least three months prior to the onset of the elective period. All electives are subject to approval.
4. The resident needs to organize the elective and obtain, for the Program Director, the educational objectives for each block of the elective. This elective period needs to be recognized by the Program Director and Associate Dean as acceptable in the fulfillment of residency training requirements for the discipline.
5. A letter from the supervisor agreeing to the objectives, agreeing to supervise and evaluate the resident using the University's evaluation form is also required.
6. The Program Director, if he/she approves the elective, writes to the Associate Dean, and sends along the form entitled "Request for an elective rotation in a non accredited

- site in Québec or in other Canadian provinces” (contact the Faculty of Medicine), from the supervisor and the resident.
7. Trainees will be supervised and evaluated according to the University’s Evaluation and Promotion Guidelines, and will ensure that a rotation in-training evaluation form is completed and submitted to the Program Director upon completion of the rotation. A copy of the evaluation form is then sent to the Associate Dean’s Office.
 8. The out-of-province elective is only available after completion of at least one-half of a residency program. Thus for programs of four – five years duration, a trainee can do his/her out-of-province elective during his or her third year; for Family Medicine trainees in a two-year program, they need to have completed one year of Family Medicine prior to doing an out-of-province elective.
 9. The resident should not finalize travel and accommodation plans until the elective is approved by the CMQ.
 10. This request for approval needs to reach the Associate Dean’s office three months prior to the elective, as the Postgraduate Office needs to obtain approval from the CMQ so that the resident receives credit for his/her training in a non-accredited site.
 11. The Associate Dean will need to send the documentation to the Director of Medical Education at the CMQ at least 60 days before the onset of the rotation. If above conditions are fulfilled, the CMQ will authorize the rotation.
 12. Trainees should be advised that during the out-of-province elective, the Training Card will indicate out-of-province rotation, which could prevent payment from the RAMQ and that adequate personal insurance coverage is necessary (see “Professional Liability Insurance”).
 13. The province does not allow out of province electives in elective areas that can be provided for within the province.

PROFESSIONAL LIABILITY INSURANCE (MALPRACTICE)

All McGill teaching hospitals, except the Shriner’s, which is self-insured, are members of a special policy covering hospital employees through the Association des hôpitaux du Québec. This master hospital policy covers professional liability in Canada. Residents and fellows are covered under this policy while carrying out their clinical duties according to the permit provided for them in that hospital. With such a policy, the residents and fellows are also covered when they are working outside the hospital **as a resident**. It is noteworthy that neither this coverage nor the Canadian Medical Protective Association covers residents working in the United States or abroad.

The Faculty Postgraduate Education Committee, after discussions with the Association des Hôpitaux du Québec and the Federation of Medical Residents of Quebec is satisfied that this policy covers all our residents and fellows adequately.

Residents and fellows, however, are encouraged to obtain separate protection for malpractice insurance through a private carrier. (The Canadian Medical Protective Association in Ottawa has

such a policy if so desired, 1-800-267-6522.). Should you require confirmation of the AHQ coverage, please contact Mr. C. Kelly at (514) 842-4861.

PART V: Surgical Resident Guidelines

The senior surgical resident is the first assistant for all cases in the OR. The priority of the senior resident is in the OR.

If there is more than one senior surgical resident based at each of the MUHC locations, then they are to divide the OR time among themselves.

Any disputes regarding OR time distribution will be brought to the attention of the Clinical Director who will mediate the dispute.

Senior residents are excused from the first OR case in the morning if they are attending morning teaching rounds.

Senior surgical residents are excused from the OR for Thursday Morning Teaching rounds.

The senior resident is expected to attend the OR if morning teaching is cancelled or Thursday morning teaching is cancelled.

Senior surgical residents who operate on clinic patients are advised to refer any functionally one-eyed patients (defined as only one eye with >20/40 potential) to the staff for surgery on the better eye.

The senior surgical resident should work-up any patients from the clinic wanting cataract surgery and should have a list of patients ready to be added to the surgical day of any staff who requests it.

Any clinic patients booked for surgery with an attending staff should have their chart reviewed with the senior surgeon before surgery. This would include the biometry and manifest refraction as well as any other pertinent information.

The senior surgical resident should *not* operate on any patient with moderate to severe corneal endothelial dystrophy or evidence of split fixation secondary to glaucomatous visual field loss.

The senior resident who operates with any staff member on Friday should be available to see his post-ops on Saturday at the Hospital.

The senior surgical resident is responsible to do all OR dictations for the surgeries that they attend. It is their responsibility to ensure that the dictations are complete and accurate.

The senior surgical resident is responsible for co-coordinating the resident team. This would include assigning people to see consults on the ward and reviewing various problems with the junior residents.

Senior residents should ensure that at the end of the day any examining rooms used by the residents are neatly organized before the resident departs.

The senior resident is expected to attend the clinics when the OR is cancelled or when another resident is assigned to the OR.

The senior resident should attend the end of the clinic after ORs are complete. The senior resident has 45 minutes to finish dictations and eat lunch before attending the end of the resident clinic.

The senior resident is expected to be available for surgical trauma that goes to the OR even if he/she is not on-call.

The senior resident is to assign the junior residents to assist staff with cases in the Minor OR (e.g.: Oculoplastics, Pterygiums, TAB, etc.).

Cancelled clinics are *not* days off and the senior resident should ensure that the resident team see any outstanding consults as well as being available for emergency consultations during these periods.

The senior surgical resident should have complete knowledge of any in-patients admitted to the Ophthalmology service. Patients admitted for several days or weeks should be seen by the senior surgical resident with the junior resident team when possible.

The senior resident should report any significant performance problems with individuals on the resident team to the Clinical Director. The senior resident is encouraged to offer the Clinical Director praise for residents who have been doing excellent work.

The senior resident should keep a surgical logbook of surgical cases. The Department will provide the logbook. At the end of each period, a copy of your logbook is to be submitted to the Program Coordinator.

The following is the required and approved log sheet for all residents in our department that must be filled and signed by the attending staff for all days in the OR where the resident is first assistant EVEN if he/she does no hands on work. Every sheet must be kept for resident records and possible audits.



McGill

O.R. Record

Department of Ophthalmology (JGH, MGH, RVH, & SMH)

Total cases scrubbed in for:

Name: _____

Date: _____

Hospital: _____

Attending: _____

Case #	RB/PST 5%	Wound 10%	Capsulotomy 15%	Hydrodissection 10%	Sclerpt/Crack 20%	Quadrants 20%	I/A 15%	IOL 10%	Total	Miscellaneous
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Full cases (85% All steps or 90% total)

Half cases (>50%)

Partial cases (<50%)

Staff Comments:

Signature

Resident Comments:

Signature

PART VI: Resident Duties (General)

HOURS

Residents are expected to attend teaching sessions generally scheduled for 07:30. Clinics regularly start at 09:00 and usually end around 17:00 - 17:30, admissions and urgent consults after.

DRESS CODE

The dress code is of a health care professional in an outpatient setting. This is to the discretion of the resident, but generally indicates a shirt and tie for men and the appropriate equivalent for women. No jeans, sandals, barefoot, or gym wear are accepted. Lab coat to be worn in clinics and on-ward, also ID must be worn at all times in the hospital.

OPERATING ROOM

The senior resident must be familiar with the indications, techniques and complications of the respective procedures.

When operating on clinic patients: the senior resident must have personally examined patient and placed note in chart including justification for surgery before performing the surgical procedure.

On completion of his/her tasks in the OR, the senior resident is obliged to return to the clinic to assess patients and help the junior residents, this is especially important when clinics have been canceled for the day.

MANDATORY ACTIVITIES FOR ALL RESIDENTS

- Participate in a Review of medical acts.
- Attend all Early Morning Teaching, Grand Rounds and Thursday Morning Lectures. There is a mandatory 90% attendance required, otherwise the Program Director will be notified and will take the necessary action.
- Post cases for Morbidity rounds where applicable.
- Prepare and present a project for McGill Day.
- Take the OKAP and Mock Oral examination.

- It is the responsibility of the resident to ensure that Evaluation forms are completed and are submitted to the Program Coordinator for processing. *Evaluation forms* are completed by the Clinical Director, at the McGill teaching hospital, where the rotation took place.

ON-CALL SCHEDULE

On call schedules will be drawn up at least one month in advance by the senior resident (PGY-4) at the local hospital. A first call schedule must be submitted to the Program Director's office with the approval signature of the local hospital Chief at least one month prior to the beginning of the on call period. At no time may any resident be on call more than nine days in thirty during an

academic period. Residents who are on elective/rotation may be scheduled to take on call although all efforts will be made to avoid this. The PGY-4 will arrange the on-call schedule according to the following criteria:

- Must insure that the on-call schedule conforms with Article 12;
- Any exceptions to the 9 in 30 rule must be accompanied by a completed "McGill On-call Irregularity Form".

GUIDELINES FOR ON-CALL

Residents must be immediately available for call;

If specifically requested by a staff doctor to come in to hospital - resident must do so;

If in doubt as to diagnosis / treatment - go in and verify;

If any question regarding emergency management, please call senior resident and then the staff doctor on-call.

PGY-2 - TIPS TO REMEMBER WHEN "ON-CALL"

The day before you are scheduled to be on-call, contact locating in both hospitals at 5:00 pm and introduce yourself as the on-call resident and give them the pager number you are carrying.

It is recommended that you see all patients as a PGY-2 for the following reasons:

To learn more;

Not to miss sight threatening conditions;

To gain experience in judging the urgency of cases

Should you require assistance, do not hesitate to call the staff doctor on-call at anytime through locating (if they do not answer the page, ask locating to connect you with the on-call staff doctor's home).

Now you are on-call and you receive a call from the ER doctor:

You have to go see the patients with:

Loss of vision for any reason

Go and see patient at once, it might be CRAO

If >55 years of age order ESR & CRP

Flasher and floaters

Trauma:

If you suspect rupture globe ask the ER doctor for the following:

Keep the patient NPO and start IV line

Give tetanus toxoid

Hard Eye shield with no eye contact

Do CT scan and no MRI

Hang up and go see patient immediately:

Take detailed quick Hx and document it

Examine full

Call staff doctor on-call
Book OR – Category #2

Chemical Accidents

Ask for continuous irrigation in ER X half-hour at least
Check pH
Go see the patient

Ocular Pain

Go see patient promptly, it might be ACG

Post operative C/O;

Low vision
Pain
Redness
Always think about Endophthalmitis

BOOKING DISCRETIONARY VACATION AND CONFERENCE TIME

Written requests must be received by the Residency Program Training Committee at least three months prior to the start of the period involved. Time away will be booked on a first-come-first-served basis. Residents are encouraged to book time away in the initial schedule or as early as possible to avoid disappointment. Good academic standing may be a requirement for courses or conferences longer than one week. Not all requests can be granted, but the Committee will do its best to accommodate resident requests.

Other Points

Sign Out

Sign out needs to be given verbally for all patients, including:
patients seen during call and needing follow-up, patients not seen and needing follow-up, in-patients (active or inactive issues)

PKP

All PKPs are to be attended by resident on-call; if resident is otherwise occupied, he/she is to contact surgeon to explain and ensure follow-up

Conflict

Any inter-resident conflict resolution should be attempted by residents with moderation of chief/assistant; Postgraduate staff liaison (currently Dr Cheema) is to be made aware if conflict is judged to be of a grave nature, or if conflict resolution unsatisfactory; the next level of conflict resolution is postgraduate training committee

Religious obligations

Any religious obligations that interfere with resident duties are to be discussed in advance with all residents affected with moderation of chief/assistant (includes religious holidays,

friday prayer, sabbath, ramadan, etc); if a consensus is not achieved, resident duty overrides and program director or postgraduate liaison is made aware

Senior/junior relationships

Junior residents (R2-3) need to review any patients seen during working hours with either senior resident or staff

Senior resident responsibilities

Senior residents are responsible for advance planning of clinic management: calling for coverage, adjusting number of patients seen PRN, making staff aware if no residents during conference etc.

Part VII: Residents in Difficulty

A residency program is challenging from physical, mental and psychological points of view. Residents are frequently in high stress positions and many will suffer from the effects of stress or depression during the residency program. It is important for all residents to be aware that there are several services offered by the Faculty of Medicine at McGill as well as the Resident Federation (FMRQ). Every resident should visit these sites at the beginning of the residency program to view the services offered by these groups. Below are some of the ways to contact these services.

After-Hour Emergencies

McGill Nightline

A confidential and anonymous listening, information and referral service Tel.: 514-398-6246 The line is open 6 p.m. to 3 a.m. throughout the school year.

Crisis Hotlines

[Suicide Action Montreal](#) Tel.: 514-723-4000 24-Hour Service

[Drug and Alcohol Help Line](#) Tel.: 514-527-2626 24-Hour Service

[Quebec Suicide Crisis Centres](#)

[The Quebec Physicians' Health Program](#): info@pamq.org