RESIDENCY TRAINING MANUAL
2017 – 2018

Department of Ophthalmology & Visual Sciences
University of British Columbia

Please visit http://ophthalmology.med.ubc.ca/education/residency/ for manual updates

Updated on July 2017
1. STAFF ........................................................................................................................................ 4
   A. RESIDENT STAFF .................................................................................................................. 4
   B. AFFILIATED HOSPITALS ....................................................................................................... 4
   C. EYE CARE CENTRE ADMINISTRATION STAFF .................................................................. 4
   D. SERVICES AVAILABLE VIA VH DEPARTMENT OF OPHTHALMOLOGY .............................. 4
   E. SERVICES AT BC CHILDREN’S HOSPITAL ......................................................................... 5
   F. SERVICES AT PROVIDENCE HEALTH CARE ..................................................................... 6

2. SCHEDULES .................................................................................................................................... 7
   A. DAILY ROTATION SCHEDULES ............................................................................................ 7
   B. ACADEMIC HALF DAYS SCHEDULE & TOPICS .................................................................. 10
   C. RESIDENT CLINICAL ROUNDS SCHEDULE ....................................................................... 11
   D. RESIDENT ROTATION SCHEDULE (JULY 1, 2017 – JUNE 30, 2018) ............................ 12
   E. ACADEMIC HALF DAYS ON-CALL COVERAGE .................................................................. 12
   F. MORBIDITY ROUNDS ........................................................................................................ 12
   G. DEPARTMENT GRAND ROUNDS ...................................................................................... 13
   H. PROFESSOR ROUNDS ....................................................................................................... 13
   I. ORAL EXAMS ................................................................................................................... 13
   J. RESIDENT SELECTION PROCESS (CaRMS) ...................................................................... 13

3. CURRICULUM FOR SURGICAL TEACHING LAB ................................................................. 13

4. CLINICS ..................................................................................................................................... 15
   A. SECTION E – AMBULATORY CARE CLINICS .................................................................... 15
   B. ORTHOPTIC CLINIC ......................................................................................................... 15
   C. FORT ST. JOHN EYE CLINIC ............................................................................................ 17

5. RESIDENCY TRAINING COMMITTEE .................................................................................. 20
   A. RESIDENCY TRAINING COMMITTEE MEETINGS ............................................................. 21

6. RESIDENTS ............................................................................................................................... 21
   A. RESIDENT REPRESENTATION ON COMMITTEES 2017 – 2018 ...................................... 21
   B. RESIDENT EVALUATIONS .................................................................................................. 21
   C. RESIDENT VACATION GUIDELINES ................................................................................ 22
   D. CONFERENCE LEAVE, REVIEW COURSES AND FUNDING ........................................ 22
   E. STUDY WEEKS FOR RSs .................................................................................................... 23
   F. CONSTANCE DINGWALL ESTATE AWARD ....................................................................... 23
   G. ELECTIVES ....................................................................................................................... 23
   H. JOURNAL CLUB ............................................................................................................... 23
   I. RESEARCH ......................................................................................................................... 24
   J. RESIDENTS AS TEACHERS (RAT) CURRICULUM IN OPHTHALMOLOGY ..................... 24
   K. EVALUATION, REMEDIATION AND PROBATION POLICY ........................................... 25
   L. HANDLING OF CONSULTATIONS IN THE TEACHING HOSPITALS ............................. 25
   M. EMERGENCY DEPARTMENT COVERAGE ...................................................................... 26
   N. PROTOCOL FOR THE MANAGEMENT OF MEDICAL PROBLEMS ON PATIENTS ADMITTED TO OPHTHALMOLOGY 27
7. EYE TISSUE FOR PRACTICE MICROSURGERY ................................................................. 28
8. RESIDENCY PROGRAM OBJECTIVES ........................................................................... 28
   A. INTENT OF OBJECTIVES ......................................................................................... 28
   B. GENERAL GOALS OF RESIDENCY TRAINING........................................................ 28
9. OBJECTIVES BY YEAR (DETAILS OUTLINED IN ‘RESIDENCY PROGRAM OBJECTIVES’) ..... 31
   A. SECOND YEAR OF 5 YEAR PROGRAM (PGY 2 / R2) ................................................. 33
   B. THIRD YEAR OF 5 YEAR PROGRAM (PGY3 / R3) ................................................... 49
   C. FOURTH YEAR OF 5 YEAR PROGRAM (PGY 4 / R4) .............................................. 57
   D. FIFTH YEAR OF 5 YEAR PROGRAM (PGY 5 / R5) .................................................. 67
10. FINAL SURGICAL OBJECTIVES FOR RESIDENCY TRAINING .................................... 77
    A. MINIMUM SURGICAL EXPERIENCE UPON COMPLETION OF RESIDENCY TRAINING ... 80
11. SPECIAL SECTIONS OBJECTIVES .............................................................................. 80
    A. EXPECTATIONS OF RESIDENTS AROUND ACADEMIC EVENTS .............................. 81
    B. EXPECTATIONS AROUND ADULT AMBULATORY CLINICS – SECTION E, SPH .......... 82
    C. EXPECTATIONS OF RESIDENTS WHEN ON-CALL ............................................... 83
    D. EXPECTATIONS OF RESIDENTS AROUND EMERGENCY SURGERY ...................... 85
    E. EXPECTATIONS OF RESIDENTS AROUND ANTERIOR SEGMENT OR ................. 85
12. PROFESSIONAL STANDARDS FOR LEARNERS AND FACULTY MEMBERS .............. 87
13. POLICY FOR ON-CALL COVERAGE FOR CLINICAL CONFERENCE DAYS ............. 91
14. POLICY FOR ON-CALL COVERAGE DURING OKAP AND MOCK ORAL EXAMINATION ... 91
15. SAFETY OF POSTGRADUATE MEDICAL TRAINEES ............................................... 92
16. SUPERVISION OF POSTGRADUATE MEDICAL TRAINEES ...................................... 94
17. UBC OPHTHALMOLOGY RESIDENTS PHOTOS ......................................................... 97
1. Staff

a. Resident Staff

<table>
<thead>
<tr>
<th>PGY 1</th>
<th>PGY 2</th>
<th>PGY 3</th>
<th>PGY 4</th>
<th>PGY 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry Chen</td>
<td>Geoffrey Law</td>
<td>Mitchell Browne</td>
<td>Katie Clapson</td>
<td>Kailun Jiang</td>
</tr>
<tr>
<td>Lauren Sawatzky</td>
<td>Wendy Ming</td>
<td>Rosanna Martens</td>
<td>Gavin Docherty</td>
<td>Tom Liu</td>
</tr>
<tr>
<td>Carol Tadrous</td>
<td>Grace Qiao</td>
<td>Colten Wendel</td>
<td>Salina Teja</td>
<td>Myra Butler</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gelareh Noureddin</td>
</tr>
</tbody>
</table>

b. Affiliated Hospitals

- BC Children’s Hospital 604-875-2345
- Vancouver Coastal Health – UBC site 604-822-7121
- St. Paul’s Hospital 604-682-2344
- Vancouver Coastal Health – VGH site 604-875-4111
- Mount Saint Joseph 604-874-1141

b. Eye Care Centre Administration Staff

- Linda Wong  Operations Manager, VCH/UBC Eye Care Centre 604-875-4242
- Lynn Lau  Undergraduate Program Assistant 604-875-4111 x62712
- Jeanne Charles  Secretary to Head 604-875-4199
- Mabel Chan  Residency Training Program Administrator 604-875-5266
- Derek Agyapong-Poku  Financial & Operations Manager 604-875-4113
- Aqsa Shaikh  Receptionist & HR/Financial Assistant (part-time) 604-875-4121

b. Services Available via VH Department of Ophthalmology

Please contact Lynn Lau (6-2712) – Undergraduate Program Assistant for a list of Section contact and clinic staff.

Glaucoma
- Dr. Michael Dobrogowski
- Dr. Frederick Mikelberg
- Dr. Steven Schendel

Retina
- Dr. Andrew Merkur
- Dr. David Albiani
- Dr. Andrew Kirker
- Dr. David Maberley
- Dr. Eduardo Navajas
- Dr. Jason Cherry
- Dr. Ari Giligson
- Dr. Francis Law
- Dr. Patrick Saunders
- Dr. Stuart Smith
- Dr. Suren Sanmugasunderam
- Dr. Simon Warner

Section E
- Dr. Jeff Blicker
- Dr. Katherine Paton
- Dr. Patrick Saunders
- Dr. Suren Sanmugasunderam
- Dr. Simon Warner

Ophthalmic Photography
- Bryan Harrison
- Kelly Grant
- Chris Carlton
- Anne Marie Godfrey Glenn
- Ottenbreit
- Ellen Yang

Corneal Surgery and External Diseases
- Dr. John Richards
- Dr. Martin McCarthy
- Dr. Simon Holland
- Dr. David Rollins
Oculoplastics
Dr. Peter Dolman    Dr. David Rossman

Visual Field Laboratory
Dr. Duncan Anderson

Neuro-Ophthalmology
Dr. Duncan Anderson    Dr. Jason Barton    Dr. Claire Sheldon    Dr. Jean Chuo
Dr. Sara Simpson

Ocular Oncology
Dr. Katherine Paton

ASAU and Ophthalmic Imaging
Aftab Shaikh    Alejandro Chung

Prosthetics
Marie Allen    Liz Save

Surgical Daycare
Kate Callaghan    Nancy Erlendson    Wanda Lai

Resident Wet Lab
Howard Meadows

e. Services at BC Children’s Hospital

Administration
Chloe Gregg, Administrative Coordinator    604-875-3867
Dr. M. Aroichane & Natalie Wong, Secretary    604-875-3868
Dr. J. Gardiner & Dolores Latham, Secretary    604-875-3079
Dr. C.J. Lyons & Rechelle Cajuguiran, Secretary    604-875-3117 direct line 604 875-2228

Electrophysiology
Linn Moore

Orthoptics
Christy Giligson    Debbie Zylich    Andrea Quan    Vaishali Mehta

Research
Dr. Deborah Giaschi

Visual Impairment Program
Dr. Carey Matsuba
f. Services at Providence Health Care

Administration
David Albani, Department Head 604-806-8169 / 604-879-9311
Stephanie Yan, Assistant 604-806-8169
Reception & Scheduling 604-806-8168

Diagnostics (Orthoptics, Visual Fields, OCT, Fluorescein, Angiography, Photography)
Olena Mota Emma Chillet Cindy Yang

Cornea Service
Dr. Paul Dubord Dr. Simon Holland Dr. Martin McCarthy Dr. Sonia Yeung

General Ophthalmology
Dr. Andrea Butler Dr. Pierre Faber Dr. Harpreet Gill Dr. Heather O’Donnell
Dr. Tanya Orton

Glaucoma
Dr. Michael Dobrogowski

Neuro-Ophthalmology
Dr. Duncan Anderson Dr. Jean Chuo Dr. Janette Lindley Dr. Sara Simpson

Ocular AIDS
Dr. Janette Lindley Dr. Jane Gardiner

Oculoplastics
Dr. Tony Wong

Retina
Dr. David Albani Dr. Andrew Kirker Dr. Andrew Merkur Dr. William Ross

Uveitis
Dr. Farzin Forooghian

Research
Dr. Ken Bassett

Surgical Staff
Dr. David Butler Dr. Jesse Chew Dr. Jean Chuo Dr. Tony Wong
Dr. Michael Dobrogowski Dr. Al Demco Dr. Paul Dubord Dr. Pierre Faber
Dr. Simon Holland Dr. Janette Lindley Dr. Jocelyn MacIntosh Dr. Martin McCarthy
Dr. Andrew Merkur Dr. Sonia Yeung Dr. David Albani Dr. Andrew Kirker
Dr. Heather O’Donnell Dr. Andrea Butler Dr. Suren Sanmugasunderam
2. Schedules

a. Daily Rotation Schedules

CORNEA – PGY 2 & 3

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Dubord</td>
<td>1. Yeung (5x)</td>
<td>1. Holland</td>
<td>1. VGH OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Warner/CL (3x)</td>
<td>2. Refractive*</td>
<td>2. Wet Lab</td>
</tr>
<tr>
<td>PM</td>
<td>Dubord</td>
<td>1. Yeung (5x)</td>
<td>Dubord</td>
<td>Rollins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. McCarthy (3x)</td>
<td></td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

* Refractive surgery with Dr. Perry Maerov at London Eye Centre in New Westminster (2 sessions/rotation). Please contact him in advance of the rotation: pmaerov@nseyeassociates.com

ECC ANTERIOR SEGMENT – PGY 4 & 5

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>OR</td>
<td>OR</td>
<td>Wet Lab</td>
<td>OR</td>
</tr>
<tr>
<td>PM</td>
<td>OR</td>
<td>OR</td>
<td>Wet Lab</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Research</td>
</tr>
</tbody>
</table>

GLAUCOMA – PGY 3

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>Research</td>
</tr>
<tr>
<td>PM</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

GLAUCOMA – PGY 5

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>Research</td>
</tr>
<tr>
<td>PM</td>
<td>OR/Clinic</td>
<td>OR/Clinic</td>
<td>Pathology</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

*This rotation is divided such that the resident spends 2 continuous weeks with each Glaucoma preceptor. If no preceptors are on vacation the rotation will follow the order Mackenzie/Schendel/Mikelberg/Dobrogowski, however these weeks will be adjusted by the chief resident according to staff vacations to ensure continuity of clinical exposure

MSJ ANTERIOR SEGMENT – PGY 4 & 5

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>OR*</td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>PM</td>
<td>OR*</td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
</tbody>
</table>
Monday is not officially teaching time at MSJ. Options are MSJ plastics with Dr. Wong (contact him the week prior), VGH OR, or lasers.

**NEURO-OPHTH – PGY 2**

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>
| AM         | Neuro-Ophth clinic* | Neuro-Ophth clinic* | Neuro-Ophth clinic* | Neuro-Ophth clinic* | 1. Research**  
2. Botox            |
| PM         | Neuro-Ophth clinic* | Neuro-Ophth clinic* | Neuro-Ophth clinic* | Neuro-Ophth clinic* | Academic half-day |

**NEURO-OPHTH/ONCOLOGY – PGY 5**

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Oncology</td>
<td>Neuro-Ophth clinic*</td>
<td>Neuro-Ophth clinic*</td>
<td>Neuro-Ophth clinic*</td>
<td>Research</td>
</tr>
<tr>
<td>PM</td>
<td>Neuro-Ophth clinic*</td>
<td>Neuro-Ophth clinic*</td>
<td>Neuro-Ophth clinic*</td>
<td>Neuro-Ophth clinic*</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

* please refer to online neuro-ophth clinic schedule for daily assignment  
**when Barton or Lindley are away, research can move to their slot and Fri am can be with Dr. Anderson

**PEDIATRICS – PGY 3 & 4**

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Cline</td>
<td>ROP rounds</td>
<td>Aroichane</td>
<td>Gardiner</td>
<td>Research ***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gardiner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>Cline</td>
<td>Lyons</td>
<td>Lyons</td>
<td>Lyons</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

Pediatrics- PGY 3 & 4

The PGY3 pediatric rotation will emphasize the acquisition of clinical skills in the pediatric ophthalmology clinic setting with approximately one day in the OR every 2 weeks. In the absence of any of the clinic preceptors either on or off site (Drs Aroichane, Cline, Gardiner, Kennedy, Lyons or Rees), residents are expected to attend the orthoptic clinic. The PGY4 rotation has more emphasis on surgical skills with approximately one day a week in the BCCH OR.

After academic half days end in mid-May, residents should attend either Dr. Gardiner’s Friday morning clinic or the orthoptic clinic and take Friday afternoon as their research half-day.

Since the OR allocation is not based on a regular rotation, the resident timetable will be determined at the start of the pediatric rotation for each resident and circulated to the resident and staff by the BCCH Ophthalmology Administrative Coordinator, Chloe Gregg, 2 weeks before the start of the rotation.

*** After AHD ends in June, residents attend AM clinic @ BCCH.
### OCULOPLASTICS/ORBIT – PGY 2 & 4

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Wong (MSJ)</td>
<td>Dhaliwal Yin</td>
<td>Rossman</td>
<td>Dolman</td>
<td>Research</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>Wong (MSJ)</td>
<td>Dhaliwal Yin</td>
<td>Pathology</td>
<td>Dolman</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

### RETINA – PGY 2 & 4

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Navajas</td>
<td>Kirker</td>
<td>Ross (SPH)</td>
<td>Merkur</td>
<td>Research</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>Ma</td>
<td>Maberley</td>
<td>Albiani</td>
<td>Forooghian</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

NB (for Retina):

- If the staff member is away – the resident can join another staff member in clinic (first priority would be to same Section)
- If assigned staff member is in OR – then go to OR
- Try to go to a clinic where there is no fellow so each learner will have space to work
- Residents are allowed in all private clinics
- Priority for clinic should be for Resident – not fellow.

### SECTION E – PGY 2 & 3

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>Ward Consults</td>
<td>Ward Consults</td>
<td>Wet Lab</td>
<td>Ward Consults</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

### SECTION E – PGY 4 & 5

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
<td>Section E</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>Cosmetics</td>
<td>Wet Lab</td>
<td>Low Vision</td>
<td>Research/Uveitis</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

### ST. PAUL’S – PGY 2 & 3

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Neuro</td>
<td>Neuro</td>
<td>Retina</td>
<td>Neuro or HIV</td>
<td>Research</td>
</tr>
<tr>
<td><strong>PM</strong></td>
<td>General</td>
<td>General</td>
<td>General</td>
<td>Neuro</td>
<td>Academic half-day</td>
</tr>
</tbody>
</table>

*Resident on-call for all SPH ED and ward calls between 8:00-17:00. When resident is away (Fridays + vacation/conference), on-call staff is first call.*
b. Academic Half Days Schedule & Topics

Topics will be supervised by one of the staff sub-specialists. The block is held Friday 1330-1630h in the Seminar Room, Eye Care Centre. Residents are freed from on-call responsibilities during academic block. Schedule is subject to change.

**September 2017**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>Peds Conference</td>
</tr>
<tr>
<td>15</td>
<td>Retina</td>
</tr>
<tr>
<td>22</td>
<td>Retina</td>
</tr>
<tr>
<td>29</td>
<td>Retina Retreat</td>
</tr>
</tbody>
</table>

**October 2017**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>Retina</td>
</tr>
<tr>
<td>13</td>
<td>Retina</td>
</tr>
<tr>
<td>20</td>
<td>Retina</td>
</tr>
<tr>
<td>27</td>
<td>Retina</td>
</tr>
</tbody>
</table>

**November 2017**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>Retina</td>
</tr>
<tr>
<td>10</td>
<td>AAO</td>
</tr>
<tr>
<td>17</td>
<td>Cornea</td>
</tr>
<tr>
<td>24</td>
<td>Cornea</td>
</tr>
</tbody>
</table>

**December 2017**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Mock Oral Exams</td>
</tr>
<tr>
<td>08</td>
<td>Cornea</td>
</tr>
</tbody>
</table>

**January 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Cornea</td>
</tr>
<tr>
<td>12</td>
<td>Cornea</td>
</tr>
<tr>
<td>19</td>
<td>Ethics</td>
</tr>
<tr>
<td>26</td>
<td>Ethics</td>
</tr>
</tbody>
</table>

**February 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>CaRMS</td>
</tr>
<tr>
<td>09</td>
<td>Uveitis</td>
</tr>
<tr>
<td>16</td>
<td>Uveitis</td>
</tr>
<tr>
<td>23</td>
<td>Cataract/Ant Seg Trauma</td>
</tr>
</tbody>
</table>

**March 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Cataract/Ant Seg Trauma</td>
</tr>
<tr>
<td>09</td>
<td>Cataract/Ant Seg Trauma</td>
</tr>
<tr>
<td>16</td>
<td>Glaucoma</td>
</tr>
<tr>
<td>23</td>
<td>Glaucoma</td>
</tr>
<tr>
<td>30</td>
<td>Good Friday</td>
</tr>
</tbody>
</table>

**April 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>Glaucoma</td>
</tr>
<tr>
<td>13</td>
<td>Glaucoma</td>
</tr>
<tr>
<td>20</td>
<td>Research Day</td>
</tr>
<tr>
<td>27</td>
<td>Glaucoma</td>
</tr>
</tbody>
</table>

**May 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>Practice Management</td>
</tr>
<tr>
<td>11</td>
<td>BCSEPS</td>
</tr>
<tr>
<td>18</td>
<td>Practice Management</td>
</tr>
<tr>
<td>25</td>
<td>Mock Oral Exams</td>
</tr>
</tbody>
</table>

**June 2018**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>COS</td>
</tr>
<tr>
<td>08</td>
<td>Communication / Personal Develop</td>
</tr>
<tr>
<td>15</td>
<td>Make up day</td>
</tr>
<tr>
<td>22</td>
<td>Make up day</td>
</tr>
</tbody>
</table>
c. Resident Clinical Rounds Schedule

All residents will attend these clinically-oriented rounds. All rounds take place in the Seminar Room with the exceptions of Pathology (in LSP) and Fluorescein (Dr. Ma’s clinic).

**SEPTEMBER 2017 TO MAY 2018 – Subject to Change**

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cornea</strong></td>
<td>7:00am – 8:00am</td>
<td></td>
<td>6:00am – 7:00am</td>
<td></td>
<td>8:00am – 9:00am</td>
</tr>
<tr>
<td><strong>Glaucoma</strong></td>
<td>7:00am – 8:00am</td>
<td></td>
<td></td>
<td>7:00am – 8:00am</td>
<td></td>
</tr>
<tr>
<td><strong>Neuro</strong></td>
<td>12:30pm – 1:30pm</td>
<td></td>
<td>8:00am – 9:00am</td>
<td>7:00am – 8:00am</td>
<td></td>
</tr>
<tr>
<td><strong>Orbit</strong></td>
<td>5:00pm – 6:00pm</td>
<td>10:00am – 11:00am</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pathology</strong></td>
<td>12:00pm – 1:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### September
- **4**: Labour Day
- **11**: Retina
- **18**: Retina
- **25**: Retina & Fluorescein
- **2**: Retina
- **9**: Thanksgiving Day
- **16**: Retina & Fluorescein
- **23**: Retina
- **30**: Retina
- **6**: Retina
- **13**: Remembrance
- **20**: Retina
- **27**: Retina & Fluorescein

### October
- **2**: Retina
- **3**: Orbit
- **16**: Retina & Fluorescein
- **23**: Retina
- **30**: Retina

### November
- **6**: Retina
- **13**: Remembrance
- **20**: Retina
- **27**: Retina & Fluorescein
- **2**: Retina
- **9**: Retina
- **12**: Retina & Fluorescein
- **19**: Retina & Fluorescein
- **26**: Retina

### December
- **4**: Retina
- **11**: Retina & Fluorescein
- **18**: Retina & Fluorescein
- **25**: Retina
- **32**: Retina

### January
- **1**: New Year's Day
- **8**: Retina & Fluorescein
- **15**: Retina
- **22**: Retina
- **29**: Retina & Fluorescein
- **5**: Retina
- **12**: Family Day
- **19**: Retina & Fluorescein
- **26**: Retina

### February
- **5**: Retina
- **12**: Family Day
- **19**: Retina & Fluorescein
- **26**: Retina

### March
- **5**: Retina
- **12**: Retina & Fluorescein
- **19**: Retina
- **26**: Retina

### April
- **2**: Easter Monday
- **9**: Retina & Fluorescein
- **16**: Retina
- **23**: Retina

### May
- **30**: Retina & Fluorescein
- **7**: Retina
- **14**: Retina
- **21**: Victoria Day
- **28**: Retina & Fluorescein

### Sundays
- Labour Day
- Thanksgiving Day
- Remembrance
- New Year’s Day
- Family Day

### Holidays
- Easter Monday
- Victoria Day
- Good Friday
d. Resident Rotation Schedule (July 1, 2017 – June 30, 2018)

<table>
<thead>
<tr>
<th></th>
<th>July 1 - 23</th>
<th>July 24 - Sep 17</th>
<th>Sep 18 - Nov 12</th>
<th>Nov 13 - Jan 14</th>
<th>Jan 15 - Mar 11</th>
<th>Mar 12 - May 6</th>
<th>May 7 - Jun 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace</td>
<td>2</td>
<td>Training</td>
<td>Cornea</td>
<td>Sec E</td>
<td>Retina</td>
<td>SPH</td>
<td>Plastics/Path</td>
</tr>
<tr>
<td>Geoff</td>
<td>2</td>
<td>Training</td>
<td>Neuro</td>
<td>Retina</td>
<td>Sec E</td>
<td>Plastics/Path</td>
<td>SPH</td>
</tr>
<tr>
<td>Wendy</td>
<td>2</td>
<td>Training</td>
<td>Sec E</td>
<td>Neuro</td>
<td>SPH</td>
<td>Cornea</td>
<td>Retina</td>
</tr>
<tr>
<td>Mitch</td>
<td>3</td>
<td>Diagnostics</td>
<td>Glaucoma</td>
<td>SPH</td>
<td>Cornea</td>
<td>Peds</td>
<td>Electives</td>
</tr>
<tr>
<td>Myra</td>
<td>3</td>
<td>Diagnostics</td>
<td>SPH</td>
<td>Plastics/Path</td>
<td>Electives</td>
<td>Glaucoma</td>
<td>Cornea</td>
</tr>
<tr>
<td>Rosanna</td>
<td>3</td>
<td>Diagnostics</td>
<td>Peds</td>
<td>Cornea</td>
<td>Electives</td>
<td>Sec E</td>
<td>SPH</td>
</tr>
<tr>
<td>Colten</td>
<td>3</td>
<td>Diagnostics</td>
<td>Peds</td>
<td>Cornea</td>
<td>Electives</td>
<td>Sec E</td>
<td>Peds</td>
</tr>
<tr>
<td>Katie</td>
<td>4</td>
<td>Training</td>
<td>Sec E</td>
<td>Peds</td>
<td>Plastics/Path</td>
<td>Retina</td>
<td>ECC OR</td>
</tr>
<tr>
<td>Gavin</td>
<td>4</td>
<td>Training</td>
<td>Retina</td>
<td>Sec E</td>
<td>Peds</td>
<td>Plastics/Path</td>
<td>MSJ OR</td>
</tr>
<tr>
<td>Kailun</td>
<td>5</td>
<td>OR</td>
<td>MSJ OR</td>
<td>Elective</td>
<td>ECC OR</td>
<td>Sec E</td>
<td>Glaucoma/Path</td>
</tr>
<tr>
<td>Tom</td>
<td>5</td>
<td>OR</td>
<td>ECC OR</td>
<td>Elective</td>
<td>MSJ OR</td>
<td>Neuro/Oncology</td>
<td>Glaucoma/Path</td>
</tr>
<tr>
<td>Gelareh</td>
<td>5</td>
<td>OR</td>
<td>Elective</td>
<td>MSJ OR</td>
<td>Neuro/Oncology</td>
<td>ECC OR</td>
<td>Sec E</td>
</tr>
<tr>
<td>Salina</td>
<td>5</td>
<td>OR</td>
<td>Elective</td>
<td>ECC OR</td>
<td>Sec E</td>
<td>MSJ OR</td>
<td>Neuro/Oncology</td>
</tr>
</tbody>
</table>

Chief Resident – Katie Clapson

*** R5s last 3 rotations will be updated at the end of 2017 to reflect the Study Leave dates. Email will be sent out to affected rotations.

e. Academic Half Days On-Call Coverage

Residents are freed from having to carry a pager on Fridays from 12:00pm to 4:30pm, for academic half day during the academic year including clinical days. Holidays, or other Fridays on which academic block is not held are excluded. It is expected the resident will notify the VH on call staff member if changes are made to the schedule.

The designated member of staff will carry the pager from 1:30pm to 4:30pm during academic block. The resident will be expected to relieve the staff person of the pager at the conclusion of the academic block.

The staff member will manage urgent consults only and will make a list of non-urgent consults which require resident follow-up.

If there is a gap (no teaching session) in the academic schedule on any Friday, the resident rather than staff is responsible for attending to emergency calls all day.

f. Morbidity Rounds

Occur as part of Vancouver Hospital Departmental meeting. Twice annually. St. Paul’s Hospital and Children’s Hospital will also have Morbidity Rounds, occurring at least every six months. The chief resident must discuss expectations for cases & dates of M&M rounds with the staff responsible at the start of the academic year.
g. Department Grand Rounds

Grand Rounds are taken by staff who may ask a resident to either assist or make the actual presentation. A minimum of two weeks’ notice must be given to a resident asked to present at these rounds. **Resident attendance at Grand Rounds is mandatory.** Residents are encouraged to sit close to the front of the auditorium and contribute to discussions. Residents are expected to have a short (5 minutes maximum) presentation prepared to present for the beginning of rounds. It would be preferred if this recently encountered case could be tied in with the theme of the rounds for that week but this is not necessary. It is expected that all Residents will have an equal opportunity to present but the actual schedule should be coordinated between the Chief Resident and the Grand Rounds Committee. Grand rounds are scheduled for every Friday morning, September – May between 8:00am – 9:00am in the ECC Auditorium.

h. Professor Rounds

At Professor’s Rounds, residents in charge of admissions at all UBC sites will summarize weekly admissions and highlight problem or interesting cases. The goal is to review activities on the service in order to highlight decision making emphasizing the ethical issues involved and issues regarding professionalism in ophthalmology. The rounds are scheduled for every Friday morning (with the exception on weeks with the RTC meeting or a visiting Grand Rounds speaker), September – May between 7:00am – 8:00am in the ECC 3rd Floor Boardroom.

i. Oral Exams

Formative oral exams are held in December and May. The format of this in-course assessment will include:

1. Wet lab assessment of suture and microsurgical techniques
2. Refraction of a volunteer subject; an accurate refraction should be performed in 5 minutes (retinoscopy and subjective – NO lensometer); the prescription, including appropriate near-add (if appropriate) should be clearly recorded.
3. Residents will move through approximately seven stations over the course of the afternoon. Each station will cover a different subspecialty and will mimic the Royal College Oral Exam.

Residents should make every effort not to schedule elective time off during these exams or to attempt and reschedule at least a partial make up session.

j. Resident Selection Process (CaRMS)

Shortlisting of the candidates will be during December. The date for CARMS Interviews will be on February 2, 2018.

3. Curriculum for Surgical Teaching Lab

Thursday morning, 7:00am – 9:00am

OVERALL GOALS:
The main goal of this lab is to provide orientation of the PGY 2 and 3 residents to the surgical environment in their ophthalmology training. Microsurgery is distinct from macrosurgery found in most of medicine and demands very specific skills. The main emphasis will be on cataract surgery but basic knowledge and skills in other areas of eye surgery will also be covered. Residents will be expected to perform procedures, and have knowledge appropriate for general ophthalmology.
MEANS OF TEACHING:
Through lecture-tutorials and hands-on training all of the basic principles of surgical procedures will be reviewed and practiced.

The skills required of the residents may be attained in the OR but many opportunities to participate fully in the OR will be lost if the resident doesn’t attend and practice them independently or together with a colleague in the wetlab.

RECOMMENDED READING:
Phacodynamics: Mastering the Tools and Techniques of Phacoemulsification. Barry Seibel, Slack, 1999
Duane’s Vol. 6, Chapters 1-17, 24-39, 42, 47-50

PGY 2
Objectives:
- Familiarity with OR routine and procedure including preparation, draping, and setting up the microscope for surgery.
- Knowledge of, and the care of, micro-instruments.
- Knowledge of sutures and needles for microsurgery.
- Rationale for, and execution of, different incisions and their repair.
- Knowledge of the advantages and disadvantages of basic surgical options in various procedures.
  - Procedures to be used for illustration:
    - Phacoemulsification / ECCE / ICCE
    - Trabeculectomy
    - Skin incisions and flaps

Course Outline:
- Introduction to the OR
  - Overview – set-up, anaesthesia, preparation, sterile technique, “setting the stage” for patient comfort.
  - Microscope – adjustment to surgeon’s comfort / optimum use for the procedure.
- Ophthalmic instruments – optimum use, care, advantages / disadvantages.
- Ophthalmic sutures / needles.
- Construction and repair of incisions
  - Vertical incision – limbal, scleral, corneal, scleral pocket
  - Stepped wounds
  - Self-sealing wound
  - Repair techniques for each incision – considerations of astigmatism.
- Phacoemulsificaton / Extracapsular, “mini-nuc” techniques
  - Basic concepts
- Trabeculectomy
  - Basic concepts

PGY 3
Objectives:
This year is an extension of the previous year’s knowledge in keeping with the graduated responsibilities of the resident in the OR. The emphasis will be on a higher level of expectation so as to facilitate the easy transition into more complex surgical situations. More dexterity in performing procedures will be required as will the need for more detailed knowledge of anaesthesia, cataract surgery, combined procedures, and more advanced techniques in plastics.

Course Outline:
Topics will include: small incision surgery, viscoelastics, capsulotomy techniques, cortex removal, lens insertion, and intracapsular techniques. In addition, the various types of IOLs and calculation of their power for surgery will be presented. Small pupil procedures and the enlargement of pupils will be addressed.

An emphasis on awareness and prevention of complications will be presented.
- Capsulotomy complications
- Lens subluxation (capsular tension rings) / luxation
  - Posterior capsular tears
  - Vitreous loss

IT IS IMPERATIVE THAT ALL RESIDENTS SPEND ADDITIONAL (UNSCHEDULED) TIME IN THE LAB TO PRACTICE THESE SKILLS. The modern ophthalmic Operating Room is not the place or time to practice basic foundation skills. If the basic skills are not available, that resident will find their first OR experiences frustrating as supervisors struggle to find safe "partial" procedures for those trainees.

RESIDENTS ARE RESPONSIBLE FOR MAINTAINING THE LAB IN A CLEAN AND TIDY STATE. THIS WILL SERVE TO MAKE IT A MORE CONDUCIVE PLACE TO PRACTICE THESE SKILLS.

4. Clinics
   a. Section E – Ambulatory Care Clinics

Eye Care Centre

The Ambulatory Care Clinics are run Monday to Friday from 9:00am – 12:00pm in the VHHSC/UBC Eye Care Centre.

These are teaching clinics where residents deal directly with patients, discussing findings and proposed management with the supervising staff person. A small number of patients are seen during each clinic allowing time for teaching and enabling the resident to comfortably examine each patient.

Ambulatory Care Clinic

1. Supervising staff are expected to write some comment on the chart of each patient seen. This might include a diagnosis, suggested treatment and whether he/she was in agreement with the various aspects of the examination performed by the resident.
2. The number of patients booked will vary according to the time of year, i.e.: during the summer months when first year residents are beginning, fewer patients will be booked to allow the new residents time to learn refraction techniques and have these checked by either the third year resident or supervising staff person.
3. Please see additional notes detailing expectations for outpatient clinic (at the end of this manual)

b. Orthoptic Clinic

Orthoptic means “straight eyes”. Terms that may be used to refer to extra-ocular muscle imbalance include Strabismus, squint, eye misalignment, lazy eye and crossed or wandering eyes. Orthoptics involves the investigation, diagnosis and management of strabismus along with abnormalities of visual acuity and binocularity (how the eyes work together) that may be associated with strabismus.
There are many disorders or diseases that can affect the function of extra-ocular muscles. Strabismus may be congenital or acquired. Causes of acquired strabismus include refractive error causing excessive accommodation requirement, trauma to the face or head that results in injury to one or more muscles or the nerves which supply the muscles, neurologic lesion affecting the nerves, nuclei or supranuclear pathways, and systemic disease affecting the vascular system or muscle anatomy. Patients range from the newborn to the elderly.

Orthoptic evaluation involves a battery of tests to determine the sensory and motor function of a pair of eyes. Various instruments and skills are used in assessing this. Sensory testing assesses the patient’s ability to blend images from the two eyes into one (fusion) and perceive depth using information from both eyes (stereopsis). Motor tests include the use of prisms to determine the exact amount of the deviation.

**Instruments and skills**

**Cover Test (cover/uncover and alternate or cross cover)**
**R.A.F. Near Point Rule**
- Near Point of Convergence
- Near Point of Accommodation

**Sensory tests**
**Stereopsis tests – Titmus, Lang, Randot, TNO, AOVectograph**
- Worth Lights (4 Dot Test)
- Major Amblyoscope (Synoptophore/Troposcope) to assess binocular function
- Bagolini Glasses to assess retinal correspondence and fusion
- After Image Test (Hering-Bielschowsky) to assess retinal correspondence
- Diplopia Tests
- 4 dioptre Base Out prism test
- Prism vergences

**Motor Tests**
- Hirschberg Test
- Krimsky Test
- Prisms – to measure a deviation
- Simultaneous Prism Introduction and Cover Test
- Prism Cover Test, Three Step Test
- Major Amblyoscope (Synoptophore/Troposcope) to measure a deviation horizontal, vertical, torsional, (to measure Angle Kappa)
- Maddox Rod
- Maddox Wing
- Maddox Double Prism
- Double Maddox Rod to measure torsion
- Bagolini Glasses to measure torsion
- Hess screen test/Lees screen
- Field of Binocular Single Vision (a motor and sensory test)
- Assessment of compensatory head postures
- Methods of assessing visual acuity and measuring a deviation in patients with nystagmus
- Assessing visual acuity in pre-verbal children
Classification and management of the various types of strabismus and syndromes affecting extra-ocular muscle balance

Management of the various types of amblyopia

Fresnel prisms – identification of indications for prism correction, assessment of correction required and Fresnel prism application

**ABBREVIATIONS**

C.T. cover test (cover – uncover test and/or alternate cover test)
O.M. ocular movement
P.C.T. prism cover test
C.R. corneal reflection (reflex)
N.P.C. near point of convergence
N.P.A. near point of accommodation
Conv. Convergence
Div. divergence
Θ no vertical deviation
Φ no horizontal deviation
Ө orthophoria
E esophoria for distance
E’ esophoria for near
X exophoria for distance
X’ exophoria for near
ET esotropia for distance
ET’ esotropia for near
XT exotropia for distance
XT’ exotropia for near
E (ET) intermittent esotropia
X (XT) intermittent exotropia
R/H right hyperphoria for distance (R/L)
R/H’ right hyperphoria for near
LH left hyperphoria for distance (L/R)
LH’ left hyperphoria for near
R/HT or LHT hypertropia in distance (R/L or L/R)
R/HT’ or LHT’ hypertropia for near
S.P. simultaneous perception
N.R.C. normal retinal correspondence
A.R.C. abnormal retinal correspondence

c. Fort St. John Eye Clinic

The Fort St. John Eye Clinic is run by the Senior Residents with the assistance of the current director, Simon Holland. Six two week clinics are conducted each year in the Fort St. John General Hospital. One resident will come for the first week and another resident will attend for the second. The first day of each two week clinic begins on the Monday at 8:00 a.m. This will necessitate travel to Fort St. John the night before. Surgery will take place on the Friday of the first week with follow-up during the next week. On the last day of each clinic a Staff Person from Vancouver attends the clinic to review any difficult cases and post-operative problems. Please take a later flight back to allow a full day clinic on the Friday.
The Fort St. John Clinic has become well-known and well-utilized as the physicians of the area refer most of their patients with ocular problems to the clinic. Dr. Simon Holland and Dr. David Fine, also attend patients in Dawson Creek at other times during the year. FSJ is the only hospital in the BC Peace region delivering eye care so it is the regional referral center.

All expenses incurred during the clinic will be reimbursed upon submission of receipts. Residents are reminded that this clinic is funded from public monies and therefore only reasonable expenses will be recognized (see expense guidelines on the last page of this section).

Travel:

Residents will be responsible for organizing the airline reservations and the department will arrange for hotel and car rental (if necessary). It is the responsibility of the residents, upon receipt of their tickets, to assure that the dates on the tickets coincide with the responsibility and dates of the clinics involved. Residents are strongly encouraged to be available for boarding at least one hour prior to flight time. This will prevent being bumped from the aircraft. The budget is limited and the cheapest flights should be booked now that there is more than one airline serving FSJ out of Vancouver.

Fort St. John Ambulatory Clinic:

The clinic has been operating for almost 35 years and is mutually beneficial to residency training, Fort St. John Hospital and the people of Peace River. There is a very good relationship with the local optometrists and family physicians. Your function while in this clinic will be to treat the patients as if they were your own and to solve any problems that you may identify during your examination. Any problems of an immediate nature should be referred to Vancouver or Edmonton. Your referral pattern should be guided by your knowledge of the patient’s problem, the patient’s preferences, and your knowledge of consultants who may be of greatest help to the patient.

Patients who present a particular challenge or who are pre-operative should return to see the Staff person attending at the end of the clinic.

Always keep in mind that we must keep space available during each clinic for consultations as opposed to having a constant flow of returns. For this reason, you must prioritize patients and refer them back to their family doctors whenever possible. Please also keep letter short and precise.

Fort St. John Surgical Clinic:

Surgical patients should be selected using the same criteria as one would apply in Vancouver. Cataract patients must have a pre op refraction documented as well as eye dominance and target refraction. In case of second eye surgery the Va and refraction of the first eye must be noted.

Resident surgery is performed in the first week in an effort to provide a full week’s follow-up. Patients must receive detailed instructions as to what to do and who to contact (eg. contact details for surgical resident) over the Saturday and Sunday if there is a post-op emergency when no ophthalmologist is on site. For postop issues if the attending surgeon is not available then contact the director (S. Holland at 604-418-0060 cell, 604-875-5850 office).
Transcription (clinical records):

Presently transcription is still done in Fort St. John although dictated into a central location. Residents are reminded that part of their training is to create a concise report appropriate for a senior resident. Clear and well enunciated dictation is appreciated by everyone and appropriate spelling should be offered to the typist as this expedites the transcription.

Patient Call Backs:

Because of the popularity of the clinic and the fact that we have a rather large number of consultations to be fit in a finite period of time the number of CALL BACKS SHOULD BE KEPT TO MINIMUM. Where appropriate, patients should be returned to their family doctor or optometrist. To increase efficiency, each resident should be aware that data which has already been recorded does not have to be repeated.

Quality of Care

The surgical outcomes are reviewed by the hospital QC committee and also by the residents and staff periodically.

Continuous Care Improvement

As part of the process to continue improvement delivery, please email a note after every trip to the Admin and the Director. Please make any suggestions or comments about your experience and ideas that would improve the service.

Please try and produce one paper/presentation that can be shown at either Grand Rounds and/or can be published e.g. any unusual case or management challenge. Full video capacity for surgeries is now possible.

The FSJ experience is an important part of the Residency Program. It is a valuable if not short exposure to independent practice. Please enjoy it and be creative in any ideas how we can use to improve the service.

Fort St. John Residents Schedule:

<table>
<thead>
<tr>
<th>Scheduled Clinic</th>
<th>Surgery Days</th>
<th>Staff</th>
<th>Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 10-14, 2017</td>
<td>no surgery</td>
<td>Dr. A. Ko</td>
<td>Kailun Jiang</td>
</tr>
<tr>
<td>July 17-21, 2017</td>
<td>20, 21</td>
<td>Dr. A. Ko</td>
<td>Gavin Docherty</td>
</tr>
<tr>
<td>September 11 - 15, 2017</td>
<td>no surgery</td>
<td>Dr. D. Fine</td>
<td>Gelareh Noureddin</td>
</tr>
<tr>
<td>September 18 - 22, 2017</td>
<td>21, 22</td>
<td>Dr. D. Fine</td>
<td>Tom Liu</td>
</tr>
<tr>
<td>November 20 - 24, 2017</td>
<td>no surgery</td>
<td>Dr. S. Schendel</td>
<td>Katie Clapson</td>
</tr>
<tr>
<td>November 27 - Dec 1, 2017</td>
<td>30, 1</td>
<td>Dr. S. Schendel</td>
<td>Gavin Docherty</td>
</tr>
<tr>
<td>January 8 - 12, 2018</td>
<td>11, 12</td>
<td>Dr. C. Pollock</td>
<td>Salina Teja</td>
</tr>
<tr>
<td>January 15 - 19, 2018</td>
<td>no surgery</td>
<td>Dr. C. Pollock</td>
<td>Tom Liu</td>
</tr>
<tr>
<td>March 5 - 9, 2018</td>
<td>no surgery</td>
<td>Dr. C. Pollock</td>
<td>Katie Clapson</td>
</tr>
<tr>
<td>March 12 - 16, 2018</td>
<td>15, 16</td>
<td>Dr. C. Pollock</td>
<td>Katie Clapson</td>
</tr>
<tr>
<td>May 7 - 11, 2018</td>
<td>no surgery</td>
<td>Dr. S. Yeung</td>
<td>Rosanna Martens</td>
</tr>
<tr>
<td>May 14 - 18, 2018</td>
<td>17, 18</td>
<td>Dr. S. Yeung</td>
<td>Myra Butler</td>
</tr>
</tbody>
</table>

*** Staff needs to arrive a day prior to surgery for pre-op.
Expense Guidelines:

1. Airline tickets, hotel accommodation and up to $50.00 of personal long distance calls charged to the room will be directly billed to the University.
2. All Eligible out-of-pocket ground transportation costs will be reimbursed upon submission of original receipts.
3. A meal allowance of $60.00 per day will be covered by the University. The days of departure and arrival combine to count as one day. Submission of receipts is not necessary to receive the meal allowance. We ask that you pay for any meals and non-reimbursable expenses charged to the hotel room at the time of check-out.
4. Car rental options are available, however, they need to be booked through the Residency Administrator.

5. Residency Training Committee

The Residency Training Committee will be composed of the following representatives. The Committee meets monthly and at the call of the Chairman.

Dr. A. Giligson  Director of the Residency Training Program (Chair)
Dr. D. Maberley  Head of Department
Dr. D. Albiani  Providence Site Head
Dr. Erik Skarsgard  Acting Head for BC Children’s Hospital
Dr. D. Giaschi  Research representative

Rotation/Section Heads:
Dr. S. Schendel  Surgery
Dr. M. McCarthy  Cornea (attended by Dr. S. Yeung)
Dr. D. Albiani  Retina/Uveitis
Dr. F. Mikelberg  Glaucoma
Dr. P. Dolman  Plastics/Orbit
Dr. J. Gardiner  Pediatric Ophthalmology
TBA  Section E/Resident Outpatient Clinic
Dr. J. Barton  Neuro-ophthalmology (attended by Dr. J. Chuo)
Dr. H. O’Donnell  SPH Outpatient Clinic

Resident Representatives:
Chief Resident
Rotating Resident (to be determined by the “resident members subcommittee”)*

*Resident Members Subcommittee is composed of all the residents in the program and chaired by the Chief Resident. Their meetings are held ad hoc but at least quarterly and deliberations from that committee are brought forward to the RTC via the Chief and the Rotating resident. The position of Rotating resident allows broader participation in RTC by various members of the residency body.

Specific Terms of Reference

1. Development of a clear program plan, including objectives relating to knowledge, skills and attitudes and CanMed competencies based upon the general objectives of training in the specialty as published in the specialty training requirements of the College.
2. Conduct of the program, including the rotation of residents to ensure that each resident is advancing and gaining in experience and responsibility in accordance with the educational plan.
3. Regular review of the program to assess the quality of the educational experience and to review the resources available in order to ensure that maximal benefit is being derived from the integration of the components of the program.
4. Establishment of mechanisms to provide career planning and counseling for residents and to deal with problems such as those related to psychological stress.
5. Selection of candidates for admission to the program, in accordance with policies determined by the Faculty Post Graduate Medical Education Committee.
6. Assessment of performance of each resident through a program of in-training evaluation. This will include the final evaluation at the end of the program as required by the Royal College.
7. Maintenance of an appeal mechanism.
8. Report to the Faculty on all aspects of the Residency Program.
9. To bring to the attention of the Department Head any items concerning quality of care which could influence residency training.

a. Residency Training Committee Meetings

Eye Care Centre Boardroom at 7:00am on the following Fridays:

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 15, 2017</td>
<td>Jan 12, 2018</td>
</tr>
<tr>
<td>Oct 20, 2017</td>
<td>Feb 9, 2018</td>
</tr>
<tr>
<td>Nov 3, 2017</td>
<td>March 2, 2018</td>
</tr>
<tr>
<td>Dec 8, 2017</td>
<td>April 6, 2018</td>
</tr>
<tr>
<td></td>
<td>May 4, 2018</td>
</tr>
<tr>
<td></td>
<td>June 1, 2018</td>
</tr>
</tbody>
</table>

6. Residents

a. Resident Representation on Committees 2017 – 2018

<table>
<thead>
<tr>
<th>MEETING CRITERIA</th>
<th>July 2017 – June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC Ophthalmology Staff Meetings</td>
<td>By invitation only</td>
</tr>
<tr>
<td>Quality of Care Committee</td>
<td>Katie Clapson</td>
</tr>
<tr>
<td>Journal Club (Chief Resident)</td>
<td>Katie Clapson</td>
</tr>
<tr>
<td>Residency Training Committee</td>
<td>Katie Clapson &amp; one resident</td>
</tr>
</tbody>
</table>

b. Resident Evaluations

Evaluation of residents takes place half way through and in the last two weeks of each of the six rotations. Evaluations are completed by the Primary Evaluators indicated in the “Objectives of Rotation” section of this manual. Primary evaluators will gather input from all Staff who had contact with the resident during that rotation.

The Resident is responsible for making an appointment to review his evaluation with the primary evaluator and, if desired, the Director of Residency Training. The One45 web-based system will be used. Also an Exit exam should be given and scored by the Rotation Supervisor before the Resident finishes the Rotation.

Oral examinations are held twice yearly and the OKAP North America-wide (Ophthalmic Knowledge Assessment Program) is held every Spring. The overall assessment of the resident takes into account the OKAP, oral and In-
Training evaluations. The Residency Director will meet with all residents in December and June/July to discuss their progress.

At the end of the four years of training a Royal College “Final In-Training Evaluation Report” is completed by the Director of Residency Training and the Residency Training Committee. Final in-training evaluations are based on the resident’s performance during the final period of training. The final evaluation is reviewed and discussed between the Program Director and the graduating resident. The “Final In-Training Evaluation Report”, complete with the resident and Evaluator’s signatures, is forwarded to the Royal College of Physicians and Surgeons of Canada to allow the Resident to write the final exams.

c. Resident Vacation Guidelines

1. The most Junior resident assigned to the "Section E" is asked not to take vacation during this rotation. This will allow all residents to pursue their other rotations without getting called back excessively for section E/Day Call. Holiday or other leave may only be taken by the Section E resident if the senior resident is present that week. Under no circumstances will Section E be left unstaffed by Residents (in case of emergency, residents will be pulled from other services).

2. All vacation and other leave requests should be forwarded in writing to the Residency Training Program Administrator and approved by the Residency Training Director at least 4 weeks in advance of that requested leave or the leave requests will not be approved.

3. Each resident is entitled to four weeks (20 working days) vacation time per year.

4. No more than one week (5 working days) vacation time may be taken during any one rotation period. In the event that they require a continuous period of two weeks, the vacation should straddle consecutive rotations. A lieu or flex day may be taken during a rotation where one week of vacation has already been approved; however, any more than 7 working days off in one rotation may result in needing to make up that missed time before passing the rotation.

5. Each resident will be entitled to one leave day in lieu of each full Statutory Holiday worked. Unused flex days are not allowed to be carried over to the next academic year. Statutory Holiday lieu days must be used within one calendar year of accruing the lieu day (i.e. Christmas Day 2016 stat must be used before Christmas Day 2017).

6. Proper resident coverage at each hospital must be maintained. A minimum of 5 residents must be present (active and in town) for rounds and academic halfdays. Consideration must be given to the Fort St. John, COS and American Academy periods where the absence of an additional resident could be detrimental to the function of the Department.

7. Residents should discuss and negotiate their vacation time with other residents on the same on-call schedule. Discrepancies will be arbitrated by the chief resident and if necessary the residency director.

d. Conference Leave, Review Courses and Funding

Conference leave time is set as per PAR-BC at 5 working days per year; any extra time taken to attend conferences would need to come out of vacation/lieu/flex days.

Residents will be funded for one trip to a major conference (AAO, COS) during their 4 core years. Residents MAY be funded by the department for other significant conferences at which they are presenting a paper or poster but
this will be determined in an ad hoc manner by the RTC in combination with the Department head. Residents are encouraged to discuss conference funding with their research supervisors.

Residents are allowed to be reimbursed for ONE review course per residency (taken in Canada or US) for registration, flight and accommodation. This also falls under Conference leave. Pre-approval budget forms and expense cover sheets are required for this type of expense.

e. **Study Weeks for R5s**

R5s are allowed to take 4 weeks of study leave leading up to the written exam in May. The last week rotation weeks are adjusted by the administrator to reflect the changes and forwarded to affected rotation heads. Residents can take the week of the oral exams off but additional days off will be counted as vacation, lieu or flex.

f. **Constance Dingwall Estate Award**

The Constance Dingwall Estate award provides partial funding to offset the Residency Program’s funding commitments for the above mentioned conference leave and elective study. The department must collect proof of expenditure for audit purposes, and it is recommended that Residents submit receipts totaling the amount of their expected award to the Residency Program Administrator, as soon as possible. Residents will receive reimbursement for these expenses during their PGY 5 year in the form of a scholarship cheque from the Constance Dingwall Estate. If in doubt, ALWAYS keep receipts that may have an ‘educational’ component during your 5 years of training.

g. **Electives**

Residents will have one elective block in PGY3 and one in PGY5. The aim of the elective block is to allow residents to customize the curriculum to support their particular needs and interests. Funding for electives outside of BC may be available from the Constance Dingwall Award (ask the Program Director for details). Funding for electives that occur within British Columbia may be available from the program budget (ask the Program Director for details). For electives that include travel outside of BC, there is unlikely to be “full” funding of any sort. Residents are free to copy electives that have been successfully run in previous years – this can be discussed with those previous participants, or create electives de novo. The main criteria are that the time and experience must form a reasonable part of their postgraduate training in Ophthalmology. Electives must be pre-approved by the RTC. Residents must adhere to any regulations or guidelines adopted by the department or by the University in regards to electives that occur outside of Canada.

h. **Journal Club**

<table>
<thead>
<tr>
<th>Presenting Date</th>
<th>Presenters</th>
<th>Host</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 27, 2017</td>
<td>Salina, Gelareh, Gavin, Myra</td>
<td>Pierre Faber</td>
<td>Cataract/Ant segment</td>
</tr>
<tr>
<td>October 25, 2017</td>
<td>Salina, Gelareh, Myra</td>
<td>Janette Lindley</td>
<td>General &amp; Neuro</td>
</tr>
<tr>
<td>November 29, 2017</td>
<td>Tom, Kailun, Katie</td>
<td>Mary Lou Jackson</td>
<td>Low vision</td>
</tr>
<tr>
<td>January 31, 2018</td>
<td>Tom, Kailun, Mitch, Wendy</td>
<td>Jean Carruthers</td>
<td>Oculoplastics</td>
</tr>
<tr>
<td>February 28, 2018</td>
<td>Katie, Colten, Grace</td>
<td>Chris Lyons</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>April 4, 2018</td>
<td>Rosanna, Gavin, Geoff</td>
<td>Claire Sheldon</td>
<td>Neuro</td>
</tr>
<tr>
<td>April 25, 2018</td>
<td>Colten, Grace, Wendy</td>
<td>Kevin Wade</td>
<td>Cataract/Ant segment</td>
</tr>
<tr>
<td>May 30, 2018</td>
<td>Mitch, Rosanna, Geoff</td>
<td>Nawaaz Nathoo</td>
<td>Comprehensive</td>
</tr>
</tbody>
</table>
Self-directed learning and interpretation of up to date research to guide diagnosis & therapy are key objectives of any modern residency program. Graduating ophthalmologists must be adept at, not only understanding common research methods, statistics and analytical tools, but also discriminating research papers based on their quality. This skill involves judging their impact based on the data and its presentation, and understand competing arguments in controversial fields.

The object of Journal Club is therefore, not only to discuss new or significant research findings but, also to help participants understand how to judge the quality of the material they are reading.

At each meeting of the Journal Club, three residents will be assigned to present papers of interest or significance. Each resident will choose a current journal article, pending approval of the Journal Club Coordinator (Dr. Claire Sheldon). The residents may wish to present on one theme per session but this is not necessary (for instance if the host is a specialist in Neuro-ophthalmology - this may be the focus for the evening). Each resident will invite a supervisor who will help adjudicate the discussion on the paper in question. For the 2016/2017 Academic year, presenting residents will critique the chosen manuscript following a standardized assessment tool (available from Dr. Claire Sheldon).

The agenda for Journal club meetings will be complete and available 2 weeks in advance.

To reduce stress on the host, the full complement of any journal club will be confined to the following individuals:

i) all ophthalmology residents of the program currently available in the lower mainland (mandatory); ii) staff who are supervising the papers (mandatory); iii) fellows, researchers or other UBC members whose interest is covered in the papers (optional); iv) other Department staff members, including Journal Club Coordinator, Residency Program Director and/or Department Head (optional).

Given the role of industry and pharmaceutical representatives in sponsoring a biased understanding of specific research topics, THERE MUST NOT BE any presence of pharmaceutical industry representatives. Nor must any industry funding be accepted for costs of journal club.

i. Research

It is a requirement of the Royal College that residents should take an active part in research projects. Time is set aside in each rotation except Section E for Research and study. This period will be coordinated under the guidance of the department's Resident Research supervisor. Each Resident should identify an area of interest which could generate a presentation for Research Day.

All residents are expected to prepare a research project suitable for presentation as a talk or poster at the Annual Ophthalmology Research Day. The PGY5 Residents are not required (but are invited) to present. A Faculty co-ordinator will be appointed. Viable Ophthalmology research projects will be identified in September, and Residents will chose one with which they will be associated. Research Day will be held on Friday, April 28, 2017.

j. Residents as Teachers (RaT) Curriculum in Ophthalmology

The RaT curriculum was developed by the UBC office of Faculty Development in recognition of the important role that residents play in the education of medical student learners, colleagues and patients.

The program includes 6 educational modules that have been adapted for implementation throughout residency training and will continue to evolve to meet the needs of the resident group. Residents will receive a certificate of completion when all 6 modules are completed. Details of core objectives of each session can be found at:
Resident as teacher and Learner:

This one hour lecture and group discussion occurs during orientation block and focuses on learning principles relevant to medical education.

Effective Presentations:

Residents will work in pairs (self-select, any resident not in your year) to review the effective presentation slide set which provides focus and context for the task described below:

Select a resident presentation from the grand rounds library online (preferably one that the sr. resident presented) and review together whether the presentation met the objectives outlines within the “effective presentation” slide set. Utilize the provided: Checklist for a healthy presentation pdf.

Following one self-selected grand rounds presentation throughout the year resident pairs should meet again to reflect on their own presentation and whether it met the objectives for an effective presentation, as outlined in the slide set.

The completion of the self-directed task will be communicated to the Residents as Teachers co-ordinator, who will then distribute the module evaluation form.

Patient Education:

This module involves the direct observation of two key patient education scenarios in ophthalmology (Blepharitis and Posterior Vitreous detachment). Didactic component will be provided in hand out at beginning of SPH rotation. The observation would ideally be spontaneous but may be scheduled at the discretion of the supervising physician. A mini CEX will be completed following the session and evaluation of the module will be distributed at the end of the SPH rotation.

k. Evaluation, Remediation and Probation Policy

All appeals of residents to outcomes of either in training evaluations or final in training evaluations will be dealt with as per the policy of the Faculty of Medicine of UBC.

Please see: Postgraduate Dean of Medicine Policy: resident appeals  
http://postgrad.med.ubc.ca/files/2012/02/Resident_Evaluation_and_Appeals_Policy1734.pdf  
Postgraduate Dean of Medicine General Policies  
http://postgrad.med.ubc.ca/program-information/policies/

l. Handling of Consultations in the Teaching Hospitals

Consultations may be seen by residents on a daily basis in the Ambulatory Care or Outpatient Clinics of the hospital in which they are based. Non-ambulatory and acute cases are handled on the wards. In the instance of specific referrals the residents will contact the staff person to whom the patient has been referred. Non-specified referrals of routine cases require notification of the appropriate staff person on call, ward staff person for that hospital or ambulatory care supervisor by the resident seeing the case.
Every consultation will be reviewed by a staff person; this includes the ambulatory care and outpatient clinic supervisors, staff persons on call, and ward staff person.

Where a patient’s care overlaps two rotations, the residents involved are responsible for discussing the case adequately. A continuum of care in these situations is of the utmost priority.

m. Emergency Department Coverage

Vancouver Hospital

Emergency cases seen at the Vancouver Hospital will be treated by the resident on call. According to the seriousness of the problem junior residents may handle the case themselves, or seek the advice of the staff person on call. Follow-up may occur in Section E, Eye Care Centre, or a site designated by the staff person.

The following outlines the basic types of emergencies and how they should be handled by the resident:

1. Cases of a less serious nature which do not require follow up. These cases are managed by the resident and the appropriate report completed. A copy of this report is reviewed with the resident by the supervising staff person in the next scheduled ambulatory care clinic or the staff person on call for this purpose.

2. Cases of a less serious nature which require follow up. These cases are managed by the resident and asked to return for follow up under the supervision of the staff person on call or under the supervising staff person for the ambulatory clinic.

3. Cases requiring admission of a patient. The staff person on call is contacted and management of the patient is discussed. The staff person will see this case as an inpatient but upon discharge usually refers the patient to the ambulatory care clinic for follow up.

4. Direct referrals. The resident on call will assess the patient’s clinical status and then immediately call the ophthalmologist to whom the patient has been referred. The staff person will see the patient and discuss management and subsequent follow up with the resident.

BC Children’s Hospital

Handling of pediatric emergencies is done by the resident on call for BC Children’s Hospital. The following outlines types of emergencies and how they should be handled by the resident:

1. Patients requiring admission are referred to the staff person on call.

2. Cases of a less serious nature which do not require follow up. These cases are managed by the resident and the appropriate report completed. A copy of the report is kept by the resident to be reviewed with on-call staff.

3. Cases which do not require admission but do require follow up. These cases are managed by the resident and subsequently referred to one of the BCCH ophthalmology staff for follow up. The resident will make every effort to discuss the clinical problem with the staff person concerned prior to this review. Residents will coordinate with fellows and Faculty to ensure seamless follow up of less urgent cases at the BCCH outpatient clinic.
4. Direct referrals. The resident will assess the patient’s clinical status then immediately call the ophthalmologist to whom the patient has been referred. The staff person will see the patient and discuss management and follow up with the resident.

5. Cases of non accidental injury should be examined by the Resident and carefully documented. It is imperative that any evidence of globe trauma or retinal hemorrhage is reviewed by staff the same day and documented photographically using the RetCAM camera (available from the OR)

Accurate documentation of all cases is recognized as essential to good patient care and as such will be part of the teaching program. It is the responsibility of all residents to accurately record all findings and assure that they are made part of the continuing file for the benefit of patient care.

**St. Paul’s Hospital/Mount St. Joseph Hospital**

Daytime Emergency/Consults Priorities

1. Clinic Ophthalmologist/Resident
2. On Call Ophthalmologist/Resident
3. After hours Emergency/Consults – On Call Ophthalmologist/Resident

**Disaster Plan**

The external disaster plan for ophthalmology covers the following affiliated Hospitals:

- Vancouver Hospital & Health Sciences Centre (Oak Site & UBC Site
- Children’s Hospital
- St. Paul’s Hospital

In the event of an external disaster in Vancouver or surrounding areas:

1. The medical staff of the Department of Ophthalmology, both attending and residents, will meet in the hospitals to which they are primarily assigned.

2. Their function there will be:
   a) To provide care for ocular and facial injuries.
   b) To be available as backup staff for the triage area in the Emergency Departments.
   c) To be available as manpower for surgical teams in the operating rooms.

3. The Chiefs of the Hospital Departments will proceed to the Ophthalmology Wards of their respective hospitals to arrange the discharge of suitable patients to provide beds for emergencies. They will remain on the wards being active in both provision of care and delegating work load and responsibilities.

**n. Protocol for the Management of Medical Problems on Patients Admitted to Ophthalmology**

For patients admitted to ophthalmology, the following protocol should help in optimizing their medical care stratified to these categories:

1. Medically stable - no consultation required
2. Medically stable with complex medical issues requiring adjustment or monitoring - consult the Hospitalist Service
3. Medically unstable - call for an Internal Medicine Consult
4. Medically unstable, rapid deterioration - consult ICU Outreach
If disagreements occur over appropriateness of the referral, please feel free to page Dr. Grady Meneilhy, Head of Medicine and Physician in Chief, through locating who will adjudicate.

7. Eye Tissue for Practice Microsurgery

A. TO PICK-UP TISSUE: Phone 604-875-4567 or pager 604-877-5616 by 11:00am. This will ensure that the tissue is thawed by 1:00pm. Go to the Eye Bank to collect the tissue at the arranged time.

B. TISSUE SCREENING Human Eye Tissue donated to the Eye Bank for research purposes has been tested for HIV, HBsAg, HCV, and syphilis. All tissue should be considered as potentially infectious as some of the donors may be septic, therefore, use universal precautions.

C. TO DISPOSE OF TISSUE: All tissue must be returned to the Eye Bank before 4:00pm. If any tissue must be stored for future reference, please indicate at time of drop-off.

8. Residency Program Objectives

a. Intent of Objectives

The objectives outline the minimum requirements of a graduate in Ophthalmology following five years of training. Individual differences in talent and capacity should be recognized and, when possible met to the fullest extent by the Department. The objectives provide guidance for resident evaluations and if expectations are not fulfilled such failure may be cause for remediation or dismissal. The Department will provide opportunities for learning through didactic means as well as observation and hands-on experience. Ultimately it will be the resident's responsibility to take advantage of these experiences.

b. General Goals of Residency Training

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

Medical Expert:
- The knowledge and ability to exercise sound clinical judgment in dealing with ophthalmic medical, surgical and optical problems.
- The insight to recognize his/her limitations
- The ability and knowledge required to adequately prepare and present the Royal College professional examination

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

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

Manager:
- The management and prioritization skills necessary to run an effective professional practice.
Scholar:
- The desire and ability to continue to update his/her knowledge.
- The motivation and energy to further develop the knowledge and practice of ophthalmology through research

Professional:
- The highest ethical standards of the profession

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

Underlying the whole of Residency teaching are the concepts encompassed by the CanMeds competencies outlined below:

MEDICAL EXPERT

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. Medical Expert is the central physician Role in the CanMEDS framework.

Physicians possess a defined body of knowledge, clinical skills, procedural skills and professional attitudes, which are directed to effective patient-centered care. They apply these competencies to collect and interpret information, make appropriate clinical decisions, and carry out diagnostic and therapeutic interventions. They do so within the boundaries of their discipline, personal expertise, the healthcare setting and the patient’s preferences and context. Their care is characterized by up-to-date, ethical, and resource-efficient clinical practice as well as with effective communication in partnership with patients, other health care providers and the community. The Role of Medical Expert is central to the function of physicians and draws on the competencies included in the Roles of Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional.

COMMUNICATOR

As Communicators, physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Physicians enable patient-centered therapeutic communication through shared decision-making and effective dynamic interactions with patients, families, caregivers, other professionals, and important other individuals. The competencies of this Role are essential for establishing rapport and trust, formulating a diagnosis, delivering information, striving for mutual understanding, and facilitating a shared plan of care. Poor communication can lead to undesired outcomes, and effective communication is critical for optimal patient outcomes. The application of these communication competencies and the nature of the doctor-patient relationship vary for different specialties and forms of medical practice.

COLLABORATOR

As Collaborators, physicians effectively work within a healthcare team to achieve optimal patient care. Physicians work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. This is increasingly important in a modern multi-professional environment, where the goal of patient-centred care is widely shared. Modern healthcare teams not only include a group of professionals working closely
together at one site, such as a ward team, but also extended teams with a variety of perspectives and skills, in multiple locations. It is therefore essential for physicians to be able to collaborate effectively with patients, families, and an inter-professional team of expert health professionals for the provision of optimal care, education and scholarship.

**MANAGER**

As Managers, physicians are integral participants in healthcare organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the healthcare system.

Physicians interact with their work environment as individuals, as members of teams or groups, and as participants in the health system locally, regionally or nationally. The balance in the emphasis among these three levels varies depending on the nature of the specialty, but all specialties have explicitly identified management responsibilities as a core requirement for the practice of medicine in their discipline. Physicians function as Managers in their everyday practice activities involving co-workers, resources and organizational tasks, such as care processes, and policies as well as balancing their personal lives. Thus, physicians require the ability to prioritize, effectively execute tasks collaboratively with colleagues, and make systematic choices when allocating scarce healthcare resources. The CanMEDS Manager Role describes the active engagement of all physicians as integral participants in decision-making in the operation of the healthcare system.

**HEALTH ADVOCATE**

As Health Advocates, physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

Physicians recognize their duty and ability to improve the overall health of their patients and the society they serve. Doctors identify advocacy activities as important for the individual patient, for populations of patients and for communities. Individual patients need physicians to assist them in navigating the healthcare system and accessing the appropriate health resources in a timely manner. Communities and societies need physicians’ special expertise to identify and collaboratively address broad health issues and the determinants of health. At this level, health advocacy involves efforts to change specific practices or policies on behalf of those served. Framed in this multi-level way, health advocacy is an essential and fundamental component of health promotion. Health advocacy is appropriately expressed both by individual and collective actions of physicians in influencing public health and policy.

**SCHOLAR**

As Scholars, physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

Physicians engage in a lifelong pursuit of mastering their domain of expertise. As learners, they recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the creation, dissemination, application and translation of medical knowledge. As teachers, they facilitate the education of their students, patients, colleagues, and others.

**PROFESSIONAL**

As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.
Physicians have a unique societal role as professionals who are dedicated to the health and caring of others. Their work requires the mastery of a complex body of knowledge and skills, as well as the art of medicine. As such, the Professional Role is guided by codes of ethics and a commitment to clinical competence, the embracing of appropriate attitudes and behaviours, integrity, altruism, personal well-being and to the promotion of the public good within their domain. These commitments form the basis of a social contract between a physician and society. Society, in return, grants physicians the privilege of profession-led regulation with the understanding that they are accountable to those served.

9. Objectives by Year (details outlined in ‘Residency Program Objectives’)

These overall objectives describe Resident activities under the rubric of ‘Medical Expert’ for each year of Residency. Complete CanMeds objectives are itemized under ‘goals and objectives’ for each individual rotation.

PGY 1

For the sake of brevity this manual, which will be circulated to all UBC Ophthalmology staff, will not include the PGY1 rotations, although the PGY1 Residents will be included in monthly ophthalmology teaching activities.

Overview of Teaching Program

The PGY1 Resident will participate in the ‘call back day’ scheme to participate with ophthalmology activities for 1 day per month. The timetable for this day will be:

- 7:00am – 8:00am  Professor’s Rounds
- 8:00am – 9:00am  Grand Rounds
- 9:00am – 12:00pm  Section E
- 12:00pm – 1:30pm  Neuro/Pathology Rounds
- 1:30pm – 4:30pm  Academic Block

The last six weeks of the PGY1 year will be spent at the Toronto course in basic sciences in Ophthalmology.

PGY 2

Ophthalmology is a specialty which utilizes unique technology and has its own vocabulary. The PGY2 year will be spent in introductory clinical aspects of the subjects and the acquisition of the basic skills required to investigate ophthalmic disease.

1. The basic sciences of anatomy of the eye and orbit, ocular physiology, and optics will be introduced and correlated with clinical cases.
2. The use and care of ophthalmic instruments will be demonstrated.
3. The residents will be taught to be comfortable handling most ophthalmic emergencies and acquire a basic knowledge of medical and surgical ophthalmic problems. When on duty the resident will perform the examination and treatment of patients attending the Emergency Department with eye problems; when necessary, they will consult on cases with a Senior Resident. Should a senior resident not be available, the consultation should occur with the staff person on-call.
4. An initial introduction to microsurgery will occur using "hands on" techniques with, then without supervision in the wet-lab as well as didactic teaching methods.
5. The diagnostic and therapeutic aspects of cornea disease.
6. Through the ambulatory care clinic (Section E), an initial approach to clinical problem-solving and diagnostic skills will be taught.
7. The diagnostic and therapeutic aspects of neuro-ophthalmology
8. The diagnostic and therapeutic aspects of pathology
8. The diagnostic and therapeutic aspects of retinal and vitreal disease.
9. The diagnostic and therapeutic aspects of oculoplastics.
10. The diagnostic and therapeutic aspects of orbital disease.

PGY 3

The PGY3 year will consolidate the resident's knowledge of basic science and the following sub-specialty subjects: Ambulatory Care Clinic, Cornea and External disease, Pediatric Ophthalmology, Glaucoma and Clinics at St. Paul's Hospital.

1. An increased level of expertise will be expected from the resident attending the Ambulatory Clinics. The clinical knowledge in managing patient problems should be greater than in the first year of training. Also, more efficiency in clinical care of patients will be expected.
2. The residents will obtain training in cornea, external disease and uveitis to cover the diagnosis and treatment of the major diseases in this area.
3. The diagnostic and therapeutic aspects of pediatric and strabismus ophthalmology.
4. The residents will develop skills in Glaucoma.
5. Attending various clinics at St. Paul’s Hospital.

PGY 4

1. The resident will obtain the knowledge and skills necessary to understand the indications for, the complications of, and the ability to perform anterior segment surgery.
2. The resident will obtain the necessary skills and knowledge to understand the diagnosis, treatment, and complications of retinal pathology.
3. The diagnostic and therapeutic aspects of orbital disease.
4. The diagnostic and therapeutic aspects of oculoplastics.
5. The diagnostic and therapeutic aspects of pediatric and strabismus ophthalmology.
6. An increased level of expertise will be expected from the resident attending the Ambulatory Clinic.

PGY 5

1. The resident will obtain the knowledge and skills necessary to understand the indications for, the complications of, and the ability to perform anterior segment surgery. Residents will make every effort to involve themselves in the follow-up of surgical cases to gain an accurate insight into the effect of surgery. This is particularly important for patients in whose care they have been personally involved.
2. The diagnostic and therapeutic aspects of Glaucoma
3. The diagnostic and therapeutic aspects of Neuro/Tumour
4. An increased level of expertise will be expected from the resident attending the Ambulatory Clinics. The clinical knowledge in managing patient problems should be greater than in the PGY4 year of training.
a. Second Year of 5 Year Program (PGY 2 / R2)

<table>
<thead>
<tr>
<th>Corneal and External Disease Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Evaluator: Dr. M. McCarthy</td>
</tr>
</tbody>
</table>

**Medical Expert**

a) Has the necessary basic Science and clinical knowledge  
   - Familiar with the content of basic Corneal and External Disease text (AAO manual – Section 8)

b) Has the necessary knowledge to request appropriate investigations  
   - is aware of the place of corneal topography in corneal external disease diagnosis  
   - is aware of the place of corneal pachymetry in the diagnosis of corneal and external disease

c) The Resident should understand and be able to manage:
   1. Corneal ulcers
   2. Keratitis particularly HSV and HZV
   3. Conjunctivitis
   4. Anterior segment inflammation including scleritis and episcleritis
   5. Blepharo-conjunctivitis and meibomitis
   6. Dry Eyes
   7. Chemical burns and ocular surface disease including stem cell deficiency
   8. Common corneal dystrophies
   9. Common corneal degenerations including corneal ectasia
   10. Endothelial disease and physiology and pathophysiology
   11. Peripheral corneal disease
   12. Conjunctival neoplasia
   13. Corneal repair and remodelling

**Contact lens clinic objectives**

Be fully conversant with the following:

1. The influence of various types of contact lens materials upon the integrity of the corneal physiology.
2. The various disease processes affecting the cornea and the relationship to the use of various types of contact lenses.
3. Diseases of the eye as a whole and the relationship to the use of contact lenses.
4. The iatrogenic problems associated with contact lens wear.
5. Recognition of the various corneal diseases which will benefit from the use of contact lenses.
6. The influence of contact lens solutions on the integrity of the cornea
7. The ability to evaluate the integrity of the cornea in relationship with a lens fitted by another individual
8. Use of keratometry slit lamp examination, over refraction, corneal pachymetry and specula microscopy in relation to contact lens wear
9. Relation of locally applied drugs to diseases of the eyes in presence of contact lenses
10. Emergency problems in relation to contact lenses
11. The indications and use of bandage contact lenses
12. The specific complications associated with cosmetic contact lenses and orthokeratology

**Procedures and Technical Skills**

a) Knowledge of treatment options and specific procedures
b) Preparation for OR:
   1. Punctual
   2. Knowledgeable about each case
   3. Knowledge of instruments and their appropriate uses
   4. Preparation of the operating microscope prior to starting the case

c) Understanding of the function of the operating microscope and the ability to set up the microscope in an appropriate fashion

d) Minimal tissue trauma during surgery

e) Efficiency and appropriate speed of surgery

f) Knowledge of abilities and limits

g) Ability to listen and learn from instructions

h) Ability to act as a helpful assistant with ability to anticipating needs appropriately

i) Effective and professional interactions with all members of the OR staff

j) Appropriate and professional interactions with the patient with the ability to be circumspect in discussions with and about the patient

Communicator

a) Establishes good rapport with patients and families

b) Obtains a complete, organized and succinct history and physical examination

c) Does so in an appropriate length of time

d) Listens effectively to instructions

e) Discusses appropriate information with patients, families and health care team

f) Consultation reports and progress notes are organized, legible, complete and signed

g) Dictated reports and consultations are complete and timely

Collaborator

a) Interacts effectively with other health professionals, recognizing their roles and expertise

b) Consults and delegates effectively

c) Demonstrates appropriate leadership within the interdisciplinary health care team

d) Demonstrates the ability to provide and receive effective and constructive feedback

Manager

a) Punctual in attending to responsibilities

b) Understands and makes effective use of information technology

c) Sets realistic priorities and uses time effectively in order to optimize professional performance

d) Makes clinical decisions based on sound evidence and efficient use of available resources

Scholar

a) Critically appraises medical information, integrates information from a variety of sources

b) Demonstrates the ability to conduct a research project, including generation of hypothesis, development of a protocol, statistical analysis and presentation of results

c) Effective teacher of Residents, Medical Students and other staff

d) Demonstrates the ability to effectively prepare and deliver oral clinical presentation

e) Develop lifelong learning skills
Professional

a) Demonstrates integrity, honesty, compassion, respect for diversity
b) Fulfills medical and legal obligations of the specialist
c) Understands the principles of ethics and applies these to clinical situations
d) Demonstrates awareness of own limitations
e) Seeks advice when necessary, accepts advice and responds appropriately

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Be familiar with the current guidelines and patterns of practice for corneal and external disease
2. Respect and empower patient autonomy
3. Promote equitable health care
4. Apply the principles of quality improvement and quality assurance
5. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease (eg. cataracts in the developing world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.

Section E Rotation Goals & Objectives
Primary Evaluator: Dr. V. Yin

Objectives of Training and Training Requirements in the Outpatient Ambulatory Experience

The Ambulatory Care Clinics are run Monday to Friday from 9:00am – 12:00pm in the Eye Care Centre.

These are teaching clinics where residents deal directly with patients, discussing findings and proposed management with the supervising staff person. A small number of patients are seen during each clinic allowing time for teaching and enabling the resident to comfortably examine each patient.

Ambulatory Care Clinic
1. Two residents (one junior, one senior) run the clinic and see all patients. Supervising staff vary on different days to give residents a wide variety of philosophies. Supervising staff must be available within 5-10 minutes of call to review patients with the residents as needed.

2. Ambulatory Care Clinic patients must be seen by the supervising staff in the ACC, Section E, and not in the private practice areas of the Eye Care Centre.

3. Supervision staff is expected to write some comment on the chart of each patient seen. This might include a diagnosis, suggested treatment and whether he/she was in agreement with the various aspects of the examination performed by the resident.

4. The number of patients booked will vary according to the time of year, ie: during the summer months when first year residents are beginning, fewer patients will be booked to allow the new residents time to learn refraction techniques and have these checked by either the third year resident or supervising staff person.

General Objectives

Upon completion of the Outpatient Ambulatory Clinical experience training, a resident is expected to have acquired the skills and methods to effectively perform at a Comprehensive Ophthalmic consultant level for
patient management in an ambulatory clinic setting. The resident should be able to effectively diagnose and manage most common ophthalmic problems and is able to develop a detailed history, differential diagnosis and a treatment plan for such. He or she should also have the knowledge to identify and refer appropriately patients who needs tertiary care, either to a sub-specialist in Ophthalmology or other specialties if required.

The resident must also demonstrate the knowledge, skills sensitivities and attitudes relating to gender, culture and ethnicity pertinent to Ophthalmology. In addition, all residents must demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis.

Specific Objectives

Medical Expert

I. Didactic knowledge base
   a. The resident should be familiar with the Basic Clinical Science Course booklets from the American Academy of Ophthalmology

II. Clinical knowledge base - The resident should be able to diagnose, manage and treat the following clinical conditions, including but not limited to
   a. conjunctivitis – Acute and Chronic. Bacterial and Viral. Infectious and non-infectious.
   b. keratitis – Bacterial and viral. Infectious and non-infectious.
   c. uveitis – acute and chronic. Granulomatous and non-granulomatous. Anterior and posterior
   d. glaucoma – all types
   e. cataract diseases
   f. lid disorders
   g. common retinal disease including
      i. retinal detachment and retinal breaks
      ii. diabetic retinopathy
      iii. retinal vein occlusions and arterial occlusions
   h. AION and temporal arteritis
   i. thyroid eye diseases
   j. traumatic ocular injuries
   k. removal of corneal foreign bodies
   l. management and treatment of chemical eye injuries
   m. diagnose and treat ocular emergencies
      i. ruptured globes
      ii. globe perforation and penetration
      iii. acute angle closure glaucoma
      iv. central retinal artery occlusion
   n. familiar with common ophthalmic medications, including indications and contra-indications
      i. diagnostic drops
      ii. topical antinfectives
      iii. other topical drops
      iv. topical steroids
      v. topical glaucoma medications
      vi. oral ocular hypotensive medications – Carbonic Anhydrase Inhibitors, hyperosmotics
      vii. oral steroids

III. Clinical Skills – including but not limited to
   a. Slit lamp examination
b. Goldmann tonometry

c. Tonopen tonometry

d. Pachymetry

e. Keratometry with manual keratometer

f. Subjective refraction with Phoropter

g. Streak retinoscopy

h. Direct ophthalmoscopy

i. Indirect ophthalmoscopy

j. Gonioscopy and fundus examination with contact lens

k. Foreign body removal at slit lamp

l. Suture removal at slit lamp

m. YAG laser capsulotomy

n. YAG laser iridotomy

o. YAG laser Selective Laser Trabeculoplasty

Communicator

The resident on completion of the rotation should:

I. Understand the concept of patient centered approach to communication and shared decision making process.

II. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication can foster patient satisfaction and compliance as well as influence the manifestations and outcome of a patient's illness.

III. Establish relationships with the patient characterized by understanding, trust, respect, empathy and confidentiality.

IV. Demonstrate the ability to communicate professionally and compassionately, while considering the influence of factors such as the patient's age, gender, sexuality, and ethnic cultural and socio-economic background.

V. Demonstrate skills in:
   a. Listen effectively
   b. Providing accurate, clear, concise and timely verbal and legibly written communication as applied to consultation notes, sign over of patient care and discharge planning
   c. Communication with patients and families regarding informed consent, the medical condition, plan of treatment, prognosis, primary and secondary prevention, medical uncertainty. Delivering it in a humane and understandable fashion so that it will encourage discussion and participation in decision making
   d. Communication with other health care professionals regarding all aspects of patient care
   e. Able to honestly and effectively disclose errors relating to treatment and adverse events

Collaborator

The resident on completion of the rotation should:

I. Identify and describe the role, expertise and limitations of all members of an interdisciplinary team required to optimally achieve a goal related to patient care, a research problem, an educational task, or an administrative responsibility.

II. Develop a care plan for a patient they have assessed, including investigation, treatment and continuity of care, in collaboration with members of the interdisciplinary team, the patient and the family.

III. Able to function as a “team leader” and “quarterback” when an inter-disciplinary approach involving other physicians and health professionals, to foster best continuity of care for the patient.
IV. Participate in an inter-physician or an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty-specific expertise.

Manager

The resident on completion of the rotation should:

I. Demonstrate appropriate time management skills for effective patient care, administrative duties, scholarly activities and personal life.

II. Able to see an appropriate number of patients in the clinic without running overtime but still allow adequate time spent per patient.

III. Develop a system to prioritize appropriately patients on a surgical wait list so that:
   a. Effective care is delivered to patients who required it most based on medical indications
   b. Recognize that social, functional and occupational needs are also important factors in wait list management

IV. Recognize the business and financial skills needed for a successful medical practice and/or academic career.

V. Implement patient care practices considering available health care resources.

VI. Have an understanding of population-based approaches to health care services and recognize their implication for medical practice.

VII. Demonstrate conflict resolution skills.

VIII. Be able to participate in administrative duties including committees and meetings.

Health Advocate

The resident on completion of the rotation should be able to:

I. Educate patients and families about and promote the importance of long-term healthy behaviours and preventive health care (e.g. smoking cessation, screening tests, regular checkups, eye protection etc.)

II. Familiar with current guidelines and patterns of practice for common eye conditions such as diabetic retinopathy, glaucoma, cataracts and occupational safety

III. Respect and empower patient autonomy.

IV. Promote equitable health care.

V. Apply the principles of quality improvement and quality assurance.

VI. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in third world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.

Scholar

The resident at the end of the rotation should:

I. Understand the principles of scientific research and how these principles apply to the development and implementation of a research proposal.

II. Be able to synthesize a hypothesis and develop a plan for data gathering and to conduct basic clinical research using clinical information form the Ambulatory Outpatient Clinic experience

III. Understand how to search and critically appraise the medical literature and is familiar with using information technology for scholarly activities

IV. Demonstrate the ability to teach medical students, residents, patients, colleagues and other health care professionals.

V. Develop lifelong learning skills.
### Professional

The resident at the end of the rotation should:

1. **Discipline-based Objectives:**
   a. Display attitudes commonly accepted as essential to professionalism.
   b. Evaluate one's abilities, knowledge and skills, recognize one's limitations and use appropriate strategies to maintain and advance professional competence.

2. **Personal/Professional Boundary Objectives:**
   a. Strive to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships.
   b. Strive to balance personal and professional roles and responsibilities.
   c. Demonstrate ways of attempting to resolve conflict and role strain.

3. **Objectives related to Ethics and Professional Bodies:**
   a. Know and understand the professional, legal and ethical codes to which physicians are bound.
   b. Recognize, analyze and attempt to resolve in clinical practice ethical issues such as truth telling, consent, advanced directives, confidentiality, conflict of interest, resource allocation, research ethics, interactions with the pharmaceutical industry.
   c. Understand and apply relevant legislation that relates to the health care system in order to guide one's clinical practice.
   d. Recognize and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations.

---

### Neuro-Ophthalmology Rotation Goals & Objectives

**Primary evaluator: Dr. Jason Barton**

### General Objectives

Upon completion of the Neuro-ophthalmology rotation, a resident is expected to have acquired the skills and knowledge base to effectively diagnose and treat patients with neuro-ophthalmologic problems. He or she should also have the knowledge to identify and appropriately refer patients who need tertiary care, either to a subspecialist in Ophthalmology, Neurology or Neurosurgery.

### Specific Objectives

#### Medical Expert

**Knowledge Base**

1. Describe the signs and symptoms of:
   a. Optic neuritis
   b. Anterior ischemic optic neuropathy, and giant cell arteritis
   c. optic chiasmal compression
   d. Horner’s syndrome
   e. Adie’s pupil
   f. III nerve palsy
   g. IV nerve palsy
   h. VI nerve palsy
   i. Internuclear ophthalmoplegia
   j. Cavernous sinus syndromes

2. Provide a diagnostic approach for
a. Acute or sub-acute onset of monocular visual loss  
b. Amaurosis fugax  
c. Diplopia  
d. Nystagmus  
e. Aniscoria  
f. Ptosis  

3. Recognize neuro-ophthalmologic emergencies, such as:  
a. Giant cell arteritis  
b. Pituitary apoplexy  
c. Nystagmus with cerebellar mass lesions  
d. Papilledema from symptomatic raised intracranial pressure  
e. Posterior communicating artery aneurysms with III nerve palsy  
f. Cavernous sinus thrombosis or direct AV-fistula  

Skills  
1. Obtain a history for visual loss  
2. Obtain a history for diplopia  
3. Perform accurate confrontation visual fields  
4. Perform accurate assessment of ocular motility  
5. Perform accurate assessment of pupil and lid function  
6. Interpret visual fields by Humphrey automated and Goldmann perimetry  
7. Perform a basic neurologic exam  
8. Assess the anterior visual pathways and ocular motor structures on CT and MRI  
9. Interpret OCTs  

Communicator  

The resident, on completion of the rotation should:  
1. Understand the concept of a patient-centered approach to communication and shared decision-making process.  
2. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication fosters patient satisfaction and compliance, and influences the outcomes of a patient's illness.  
3. Establish relationships with patients characterized by understanding, trust, respect, empathy and confidentiality.  
4. Demonstrate the ability to communicate professionally and compassionately, while considering the influence of factors such as patient age, gender, sexuality, and ethnic cultural and socio-economic backgrounds.  
5. Demonstrate skills in:  
a. Listening effectively.  
b. Providing accurate, clear, concise and timely verbal and written communication as applied to consultation notes, sign over of patient care and discharge planning  
c. Communicating with patients and families regarding informed consent, the medical condition, plan of treatment, prognosis, primary and secondary prevention, and medical uncertainty such that discussion and participation in decision-making are encouraged.  
d. Communicating with other health care professionals regarding all aspects of patient care.  
e. Being able to honestly and effectively disclose errors relating to diagnosis and treatment and adverse events.
Collaborator

The resident, on completion of the rotation should be able to:
1. Identify and describe the role, expertise and limitations of the members of an interdisciplinary team required to achieve goals related to patient care, a research problem, an educational task, or an administrative responsibility.
2. Develop a care plan for a patient they have assessed, including investigation, treatment and continuity of care, in collaboration with members of the interdisciplinary team, the patient, and the family.
3. Be able to function as a “team leader” and “quarterback” when an inter-disciplinary approach requires the involvement of other physicians and health professionals in order to achieve best continuity of care for the patient.
4. Be able to participate in an inter-physician or an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty-specific expertise.

Manager

The resident, on completion of the rotation, should:
1. Demonstrate appropriate time management skills for effective patient care, administrative duties, scholarly activities and personal life.
2. Be able to see an appropriate number of patients in the clinic without running overtime but still allowing for an adequate amount of time per patient.
3. Implement patient-care practices considering available health care resources.
4. Have an understanding of population-based approaches to health care services and recognize their implication for medical practice.
5. Demonstrate conflict resolution skills.
6. Be able to participate in administrative duties including committees and meetings.
7. Appreciate patient-specific financial, social, cultural, and functional limitations when prescribing medications or recommending surgical procedures.

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Familiar with current guidelines and patterns of practice for neuro-ophthalmology.
2. Respect and empower patient autonomy.
3. Promote equitable health care.
4. Apply the principles of quality improvement and quality assurance.
5. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in the developing world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.

Scholar

The resident at the end of the rotation should:
1. Understand the principles of scientific research and how these principles apply to the development and implementation of a research proposal.
2. Be able to synthesize a hypothesis, develop a plan for data gathering, and conduct basic clinical research using clinical information derived from the neuro-ophthalmology Clinic.
3. Understand how to search and critically appraise the medical literature and be familiar with using information technology for scholarly activities.
4. Demonstrate the ability to teach medical students, residents, patients, colleagues and other health care professionals.
5. Develop lifelong learning skills.

Professional

1. Discipline-based objectives:
   a. Display attitudes commonly accepted as essential to professionalism.
   b. Recognize and evaluate one's abilities, knowledge, skills, and limitations and use appropriate strategies to maintain and advance professional competence.

2. Personal/Professional Boundary Objectives:
   a. Strive to heighten personal and professional awareness and be able to explore and resolve interpersonal difficulties in professional relationships.
   b. Strive to balance personal and professional roles and responsibilities.
   c. Demonstrate ways of attempting to resolve conflict and role strain.

3. Objectives related to Ethics and Professional Bodies:
   a. Understand the professional, legal and ethical codes to which physicians are bound.
   b. Recognize, analyze and attempt to resolve ethical issues in clinical practice such as truth telling, consent, advanced directives, confidentiality, conflict of interest, resource allocation, research ethics, and interactions with the pharmaceutical industry.
   c. Understand and apply relevant legislation that relates to the health care system in order to guide one's clinical practice.
   d. Recognize and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations.

Pathology Rotation Goals & Objectives
Evaluator: Dr. Steve Rasmussen

Medical Expert

Knowledge Base
1. Ocular anatomy. Understands the various anatomical structures of ophthalmology as evident in histological sections (boundaries of the orbit, compartments within the orbit)

2. Ocular microanatomy. Resident should have a working knowledge of normal histology (skin, conjunctiva, eyelid, lacrimal gland, lacrimal drainage system, globe, optic nerve).

3. Histology laboratory function. Understand the basic principles of tissue fixation, processing, embedding and staining. Understand the importance of minimizing artifact and optimizing tissue processing to the diagnostic process. Understand the basic principles of immunohistochemistry. Understand the ancillary techniques involved in tissue diagnosis, especially as applied to the diagnosis of lymphoma, and how those ancillary techniques affect specimen handling. Understand the basic principles of quality assurance in laboratory medicine in terms of preanalytical, analytical and postanalytical error.

4. Selected principles of general pathology. Know different patterns of inflammation and know some of the general principles of neoplasia.

5. Selected aspects of oncology (staging – (AJCC) - and grading of malignant tumors) required for the adequate pathology reporting of ophthalmology specimens.
6. Ocular pathology. The learning objectives for ocular pathology are contained in the concise but informative text by Eagle, *Ocular Pathology*. This book is required reading for the rotation, and can be digested with an allotted budget of two chapters per week. Highlighted areas of learning and expected competencies regarding histological diagnosis include:

A. Common skin lesions (seborrheic keratosis, actinic keratosis, basal cell carcinoma, sudoriferous cyst, in situ and invasive squamous cell carcinoma, sebaceous carcinoma, Merkel cell carcinoma and the concept of “small blue cell tumor”, molluscum, neurofibroma, and schwannoma)

B. Melanoma of the skin, conjunctiva, iris, ciliary body and choroid (discuss the role of synoptic reporting in laboratory medicine, know the role of tumor cytogenetics in determining prognosis)

C. Retinoblastoma

D. Primary acquired melanosis (conjunctival melanocytic intraepithelial neoplasia)

E. Ocular surface squamous neoplasia (squamous dysplasia, squamous cell carcinoma in situ, and invasive squamous cell carcinoma)

F. Corneal lesions (pterygium, failed graft, Fuchs endothelial dystrophy, acanthamebic and fungal keratitis, keratoconus, stromal dystrophies)

G. Lacrimal gland inflammations and neoplasms (IgG4-related disease, Sjögren’s syndrome, pleomorphic adenoma, adenoid cystic carcinoma)

H. Orbital inflammation and neoplasia (the work up for lymphoma, MALT lymphoma/extranodal marginal zone lymphoma, follicular lymphoma, diffuse large B cell lymphoma, granulomatosis and polyangiitis/Wegeners, OIS lymphangioma, invasive fungal disease, amyloidosis, sarcoidosis and tuberculosis)

I. Temporal arteritis

J. Histological findings in selected cases of glaucoma (angle closure, neovascularization and pseudoexfoliation)

K. Retinal diseases (diabetes mellitus, AMD, retinal infections, retinitis pigmentosa)

L. Optic nerve neoplasms (meningioma and glioma)

M. Histological changes of cataracts.

N. End-stage eye disease/ phthisis bulbi.

7. Knowing what you don’t know. Know about resources to fill information gaps and self-educate.

**Skills**

1. Resident should be able to describe or demonstrate the appropriate manner to examine, dissect, describe, ink and sample tissue for histological examination, including:

   A. Skin ellipses

   B. Lesions of eyelid margin

   C. Conjunctival biopsies

   D. Enucleations; including how to orient and measure an enucleation specimen, transilluminate specimen, harvest fresh tissue for cytogenetics, and describe the pertinent findings at the time of gross dissection.

2. Understands the workup of vitrectomy specimens for unknown uveitis.

3. Can describe the appropriate manner to biopsy and submit specimens for pathological examination.

4. Demonstrates an organized approach to the histological assessment of specific types of ocular pathology specimens.

5. Generates an appropriate differential diagnosis, and can make common diagnoses.

6. Understands the role of special stains and ancillary investigations and their contribution to final diagnosis.
7. Knows when to access electronic medical records to supplement the information provided by the laboratory requisition, retrieves old cases for comparison when appropriate.
8. Understands the importance and process of surgical margin assessment.

**Communicator**

1. Able to present their understanding and assessment of pathology specimens after pre-viewing specimens.
2. Understands the importance of clinical history in a pathology requisition, including what information the pathologist needs to know. Understands that the “bias” introduced by clinical history significantly improves the positive predictive value and negative predictive value of testing.
3. Understands some of the vernacular of pathology reports, especially regarding the communication of uncertainty.
4. Works well with laboratory staff.
5. Is able to present histological findings in a conference setting such as the Case Presentation during Grand Rounds.

**Collaborator**

1. Interacts effectively with other health professionals, recognizing the roles and expertise of others. Understands team approach within the interdisciplinary health care team.
2. Demonstrates the ability to provide and receive effective and constructive feedback.
3. Knows the importance of autopsy, and the possibility of an eyes-only autopsy.

**Manager**

1. Punctual in attending to responsibilities and following up to obtain additional information where required.
2. Understands some of the principles involved in laboratory management, especially as those might impact the normal flow of specimens. Should specimens be delayed for resident teaching? Are there critical results in pathology that need an urgent response?
3. Understands some of the costs involved with ancillary procedures, and the need for careful use of resources.

**Scholar**

1. Demonstrates understanding of and commitment to continuous, life-long learning; develops and implements ongoing and effective personal learning strategies.
2. Critically appraises medical information, integrates information from a variety of sources.
3. Considers the possibility of presenting a case report and literature review for the Canadian Ophthalmic Pathology Society.
4. Effective teacher of residents, medical students, and staff.
5. Demonstrates the ability to effectively prepare and deliver an oral presentation that includes ophthalmic pathology.

**Professional**

1. Demonstrates integrity, honesty, compassion, and respect for diversity.
2. Understands some of the ethical principles that apply to teaching, research, diagnostic service work and communication in laboratory medicine.
3. Demonstrates an awareness of his or her limitations, seeks advice when necessary, accepts advice and responds appropriately.
Health Advocate

1. Understands the determinants of health in the populations they serve.
2. Promotes the health of individual patients, communities and populations.
3. Understands the value of specialized pathological consultation in areas of the world normally underserved by medical expertise.

---

<table>
<thead>
<tr>
<th>Retina Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Evaluator: Dr. A. Kirker</td>
</tr>
</tbody>
</table>

The Retina Service is committed to provide an excellent learning experience to the Ophthalmology Residents. By the end of their residency training, we anticipate that they will have a good knowledge of retina diseases and good diagnostic and therapeutic skills.

Medical Expert

a) Has the necessary basic Science and clinical knowledge
   • Familiar with content of basic Retina Ophthalmology text (AAO manual – Section 12, Retina and Vitreous)
   • Familiar with management of ocular trauma and surgical complications
   • Understanding of the physics of laser delivery systems and lenses
   • Systemic and ocular manifestation of diabetes
b) Has necessary knowledge to request appropriate investigations
   • Is aware of the place of fluorescein angiogram, OCT, ICG, electrophysiology, visual field testing in retinal diagnosis
   • Is aware of the relative place of ultrasound, CT and MRI in retinal diseases
c) Demonstrates understanding of genetic inheritance patterns in retinal diseases and could counsel family appropriately in important ocular genetic areas.
d) Recognizes emergency retinal conditions and how to manage them

Procedures and Technical Skills

a) Knowledge of treatment options and specific procedures
b) Expected technical skills:
   • Indirect retinal examination
   • Retinal drawing
   • Scleral depression
   • Fundus contact lens use
   • Retrobulbar/peribulbar block
   • Vitreous and A/C tap and injections
c) Gaining experience with
   • B-Scan ultrasound examination
   • Panretinal photocoagulation laser
d) Preparation for OR:
   • Punctual
   • Knowledgeable about each case
   • Knows instruments and their appropriate use
   • Assisting in surgery/suturing conjunctiva
e) Minimizes tissue trauma in surgery
f) Appropriate speed of surgery
g) Knows own limits
h) Listens and learns from instruction
i) Assists well, anticipating appropriately
j) Interacts effectively with all members of OR staff

Communicator

Establishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Does so in appropriate length of time
Listens effectively to instruction
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed
Dictated reports and consultations are complete and timely

Collaborator

Interacts effectively with other health professionals, recognizing their roles and expertise
Consults and delegates effectively
Demonstrates appropriate leadership within the interdisciplinary healthcare team
Demonstrates the ability to provide and receive effective and constructive feedback

Manager

Punctual in attending to responsibilities
Understands and makes effective use of information technology
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources

Scholar

Demonstrates understanding and commitment to the need for continuous learning; develops and implements ongoing and effective personal learning strategy
Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Demonstrates the ability to effectively prepare and deliver oral clinical presentation

Professional

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations, seeks advice when necessary, Accepts advice and responds appropriately

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Familiar with current guidelines and patterns of practice for retina ophthalmology.
2. Respect and empower patient autonomy.
3. Promote equitable health care.
4. Apply the principles of quality improvement and quality assurance.

<table>
<thead>
<tr>
<th>Oculoplastics/Orbit Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Evaluator: Dr. P. Dolman</td>
</tr>
</tbody>
</table>

Medical Expert

a) Has the necessary basic Science and clinical knowledge
   - Familiar with content of basic Oculoplastics/Orbit text (AAO manual – Section 7)
   - Familiar with one other basic textbook of oculoplastic and orbit surgery (eg. Nerad, Collin, McCord, Rootman ).
   - Familiar with a basic textbook on ocular and orbital anatomy.

b) Has necessary knowledge to request appropriate investigations/x-ray, MRI, dacryocystogram, technetium scan.

c) Recognizes emergencies and how to handle them.

d) Can discuss risks and benefits of surgical procedures in which he/she is involved.

Procedures and Technical Skills

a) Knowledge of treatment options and specific procedures

b) Preparation for OR:
   1. Punctual
   2. Knowledgeable about each case
   3. Knows instruments and their appropriate use

c) Minimizes tissue trauma in surgery

d) Appropriate speed of surgery

e) Knows own limits

f) Listens and learns from instruction

g) Assists well, anticipating appropriately

h) Interacts effectively with all members of OR staff

Communicator

Understands patient autonomy and discusses not only the risks but also the benefits of any suggested surgery with patients.
Estabishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Does so in appropriate length of time
Listens effectively to instruction
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed
Dictated reports and consultations are complete and timely

Collaborator

Interacts effectively with other health professionals, recognizing their roles and expertise
Consults and delegates effectively
Demonstrates appropriate leadership within the interdisciplinary health care team
Demonstrates the ability to provide and receive effective and constructive feedback

Manager

Punctual in attending to responsibilities
Understands and makes effective use of information technology
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources

Scholar

Demonstrates understanding and commitment to the need for continuous learning; develops and implements ongoing and effective personal learning strategy
Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Demonstrates the ability to effectively prepare and deliver and oral clinical presentation

Professional

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations, seeks advice when necessary, Accepts advice and responds appropriately

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Familiar with current guidelines and patterns of practice for oculoplastic ophthalmology.
2. Respect and empower patient autonomy.
3. Promote equitable health care.
4. Apply the principles of quality improvement and quality assurance.

<table>
<thead>
<tr>
<th>St. Paul’s Hospital Eye Clinic Rotation Goals and Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Evaluator: Dr. H. O’Donnell</td>
</tr>
</tbody>
</table>

Objectives of Training and Training Requirements

The SPH Eye Clinics are run Monday to Friday from 0830-1700h. These are teaching clinics where residents deal directly with patients, discussing findings and proposed management with the supervising staff person. These clinics will include general ophthalmology, retina, neuro-ophthalmology, and HIV clinics. Supervising staff are expected to write a comment on the chart of each patient seen, such as a diagnosis, suggested treatment, and/or whether s/he was in agreement with the various aspects of the examination performed by the resident. There may also be opportunities on occasion to join staff in the OR for cataract surgery. The level of participation will be appropriate for their level of training.

General Objectives
Upon completion of the Outpatient Clinical experience training, a resident is expected to have acquired the skills to effectively perform at a Comprehensive Ophthalmic consultant level for patient management in an ambulatory clinic setting. The resident should be able to diagnose and manage most common ophthalmic problems and should be able to develop a detailed history, differential diagnosis and treatment plan. S/he should have the knowledge to identify and refer appropriately patients who need tertiary care, either to a sub-specialist in Ophthalmology or other specialties if required. The resident must also demonstrate the sensitivities and attitudes relating to gender, culture and ethnicity pertinent to Ophthalmology.

**Specific Objectives**

Specific objectives for the SPH Eye Clinic are identical to those outlined for the Section E Ambulatory Clinic. Surgical exposure will be appropriate for the level of training of the resident. Specific objectives for the surgical portion of this rotation are identical to those outlined for the Anterior Segment Rotation.

b. Third Year of 5 Year Program (PGY3 / R3)

**Cornea Goals and Objectives**

| Primary evaluator: Dr. M. McCarthy |

**Corneal and External Disease Rotation**

The goals and objectives for the PGY3 corneal and external disease rotation include all the PGY2 goals and objectives. As a more senior resident, the resident should function at a higher level with a greater depth and breadth of knowledge. In addition to meeting the goal and objectives of the PGY2 resident, the PGY3 resident should meet or exceed the following:

**Medical Expert**

a) Has the necessary basic science and clinical knowledge
   - Familiar with the content of the Corneal and External Disease sections of the major textbook such as Duane’s including those associated with Cornea and External disease surgery and refractive surgery.

**Procedures and Technical Skills**

a) Punctal occlusion
b) Pterygium surgery including the use of the tissue glues and modifiers of tissue healing
c) Conjunctival biopsy and surgical and medical treatment of neoplasia
d) Removal of anterior segment foreign body
e) Iris repair
f) The use of cyanoacrylate glue in repairing corneal perforation
g) Free conjunctival flaps
h) Anterior chamber tap
i) Corneal biopsy
j) Repair and Management of anterior segment trauma
k) Kerato-refractive surgery is not an expectation of this rotation surgery but the resident should have a good understanding of the various refractive surgery options including their outcomes and potential complications
l) Corneal transplantation, the resident should be able to place appropriate sutures during corneal transplantation although complete corneal transplantation is not a requirement of this rotation. The resident should have a good understanding of the principles of corneal transplantation including the
indications for corneal transplantation, the prognosis and complications of corneal transplantation and various techniques of corneal transplantation.

m) Management of recurrent erosion syndrome – stromal puncture.

### Elective Rotation Goals & Objectives

The following conditions must be met on an elective rotation:

1. The elective period is planned prospectively by the program director and the resident, and approved by the Residency Training Committee in full.
2. There is a clearly designated elective supervisor.
3. The educational objectives of the elective are understood by the resident, the elective supervisor and the Program Director.
4. The Resident is responsible for application for funding support by the program via the Residency Training Committee. A presentation of the proposed elective and costs should be made at the RTC meeting in June of the Resident’s PGY4 year.
5. There is a defined mechanism within the in-training evaluation system to include evaluation of the resident during the elective period. The mechanism for evaluation of the resident’s performance during the elective is clearly understood beforehand by the resident, the elective supervisor, and the program director, and is based on the educational objectives of the elective.
6. The elective period is recognized by the Program Director and Residency Training Committee as acceptable in the fulfillment of specialty training requirements.

### Section E Rotation Goals & Objectives

**Primary Evaluator: Dr. V. Yin**

The Ambulatory Care Clinics are run Monday to Friday from 0900h-1200h in the VHHSC/UBC Eye Care Centre.

These are teaching clinics where residents deal directly with patients, discussing findings and proposed management with the supervising staff person. A small number of patients are seen during each clinic allowing time for teaching and enabling the resident to comfortably examine each patient.

**Ambulatory Care Clinic**

1. Ambulatory Care Clinic patients must be seen by the supervising staff in the ACC, Section E, and not in the private practice areas of the Eye Care Centre.
2. Supervision staff is expected to write some comment on the chart of each patient seen. This might include a diagnosis, suggested treatment and whether he/she was in agreement with the various aspects of the examination performed by the resident.
3. The number of patients booked will vary according to the time of year, i.e.: during the summer months when first year residents are beginning, fewer patients will be booked to allow the new residents time to learn refraction techniques and have these checked by either the third year resident or supervising staff person.
4. The University Eye Clinic (UEC) allows exposure to both medical and surgical procedures with appropriate follow-up care done by the Resident. Many of the consults are emergent or have multi-system problems from the hospital and they should be initially assessed by the Resident with supervision by a staff person. The University Eye Clinic rotation is known as a strenuous rotation but it most closely reflects the practice of most general Ophthalmologists when finished their training. It allows an exposure to different styles and techniques of diagnosis and treatment and makes the initial steps in teaching Residents techniques of
time management and efficiency. The resident also has the opportunity to practice their teaching skills with patients and often more junior medical trainees.

**Pediatric Ophthalmology Rotation Goals & Objectives**

**Primary Evaluator: Dr. J. Gardiner**

This rotation represents the major pediatric component of the program; emphasis in the PGY3 rotation should be on ambulatory care and knowledge acquisition to understand the complexities of this subject and orthoptics. Conversely, surgical skills will be emphasized during the PGY5 rotation. The Resident should make every attempt to spend time in pediatric clinics. This will help them to develop a relaxed and child-friendly manner which in turn will allow them to rapidly elicit an accurate and pertinent history and the relevant clinical signs with minimal stress to the patient and their family.

Residents will obtain the skills necessary to assess the strabismus patient. In order to do so, they must spend adequate time in the orthoptic department to perfect their understanding of the motor and sensory assessment of strabismus.

**Medical Expert**

a) Has the necessary basic science and clinical knowledge
   - Familiar with content of basic Pediatric Ophthalmology text (AAO manual – Section 6, Pediatric Ophthalmology and Strabismus)
   - Familiar with content of basic textbook of strabismus management (eg. Pratt-Johnson and Tillson)
b) Has necessary knowledge to request appropriate investigations
   - Is aware of the place of electrophysiology in pediatric ophthalmology diagnosis
   - Is aware of the relative place of ultrasound, CT and MRI in childhood eye disease
c) Demonstrates understanding of genetic inheritance patterns in pediatric eye disease and could counsel family appropriately in important ocular genetic areas.
d) Recognizes emergency conditions and how to manage them
e) Recognizes situations in which examination under anesthesia is necessary to clarify the diagnosis

**Procedures and Technical Skills**

a) Able to obtain history and pertinent examination findings without undue stress to the patient and family
b) Knowledge of treatment options and specific procedures
c) Preparation for OR:
   1. Punctual
   2. Knowledgeable about each case
   3. Knows instruments and their appropriate use
d) Minimizes tissue trauma in surgery
e) Appropriate speed of surgery
f) Knows own limits
g) Listens and learns from instruction
h) Assists well, anticipating appropriately
i) Interacts effectively with all members of OR staff

**Communicator**

Establishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Does so in appropriate length of time
Listens effectively to instruction
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed
Dictated reports and consultations are accurate, complete and timely

**Collaborator**

Interacts effectively with other health professionals, recognizing their roles and expertise
Consults and delegates effectively
Demonstrates appropriate leadership within the interdisciplinary health care team
Demonstrates the ability to provide and receive effective and constructive feedback

**Manager**

Punctual in attending to responsibilities
Understands and makes effective use of information technology
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources

**Scholar**

Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Demonstrates the ability to effectively prepare and deliver an oral clinical presentation
Develops lifelong learning skills

**Professional**

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations
Seeks advice when necessary, accepts advice and responds appropriately

**Health Advocate**

The resident, on completion of the rotation, should be able to:
Be familiar with current guidelines and patterns of practice for pediatric ophthalmology.
Respect and empower patient autonomy.
Promote equitable health care.
Apply the principles of quality improvement and quality assurance.
Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in the developing world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.
Glaucoma Rotation Goals & Objectives
Primary Evaluator: Dr. F. Mikelberg

General Objectives

Upon completion of the Glaucoma rotation, a resident is expected to have acquired the skills and knowledge base to effectively diagnose and treat patients with glaucoma. He or she should also have the knowledge to identify and appropriately refer patients who need tertiary care, either to a sub-specialist in Ophthalmology or to other specialties as required.

Medical Expert

Knowledge Base

1. Describe the signs and symptoms of:
   a. Chronic open angle glaucoma
   b. Pigmentary Dispersion Syndrome
   c. Pseudoexfoliation Syndrome
   d. Other common secondary open angle glaucomas
   e. Angle Closure Glaucoma
      i. Primary Pupil Block
      ii. Secondary Pupil Block
      iii. Non-Pupil Block
   f. Congenital Glaucoma

2. Describe the mechanism of action and side effects of:
   a. Beta-blockers
   b. Miotics
   c. Alpha-2 agonists
   d. Topical and systemic carbonic anhydrase inhibitors
   e. Prostanoids
   f. Hyperosmotics

3. Describe the indications and complications of:
   a. Trabeculectomy
   b. Use of mitomycin and 5FU
   c. Ahmed valve
   d. Cycloablation
   e. Phaco-trabeculectomy
   f. Goniotomy
   g. Trabeculotomy

Skills

1. Obtain a glaucoma-specific history
2. Obtain accurate IOP assessment by Goldmann applanation and Tonopen
3. Obtain accurate CCT measurement
4. Perform accurate gonioscopy, identifying all relevant landmarks
5. Obtain accurate optic disc assessment by contact and non-contact techniques
6. Interpret perimetry via Humphrey and/or Medmont automated and Goldmann manual
7. Interpret automated optic disc and retina assessments via HRT and OCT
8. Perform YAG laser iridotomy
9. Perform SLT
Communicator

The resident, on completion of the rotation should:

1. Understand the concept of a patient-centered approach to communication and shared decision-making process.
2. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication fosters patient satisfaction and compliance, and influences the outcomes of a patient’s illness.
3. Establish relationships with patients characterized by understanding, trust, respect, empathy and confidentiality.
4. Demonstrate the ability to communicate professionally and compassionately, while considering the influence of factors such as patient age, gender, sexuality, and ethnic cultural and socio-economic backgrounds.
5. Demonstrate skills in:
   a. Listening effectively.
   b. Providing accurate, clear, concise and timely verbal and written communication as applied to consultation notes, sign over of patient care and discharge planning;
   c. Communicating with patients and families regarding informed consent, the medical condition, plan of treatment, prognosis, primary and secondary prevention, and medical uncertainty such that discussion and participation in decision-making are encouraged.
   d. Communicating with other health care professionals regarding all aspects of patient care.
   e. Being able to honestly and effectively disclose errors relating to diagnosis and treatment and adverse events.

Collaborator

The resident, on completion of the rotation should be able to:

1. Identify and describe the role, expertise and limitations of the members of an interdisciplinary team required to achieve goals related to patient care, a research problem, an educational task, or an administrative responsibility.
2. Develop a care plan for a patient they have assessed, including investigation, treatment and continuity of care, in collaboration with members of the interdisciplinary team, the patient, and the family.
3. Be able to function as a “team leader” and “team player” when an inter-disciplinary approach requires the involvement of other physicians and health professionals in order to achieve best continuity of care for the patient.
4. Be able to participate in an inter-physician or an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty-specific expertise.

Manager

The resident, on completion of the rotation, should:

1. Demonstrate appropriate time management skills for effective patient care, administrative duties, scholarly activities and personal life.
2. Be able to see an appropriate number of patients in the clinic without running overtime but still allowing for an adequate amount of time per patient.
3. Develop a system to appropriately prioritize patients on a surgical wait list such that:

   Effective care is delivered to patients who require it most based on medical indications.
   Social, functional and occupational needs are appropriately taken into consideration.
4. Recognize the business and financial skills needed for a successful medical practice and/or academic career.
5. Implement patient-care practices considering available health care resources.
6. Have an understanding of population-based approaches to health care services and recognize their implication for medical practice.
7. Demonstrate conflict resolution skills.
8. Be able to participate in administrative duties including committees and meetings.
9. Appreciate patient-specific financial, social, cultural, and functional limitations when prescribing medications or recommending surgical procedures.

Health Advocate

The resident, on completion of the rotation, should be able to:

1. Educate and promote the importance of long-term healthy behaviours and preventive health care (e.g. smoking cessation, screening tests, regular checkups, eye protection etc.) to patients and families.
3. Respect and empower patient autonomy.
4. Promote equitable health care.
5. Apply the principles of quality improvement and quality assurance.
6. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in the developing world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.

Scholar

The resident at the end of the rotation should:

1. Understand the principles of scientific research and how these principles apply to the development and implementation of a research proposal.
2. Be able to synthesize a hypothesis, develop a plan for data gathering, and conduct basic clinical research using clinical information derived from the Glaucoma Clinic experience.
3. Understand how to search and critically appraise the medical literature and be familiar with using information technology for scholarly activities.
4. Demonstrate the ability to teach medical students, residents, patients, colleagues and other health care professionals.
5. Develop lifelong learning skills.

Professional

1. Discipline-based objectives:
   a. Display attitudes commonly accepted as essential to professionalism.
   b. Recognize and evaluate one's abilities, knowledge, skills, and limitations and use appropriate strategies to maintain and advance professional competence.
2. Personal/Professional Boundary Objectives:
   a. Strive to heighten personal and professional awareness and be able to explore and resolve interpersonal difficulties in professional relationships.
   b. Strive to balance personal and professional roles and responsibilities.
   c. Demonstrate ways of attempting to resolve conflict and role strain.
3. Objectives related to Ethics and Professional Bodies:
   a. Understand the professional, legal and ethical codes to which physicians are bound.
b. Recognize, analyze and attempt to resolve ethical issues in clinical practice such as truth telling, consent, advanced directives, confidentiality, conflict of interest, resource allocation, research ethics, and interactions with the pharmaceutical industry.

c. Understand and apply relevant legislation that relates to the health care system in order to guide one's clinical practice.

d. Recognize and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations.

**Diagnostics PGY-3 (July - 1 month)**

1. For each diagnostic modality:
   a. Resident to gain some experience performing tests when possible.
   b. Observation of technical aspects of performing the tests.
   c. Understanding principles of tests (e.g. Reading manuals, reading classic papers).
   d. Working through cased-based material to be completed by end of rotation.
   e. Be able to outline the indications, diagnostic limitations, and physical limitations of each test type.
   f. Be able to outline how best to combine test types for maximal effectiveness and efficiency.

2. Week-long rotations in each area (ultrasound, visual fields, photography (IVFA/OCT/HRT)

3. Wed pm wet-lab

4. Friday research / academic

**Week 1 – Ultrasound, A’s & K’s**

**Week 2 – Photography (IVFA, OCT, HRT)**

**Week 3 – Visual fields (HVF, GVF)**

**Week 4 – Electrophysiology, Eye Bank, Completion of case-based material.**

---

**St. Paul’s Hospital Eye Clinic Rotation Goals and Objectives**

**Primary Evaluator: Dr. H O’Donnell**

**Objectives of Training and Training Requirements**

The SPH Eye Clinics are run Monday to Friday from 0830-1700h. These are teaching clinics where residents deal directly with patients, discussing findings and proposed management with the supervising staff person. These clinics will include general ophthalmology, retina, neuro-ophthalmology, and HIV clinics. Supervising staff are expected to write a comment on the chart of each patient seen, such as a diagnosis, suggested treatment, and/or whether s/he was in agreement with the various aspects of the examination performed by the resident. There may also be opportunities on occasion to join staff in the OR for cataract surgery. The level of participation will be appropriate for their level of training.

**General Objectives**

Upon completion of the Outpatient Clinical experience training, a resident is expected to have acquired the skills to effectively perform at a Comprehensive Ophthalmic consultant level for patient management in an ambulatory clinic setting. The resident should be able to diagnose and manage most common ophthalmic problems and should be able to develop a detailed history, differential diagnosis and treatment plan. S/he should have the knowledge to identify and refer appropriately patients who need tertiary care, either to a sub-specialist in Ophthalmology or other specialties if required. The resident must also demonstrate the sensitivities and attitudes relating to gender, culture and ethnicity pertinent to Ophthalmology.
Specific Objectives

Specific objectives for the SPH Eye Clinic are identical to those outlined for the Section E Ambulatory Clinic. Surgical exposure will be appropriate for the level of training of the resident. Specific objectives for the surgical portion of this rotation are identical to those outlined for the Anterior Segment Rotation.

c. Fourth Year of 5 Year Program (PGY 4 / R4)

<table>
<thead>
<tr>
<th>Retina Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary evaluator: Dr. A. Kirker</td>
</tr>
</tbody>
</table>

To improve upon goals and objectives of PGY 2 year.

Medical Expert

a) Has the necessary basic Science and clinical knowledge
   • Be familiar with the role of a visual ophthalmic consultant
   • Familiar with the responsibility of ophthalmic consultant
   • Understand the pathophysiology, diagnosis and management of macular diseases
   • Understand the role of ICG and dye testing
   • Understand surgical management of retinal diseases
   • Familiar with content of basic Retina Ophthalmology text (AAO manual – Section 12, Retina and Vitreous)
   • Familiar with management of ocular trauma and surgical complications
   • Understanding of the physics of laser delivery systems and lenses
   • Systemic and ocular manifestation of diabetes

b) Has necessary knowledge to request appropriate investigations
   • Is aware of the place of fluorescein angiogram, OCT, ICG, electrophysiology, visual field testing in retinal diagnosis
   • Is aware of the relative place of ultrasound, CT and MRI in retinal diseases

c) Demonstrates understanding of genetic inheritance patterns in retinal diseases and could counsel family appropriately in important ocular genetic areas.

d) Recognizes emergency retinal conditions and how to manage them

Procedures and Technical Skills

a) Knowledge of treatment options and specific procedures

b) Expected technical skills:
   • Indirect retinal examination
   • Retinal drawing
   • Scleral depression
   • Fundus contact lens use
   • Retrobulbar/peribulbar block
   • Vitreous and A/C tap and injections

c) Gaining experience with
   • B-Scan ultrasound examination
   • Panretinal photocoagulation laser
   • Retinal laser
d) Preparation for OR:
   • Punctual
   • Knowledgeable about each case
   • Knows instruments and their appropriate use
   • Assisting in surgery/suturing conjunctiva
   • Assisting in surgery of scleral buckle and vitrectomy

e) Minimizes tissue trauma in surgery

f) Appropriate speed of surgery

g) Knows own limits

h) Listens and learns from instruction

i) Assists well, anticipating appropriately

j) Interacts effectively with all members of OR staff

h) Understand the role and responsibility of ophthalmic consultant in surgical management

Communicator

Establishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Does so in appropriate length of time
Listens effectively to instruction
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed
Dictated reports and consultations are complete and timely

Collaborator

Interacts effectively with other health professionals, recognizing their roles and expertise
Consults and delegates effectively
Demonstrates appropriate leadership within the interdisciplinary health care team
Demonstrates the ability to provide and receive effective and constructive feedback

Manager

Punctual in attending to responsibilities
Understands and makes effective use of information technology
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources

Scholar

Demonstrates understanding and commitment to the need for continuous learning; develops and implements ongoing and effective personal learning strategy
Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Demonstrates the ability to effectively prepare and deliver and oral clinical presentation
Professional

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations, seeks advice when necessary, Accepts advice and responds appropriately
Understands the role and responsibilities of ophthalmic consultant

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Familiar with current guidelines and patterns of practice for retina disease.
2. Respect and empower patient autonomy.
3. Promote equitable health care.
4. Apply the principles of quality improvement and quality assurance.

Oculoplastics/Orbit Rotation Goals & Objectives

Primary evaluator: Dr. P. Dolman

To improve upon goals and objectives of PGY2 Year.

Medical Expert

Using the same materials outlined in the PGY2 year, the senior resident will demonstrate more depth and detail of knowledge. The senior resident will demonstrate more rapid and accurate synthesis and problem solving.

Procedures and Technical Skills

For the same procedures present in PGY2, the senior resident will show greater fluency and be more self directed in regards to preparation, execution and dealing with complications.

Communicator

As well as encompassing previously demonstrated aptitudes, the senior resident will be more accomplished in dealing with less explicit or straightforward communication styles in both patients and medical personnel. The senior resident will demonstrate greater brevity, accuracy and clarity in communications.

Collaborator

As well as meeting targets present in junior years, the senior will be more familiar with avenues of collaboration, have a better grasp of the networks of people involved in accomplishing tasks, and be more adept at giving and receiving positive criticism.

Manager

The senior resident will demonstrate better ability to triage and prioritize than the junior. The senior will be more aware of the multitude of factors (non medical) that promote or inhibit efficient operations of - a medical unit, an
office, an operating room. The senior will demonstrate tools and techniques used to manage time more effectively.

**Scholar**

The senior resident will have completed or have done the majority of work on a research topic suitable for publication (not limited to this subspecialty topic). The senior will demonstrate the ability to quickly and accurately find reference material in support of a particular clinical approach.

**Professional**

The senior will continue to demonstrate those personal attributes that comprise professional and collegial behavior. Beyond this, the senior will be able to fluently discuss what is meant by "professional" and what constitutes a breach of professionalism.

**Health Advocate**

The senior resident will have a basic grasp of financial, social and political factors that influence delivery of medical care to patients. The senior will also be able to describe impediments to patient's attaining optimum medical care and would be able to suggest solutions.

---

**Section E Rotation Goals & Objectives**

**Primary evaluator: Dr. V. Yin**

To improve upon goals and objectives of PGY 2 & PGY 3 years.

**Medical Expert**

I. **Didactic knowledge base**
   a. The resident should be familiar with the Basic Clinical Science Course text (American Academy of Ophthalmology)

II. **Clinical knowledge base** - The resident should be able to diagnose, manage and treat the following clinical conditions, including but not limited to
   a. conjunctivitis – Acute and Chronic. Bacterial and Viral. Infectious and non-infectious.
   b. keratitis – Bacterial and viral. Infectious and non-infectious.
   c. uveitis – acute and chronic. Granulomatous and non-granulomatous. Anterior and posterior
   d. glaucoma – all types
   e. cataract diseases
   f. lid disorders
   g. common retinal disease
   h. retinal detachment and retinal breaks
   i. diabetic retinopathy
   j. retinal vein occlusions and arterial occlusions
   k. AION and temporal arteritis
   l. thyroid eye diseases
   m. traumatic ocular injuries
   n. corneal foreign bodies
   o. chemical eye injuries
p. ocular emergencies
q. ruptured globes
r. acute angle closure glaucoma

Be familiar with common ophthalmic medications, including indications and contra-indications

III. Clinical Skills – including but not limited to
a. Slit lamp examination
b. Goldmann tonometry
c. Tonopen tonometry
d. Pachymetry
e. Keratometry with manual keratometer
f. Subjective refraction with Phoropter
g. Streak retinoscopy
h. Direct ophthalmoscopy
i. Indirect ophthalmoscopy
j. Gonioscopy and fundus examination with contact lens
k. Foreign body removal at slit lamp
l. Suture removal at slit lamp
m. YAG laser capsulotomy
n. YAG laser iridotomy
o. YAG laser Selective Laser Trabeculoplasty

Communicator

The resident shall:
I. Understand the concept of patient centered approach to communication, shared decision making and the consent process.
II. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication can foster patient satisfaction and compliance as well as influence the manifestations and outcome of a patient’s illness.
III. Establish relationships with the patient characterized by understanding, trust, respect, empathy and confidentiality
IV. Demonstrate the ability to communicate professionally and compassionately, while considering the influence of factors such as the patient’s age, gender, sexuality and ethnic cultural and socio-economic background.
V. Demonstrate skills in:
   a. Listening effectively
   b. Provide accurate, clear, concise and timely verbal and legibly written communication as applied to consultation notes, sign over of patient care and discharge planning
   c. Communication with patients and families regarding informed consent, the medical condition, plan of treatment, prognosis, primary and secondary prevention, medical uncertainty.
   d. Communication with other health care professionals regarding all aspects of patient care
   e. Honestly and effectively disclose errors relating to treatment and adverse events

Collaborator

I. Identify and describe the role, expertise and limitations of all members of an interdisciplinary team (Front desk staff, Photographers, Visual Field Technicians, Nurses, Porters, Security, and Cleaning Staff)
II. Develop a care plan for a patient they have assessed, including investigation, treatment and continuity of care, in collaboration with colleagues (including other departments) members of the interdisciplinary team (including the family physician or care home head nurse), the patient and the family.
III. Be able to function as a “team leader” in an inter-disciplinary approach involving other physicians and health professionals, to foster best continuity of care for the patient.
IV. Participate in an inter-physician or an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty specific expertise.

Manager

I. Demonstrate appropriate time management skills for effective patient care, administrative duties, scholarly activities and personal life.
II. Be able to see an appropriate number of patients in the clinic without running overtime but still allow adequate time spent per patient.
III. Be able to coordinate and triage requests for consultation from the ward, the emergency room, community physicians and remote sites in BC.
IV. Prioritize and develop a plan to teach medical students in the clinic based on student need, and ability balanced against clinical load.
V. Develop a system to prioritize appropriately patients on a surgical wait list such that that:
   a. Effective care is delivered to patients who required it most based on medical indications
   b. Recognize that social, functional and occupational needs are also important factors in wait list management
IV. Recognize the business and finance management skills needed for a successful medical practice and/or academic career.
V. Implement patient care practices considering available healthcare resources.
VI. Have an understanding of population-based approaches to health care services and recognize their implication for medical practice.
VII. Demonstrate conflict resolution skills.
VIII Be able to participate in administrative duties including committees and meetings.

Health Advocate

I. Educate patients and families about and promote the importance of long-term healthy behaviours and preventive health care (e.g. smoking cessation, screening tests, regular checkups, eye protection in sports and in work. Hypertension and Diabetic effects on normal and pathological eyes, etc.)
II. Be familiar with current guidelines and patterns of practice for common eye conditions such as diabetic retinopathy, glaucoma, cataracts and occupational safety
III. Respect and empower patient autonomy.
IV. Promote equitable health care.
V. Apply the principles of quality improvement and quality assurance.
VI. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in third world, trachoma, preventable childhood blindness, corneal transplantation).
VII. Be aware of and apply the knowledge of community resources and facilities to the needs of patients in vulnerable populations (e.g. CNIB for low vision patients, Tax credits for blind patients).

Scholar

I. Understand the principles of scientific research and how these principles apply to the development and implementation of a research proposal.
II. Be able to synthesize a hypothesis and develop a plan for data gathering and to conduct basic clinical research using clinical information from the Ambulatory Outpatient Clinic experience
III. Understand how to search and critically appraise the medical literature and is familiar with using information technology for scholarly activities
IV. Demonstrate the ability to teach medical students, residents, patients, colleagues and other health care professionals.

V. Develop lifelong learning skills.

Professional

a. Display attitudes commonly accepted as essential to professionalism. [honesty, integrity, sincerity, equanimity]

b. Evaluate one's abilities, knowledge and skills, recognize one's limitations and use appropriate strategies to advance professional competence. [know when to ask for help]

c. Strive to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships. [be courteous but be able to defend one’s position in a reasonable manner]

d. Strive to balance personal and professional roles and responsibilities. [prioritize]

e. Demonstrate ways of attempting to resolve conflict and role strain.

f. Know and understand the professional, legal and ethical codes to which physicians are bound. [Anticipate problems before they occur]

g. Recognize, analyze and attempt to resolve in clinical practice ethical issues such as truth telling, consent, advanced directives, confidentiality, conflict of interest, resource allocation, research ethics, interactions with the pharmaceutical industry.

h. Understand and apply relevant legislation that relates to the health care system in order to guide one's clinical practice.

i. Recognize and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations. [proceed in a collegial fashion but keep the interests of the patient first]

---

**Anterior Segment Rotation Goals & Objectives**

*Primary evaluator: Dr. S. Schendel*

---

**Medical Expert**

Residents are exposed to the following skills and concepts at multiple levels. Acquisition of knowledge and skills is expected to be graduated over the course of a five year residency and with the Academic Half Day Block on Anterior Segment Surgery. Progression of knowledge along the continuum of training is assessed with mid-rotation evaluations, end of rotation examinations, and yearly comprehensive practice orals which incorporate this material.

Each Resident must ultimately demonstrate that he/she:

a) Has the necessary basic science and clinical knowledge of anterior segment surgery
   Is familiar with content of a basic Lens and Cataract text (AAO manual – Section 8, External Disease and Cornea) as a starting point

b) Has the necessary knowledge to:
   Determine when a cataract is interfering with a patient’s daily function
   Understand the benefits and risks of surgery as appropriate for a particular patient

c) Conducts appropriate patient pre-operative preparation

d) Selects a lens type and power best suited for the patient

e) Understands lens power formulas and relative merits of different formulas and biometry

f) Understands interpretation and relative merits of different biometry techniques and methods

g) Plans surgical approach, including anaesthetic, and sedation if necessary

h) Works with booking staff to expedite appropriate surgical wait times
i) Recognizes emergency conditions and triages with appropriate management (eg. Globe perforation, endophthalmitis, traumatic cataract)

j) Gains in surgical dexterity and repertoire with time and experience.

k) Milestones must include assisting, draping, wound construction, capsulorrhexis, lens disassembly techniques, cortical removal, lens implantation, and conclusion of the case.

l) Is capable of selecting phaco machine settings for each stage of the procedure

m) Selects an appropriate viscoelastic for the task

n) Can take steps to avoid infectious, corneal, iris, capsular, retinal, optic nerve, and choroidal complications of anterior segment surgery

o) Must show understanding of advanced concepts of complicated cataract scenarios:
   a. Advanced glaucoma
   b. Pseudo-exfoliation Syndrome
   c. Uveitis
   d. Diabetic Retinopathy
   e. Endothelial Dystrophy
   f. High Myopia
   g. Prior Corneal Refractive surgery
   h. Zonular instability
   i. Floppy Iris Syndrome

p) Knows how to deal with post-operative complications of:
   a. Lens dislocation
   b. Cortical fragments
   c. Wound leakage
   d. IOP spikes
   e. Bacterial or viral infection

q) Understands vitrectomy settings IOL power adjustment with vitreous presentation

r) Is capable of discussing iris reconstruction, cataract surgery in children,

s) Prevention and management of capsular opacification

t) Knows instruments and their appropriate use and selection

u) Minimizes tissue trauma in surgery

v) Shows appropriate pacing of surgery

w) Knows own limits and exercises caution

Communicator

Overall score consists of all CANMEDS competencies including establishing rapport, explaining a treatment plan, obtaining an organized history in a timely manner, listens to instruction, completes operative reports, and consultations with organized legible complete notes.

Collaborator

Overall score consists of all CANMEDS competencies including interactions with other health professionals, consulting and delegating when necessary, working for improvement at local and national levels, punctuality, preparedness, and providing and receiving effective feedback.

Manager

Overall score consists of all CANMEDS competencies including utilizing all members of the health team, being punctual in attending to responsibilities, using information technology, optimizing time with realistic priorities, making clinical decisions based on sound evidence.
Health Advocate

Overall score consists of all CANMEDS competencies including advocacy for patients, educating patients and members of the health care team, having a current fund of knowledge regarding cataract and nutrition, vitamins, light toxicity, radiation, etc.

Scholar

Overall score consists of all CANMEDS competencies including a commitment to continuous learning, a life-long commitment to surgical teaching of more junior trainees and colleagues, critical appraisal of the literature, weighing industry bias in promotional material, generating hypotheses and a protocol for investigation, delivery of oral presentations, and participates actively in rounds.

Professional

Overall score consists of all CANMEDS competencies including demonstrating behavior and ethics of the highest standards, recognizing personal limitations, seeking and accepting advice.

Surgical skills to be acquired:

1. Safe, skilled, focused handling of surgical instruments and an understanding of their purpose.
2. An understanding of surgical skills, their logical sequence through a routine operation, and some knowledge of variations in technique from “routine”.
3. Facility and knowledge of suturing specifically minor surgical technique.
4. Familiarity with the following procedures.
   a. Phacoemulsification
   b. IOL implantation
   c. Extracapsular extraction
   d. Iridectomy
   e. Repair of corneal/scleral lacerations
   f. Management of wound leaks
   g. Anaesthetic procedures – peribulbar, retrobulbar, subconjunctival, and topical techniques.

Laser Surgery Objectives:

1. To be familiar with the basic concepts of both Argon and Yag lasers.
2. To know the indications and contraindications of the use of lasers in ophthalmic surgery.
3. To obtain hands on experience in the performance of laser iridotomies and YAG capsulotomies.

Pediatrics Rotation Goals & Objectives

Primary evaluator: Dr. J. Gardiner

To include Goals and objectives of PGY 3 year plus the following:

2. Competence in principles of genetic counseling pertaining to major ophthalmological conditions.
3. Surgical competence in the management of paediatric and adult comitant and incomitant strabismus including: formulation of surgical plan, discussion for consent including complications and their management, rectus muscle surgery, adjustable surgery, post-operative management.

4. Appreciation of differences between child and adult ocular tissues and repair and reasons for differences in surgical and refractive management of aphakia, glaucoma etc.

5. Familiarity with the major syndromes which involve the eye.

Medical Expert

a) Has the necessary basic Science and clinical knowledge
   - Familiar with content of basic Pediatric Ophthalmology text (AAO manual – Section 6, Pediatric Ophthalmology and Strabismus)
   - Familiar with content of basic textbook of strabismus management (eg. Pratt-Johnson and Tillson)

b) Has necessary knowledge to request appropriate investigations
   - Is aware of the place of electrophysiology in pediatric ophthalmology diagnosis
   - Is aware of the relative place of ultrasound, CT and MRI in childhood eye disease

c) Demonstrates understanding of genetic inheritance patterns in pediatric eye disease and could counsel family appropriately in important ocular genetic areas.

d) Recognizes emergency conditions and how to manage them

e) Recognizes situations in which examination under anesthesia is necessary

Procedures and Technical Skills

a) Knowledge of treatment options and specific procedures

b) Preparation for OR:
   1: Punctual
   2: Knowledgeable about each case
   3: Knows instruments and their appropriate use

c) Minimizes tissue trauma in surgery

d) Appropriate speed of surgery

e) Knows own limits

f) Listens and learns from instruction

g) Assists well, anticipating appropriately

h) Interacts effectively with all members of OR staff

Communicator

Establishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Does so in appropriate length of time
Listens effectively to instruction
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed
Dictated reports and consultations are complete and timely

Collaborator

Interacts effectively with other health professionals, recognizing their roles and expertise
Consults and delegates effectively
Demonstrates appropriate leadership within the interdisciplinary health care team
Demonstrates the ability to provide and receive effective and constructive feedback
Manager

Punctual in attending to responsibilities
Understands and makes effective use of information technology
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources

Scholar

Demonstrates understanding and commitment to the need for continuous learning; develops and implements ongoing and effective personal learning strategy
Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Demonstrates the ability to effectively prepare and deliver an oral clinical presentation

Professional

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations
Seeks advice when necessary, accepts advice and responds appropriately

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Familiar with current guidelines and patterns of practice for pediatric ophthalmology.
2. Respect and empower patient autonomy.
3. Promote equitable health care.
4. Apply the principles of quality improvement and quality assurance.
5. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in the developing world, trachoma, preventable childhood blindness) and the role of advocacy groups and funding agencies.

<table>
<thead>
<tr>
<th>d. Fifth Year of 5 Year Program (PGY 5 / R5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anterior Segment/UBC Rotation Goals &amp; Objectives</td>
</tr>
<tr>
<td>Primary evaluator: Dr. S. Schendel</td>
</tr>
</tbody>
</table>

The objectives of this rotation are an extension of those expressed in the PGY 4 Anterior Segment rotation description. This rotation should not be seen as a repetition of that rotation as higher expectations are made of each resident at this level. At the end of this block, the resident should present as a mature, confident surgeon capable of managing the pre-operative, intra-operative, and post-operative situations of all anterior segment procedures as listed in the PGY 4 rotation.
Elective Rotation Goals & Objectives

The following conditions must be met on an elective rotation:

1. The elective period is planned prospectively by the program director and the resident, and approved by the Residency Training Committee in full.
2. There is a clearly designated elective supervisor.
3. The educational objectives of the elective are understood by the resident, the elective supervisor and the Program Director.
4. The Resident is responsible for application for funding support by the program via the Residency Training Committee. A presentation of the proposed elective and costs should be made at the RTC meeting in June of the Resident’s PGY4 year.
5. There is a defined mechanism within the in-training evaluation system to include evaluation of the resident during the elective period. The mechanism for evaluation of the resident’s performance during the elective is clearly understood beforehand by the resident, the elective supervisor, and the program director, and is based on the educational objectives of the elective.
6. The elective period is recognized by the Program Director and Residency Training Committee as acceptable in the fulfillment of specialty training requirements.

Glaucoma Rotation Goals & Objectives

Primary evaluator: Dr. F. Mikelberg

To improve upon goals and objectives of PGY 3 year.

Medical Expert

Using the same materials outlined in the PGY2 year, the senior resident will demonstrate more depth and detail of knowledge. The senior resident will demonstrate more rapid and accurate synthesis and problem solving.

Procedures and Technical Skills

For the same procedures present in PGY2, the senior resident will show greater fluency and be more self directed in regards to preparation, execution and dealing with complications.

Communicator

As well as encompassing previously demonstrated aptitudes, the senior resident will be more accomplished in dealing with less explicit or straightforward communication styles in both patients and medical personnel. The senior resident will demonstrate greater brevity, accuracy and clarity in communications.

Collaborator

As well as meeting targets present in junior years, the senior will be more familiar with avenues of collaboration, have a better grasp of the networks of people involved in accomplishing tasks, and be more adept at giving and receiving positive criticism.
Manager

The senior resident will demonstrate better ability to triage and prioritize than the junior. The senior will be more aware of the multitude of factors (non medical) that promote or inhibit efficient operations of - a medical unit, an office, an operating room. The senior will demonstrate tools and techniques used to manage time more effectively.

Scholar

The senior resident will have completed or have done the majority of work on a research topic suitable for publication (not limited to this subspecialty topic). The senior will demonstrate the ability to quickly and accurately find reference material in support of a particular clinical approach.

Professional

The senior will continue to demonstrate those personal attributes that comprise professional and collegial behavior. Beyond this, the senior will be able to fluently discuss what is meant by "professional" and what constitutes a breach of professionalism.

Health Advocate

The senior resident will have a basic grasp of financial, social and political factors that influence delivery of medical care to patients. The senior will also be able to describe impediments to patient's attaining optimum medical care and would be able to suggest solutions.

Pathology Rotation Goals & Objectives
Evaluator: Dr. Steve Rasmussen

Medical Expert

Knowledge Base
1. Ocular anatomy. Understands the various anatomical structures of ophthalmology as evident in histological sections (boundaries of the orbit, compartments within the orbit)

2. Ocular microanatomy. Resident should have a working knowledge of normal histology (skin, conjunctiva, eyelid, lacrimal gland, lacrimal drainage system, globe, optic nerve).

3. Histology laboratory function. Understand the basic principles of tissue fixation, processing, embedding and staining. Understand the importance of minimizing artifact and optimizing tissue processing to the diagnostic process. Understand the basic principles of immunohistochemistry. Understand the ancillary techniques involved in tissue diagnosis, especially as applied to the diagnosis of lymphoma, and how those ancillary techniques affect specimen handling. Understand the basic principles of quality assurance in laboratory medicine in terms of preanalytical, analytical and postanalytical error.

4. Selected principles of general pathology. Know different patterns of inflammation and know some of the general principles of neoplasia.

5. Selected aspects of oncology (staging – (AJCC) - and grading of malignant tumors) required for the adequate pathology reporting of ophthalmology specimens.
6. Ocular pathology. The learning objectives for ocular pathology are contained in the concise but informative text by Eagle, *Ocular Pathology*. This book is required reading for the rotation, and can be digested with an allotted budget of two chapters per week. Highlighted areas of learning and expected competencies regarding histological diagnosis include:

- **A.** Common skin lesions (seborrheic keratosis, actinic keratosis, basal cell carcinoma, sudoriferous cyst, in situ and invasive squamous cell carcinoma, sebaceous carcinoma, Merkel cell carcinoma and the concept of “small blue cell tumor”, molluscum, neurofibroma, and schwannoma)
- **B.** Melanoma of the skin, conjunctiva, iris, ciliary body and choroid (discuss the role of synoptic reporting in laboratory medicine, know the role of tumor cytogenetics in determining prognosis)
- **C.** Retinoblastoma
- **D.** Primary acquired melanosis (conjunctival melanocytic intraepithelial neoplasia)
- **E.** Ocular surface squamous neoplasia (squamous dysplasia, squamous cell carcinoma in situ, and invasive squamous cell carcinoma)
- **F.** Corneal lesions (pterygium, failed graft, Fuchs endothelial dystrophy, acanthamebic and fungal keratitis, keratoconus, stromal dystrophies)
- **G.** Lacrimal gland inflammations and neoplasms (IgG4-related disease, Sjögren’s syndrome, pleomorphic adenoma, adenoid cystic carcinoma)
- **H.** Orbital inflammation and neoplasia (the work up for lymphoma, MALT lymphoma/extranodal marginal zone lymphoma, follicular lymphoma, diffuse large B cell lymphoma, granulomatosis and polyangiitis/Wegeners, OIS lymphangioma, invasive fungal disease, amyloidosis, sarcoidosis and tuberculosis)
- **I.** Temporal arteritis
- **J.** Histological findings in selected cases of glaucoma (angle closure, neovascularization and pseudoexfoliation)
- **K.** Retinal diseases (diabetes mellitus, AMD, retinal infections, retinitis pigmentosa)
- **L.** Optic nerve neoplasms (meningioma and glioma)
- **M.** Histological changes of cataracts.
- **N.** End-stage eye disease/ phthisis bulbi.

7. Knowing what you don’t know. Know about resources to fill information gaps and self-educate.

Skills
1. Resident should be able to describe or demonstrate the appropriate manner to examine, dissect, describe, ink and sample tissue for histological examination, including:
   - **A.** Skin ellipses
   - **B.** Lesions of eyelid margin
   - **C.** Conjunctival biopsies
   - **D.** Enucleations; including how to orient and measure an enucleation specimen, transilluminate specimen, harvest fresh tissue for cytogenetics, and describe the pertinent findings at the time of gross dissection.
2. Understands the workup of vitrectomy specimens for unknown uveitis.
3. Can describe the appropriate manner to biopsy and submit specimens for pathological examination.
4. Demonstrates an organized approach to the histological assessment of specific types of ocular pathology specimens.
5. Generates an appropriate differential diagnosis, and can make common diagnoses.
6. Understands the role of special stains and ancillary investigations and their contribution to final diagnosis.
7. Knows when to access electronic medical records to supplement the information provided by the laboratory requisition, retrieves old cases for comparison when appropriate.
8. Understands the importance and process of surgical margin assessment.

**Communicator**

1. Able to present their understanding and assessment of pathology specimens after pre-viewing specimens.
2. Understands the importance of clinical history in a pathology requisition, including what information the pathologist needs to know. Understands that the “bias” introduced by clinical history significantly improves the positive predictive value and negative predictive value of testing.
3. Understands some of the vernacular of pathology reports, especially regarding the communication of uncertainty.
4. Works well with laboratory staff.
5. Is able to present histological findings in a conference setting such as the Case Presentation during Grand Rounds.

**Collaborator**

1. Interacts effectively with other health professionals, recognizing the roles and expertise of others. Understands team approach within the interdisciplinary health care team.
2. Demonstrates the ability to provide and receive effective and constructive feedback.
3. Knows the importance of autopsy, and the possibility of an eyes-only autopsy.

**Manager**

1. Punctual in attending to responsibilities and following up to obtain additional information where required.
2. Understands some of the principles involved in laboratory management, especially as those might impact the normal flow of specimens. Should specimens be delayed for resident teaching? Are there critical results in pathology that need an urgent response?
3. Understands some of the costs involved with ancillary procedures, and the need for careful use of resources.

**Scholar**

1. Demonstrates understanding of and commitment to continuous, life-long learning; develops and implements ongoing and effective personal learning strategies.
2. Critically appraises medical information, integrates information from a variety of sources.
3. Considers the possibility of presenting a case report and literature review for the Canadian Ophthalmic Pathology Society.
4. Effective teacher of residents, medical students, and staff.
5. Demonstrates the ability to effectively prepare and deliver an oral presentation that includes ophthalmic pathology.

**Professional**

1. Demonstrates integrity, honesty, compassion, and respect for diversity.
2. Understands some of the ethical principles that apply to teaching, research, diagnostic service work and communication in laboratory medicine.
3. Demonstrates an awareness of his or her limitations, seeks advice when necessary, accepts advice and responds appropriately.
Health Advocate

1. Understands the determinants of health in the populations they serve.
2. Promotes the health of individual patients, communities and populations.
3. Understands the value of specialized pathological consultation in areas of the world normally underserved by medical expertise.

<table>
<thead>
<tr>
<th>Section E Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary evaluator: Dr. V. Yin</td>
</tr>
</tbody>
</table>

To improve upon goals and objectives of PGY 3 year.

Medical Expert

I. Didactic knowledge base
   a. The resident should be familiar with the Basic Clinical Science Course text (American Academy of Ophthalmology)

II. Clinical knowledge base - The resident should be able to diagnose, manage and treat the following clinical conditions, including but not limited to
   a. conjunctivitis – Acute and Chronic. Bacterial and Viral. Infectious and non-infectious.
   b. keratitis – Bacterial and viral. Infectious and non-infectious.
   c. uveitis – acute and chronic. Granulomatous and non-granulomatous. Anterior and posterior
   d. glaucoma – all types
   e. cataract diseases
   f. lid disorders
   g. common retinal disease
   h. retinal detachment and retinal breaks
   i. diabetic retinopathy
   j. retinal vein occlusions and arterial occlusions
   k. AION and temporal arteritis
   l. thyroid eye diseases
   m. traumatic ocular injuries
   n. corneal foreign bodies
   o. chemical eye injuries
   p. ocular emergencies
   q. ruptured globes
   r. acute angle closure glaucoma
Be familiar with common ophthalmic medications, including indications and contra-indications

III. Clinical Skills – including but not limited to
   a. Slit lamp examination
   b. Goldmann tonometry
   c. Tonopen tonometry
   d. Pachymetry
   e. Keratometry with manual keratometer
   f. Subjective refraction with Phoropter
   g. Streak retinoscopy
   h. Direct ophthalmoscopy
   i. Indirect opthalmoscopy
j. Gonioscopy and fundus examination with contact lens
k. Foreign body removal at slit lamp
l. Suture removal at slit lamp
m. YAG laser capsulotomy
n. YAG laser iridotomy
o. YAG laser Selective Laser Trabeculoplasty

**Communicator**

The resident shall:
I. Understand the concept of patient centered approach to communication, shared decision making and the consent process.
II. Recognize that being a good communicator is an essential function of a physician, and understand that effective patient-physician communication can foster patient satisfaction and compliance as well as influence the manifestations and outcome of a patient's illness.
III. Establish relationships with the patient characterized by understanding, trust, respect, empathy and confidentiality
IV. Demonstrate the ability to communicate professionally and compassionately, while considering the influence of factors such as the patient’s age, gender, sexuality and ethnic cultural and socio-economic background.
V. Demonstrate skills in:
   a. Listening effectively
   b. Provide accurate, clear, concise and timely verbal and legibly written communication as applied to consultation notes, sign over of patient care and discharge planning
   c. Communication with patients and families regarding informed consent, the medical condition, plan of treatment, prognosis, primary and secondary prevention, medical uncertainty.
   d. Communication with other health care professionals regarding all aspects of patient care
   e. Honestly and effectively disclose errors relating to treatment and adverse events

**Collaborator**

I. Identify and describe the role, expertise and limitations of all members of an interdisciplinary team (Front desk staff, Photographers, Visual Field Technicians, Nurses, Porters, Security, and Cleaning Staff)
II. Develop a care plan for a patient they have assessed, including investigation, treatment and continuity of care, in collaboration with colleagues (including other departments) members of the interdisciplinary team (including the family physician or care home head nurse), the patient and the family.
III. Be able to function as a “team leader” in an inter-disciplinary approach involving other physicians and health professionals, to foster best continuity of care for the patient.
IV. Participate in an inter-physician or an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing specialty specific expertise.

**Manager**

I. Demonstrate appropriate time management skills for effective patient care, administrative duties, scholarly activities and personal life.
II. Be able to see an appropriate number of patients in the clinic without running overtime but still allow adequate time spent per patient.
III. Be able to coordinate and triage requests for consultation from the ward, the emergency room, community physicians and remote sites in BC.
IV. Prioritize and develop a plan to teach medical students in the clinic based on student need, and ability balanced against clinical load.
V. Develop a system to prioritize appropriately patients on a surgical wait list such that that:
   a. Effective care is delivered to patients who required it most based on medical indications
   b. Recognize that social, functional and occupational needs are also important factors in wait list management

IV. Recognize the business and finance management skills needed for a successful medical practice and/or academic career.

V. Implement patient care practices considering available healthcare resources.

VI. Have an understanding of population-based approaches to health care services and recognize their implication for medical practice.

VII. Demonstrate conflict resolution skills.

VIII Be able to participate in administrative duties including committees and meetings.

Health Advocate

I. Educate patients and families about and promote the importance of long-term healthy behaviours and preventive health care (e.g. smoking cessation, screening tests, regular checkups, eye protection in sports and in work. Hypertension and Diabetic effects on normal and pathological eyes, etc.)

II. Be familiar with current guidelines and patterns of practice for common eye conditions such as diabetic retinopathy, glaucoma, cataracts and occupational safety

III. Respect and empower patient autonomy.

IV. Promote equitable health care.

V. Apply the principles of quality improvement and quality assurance.

VI. Appreciate the existence of global health advocacy and initiatives for elimination of poverty and eye disease, (e.g. cataracts in third world, trachoma, preventable childhood blindness, corneal transplantation).

VII Be aware of and apply the knowledge of community resources and facilities to the needs of patients in vulnerable populations (eg CNIB for low vision patients, Tax credits for blind patients).

Scholar

I. Understand the principles of scientific research and how these principles apply to the development and implementation of a research proposal.

II. Be able to synthesize a hypothesis and develop a plan for data gathering and to conduct basic clinical research using clinical information from the Ambulatory Outpatient Clinic experience

III. Understand how to search and critically appraise the medical literature and is familiar with using information technology for scholarly activities

IV. Demonstrate the ability to teach medical students, residents, patients, colleagues and other health care professionals.

V. Develop lifelong learning skills.

Professional

a. Display attitudes commonly accepted as essential to professionalism.
   [honesty, integrity, sincerity, equanimity]

b. Evaluate one's abilities, knowledge and skills, recognize one's limitations and use appropriate strategies to advance professional competence. [know when to ask for help]

c. Strive to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships. [be courteous but be able to defend one’s position in a reasonable manner]

d. Strive to balance personal and professional roles and responsibilities. [prioritize]

e. Demonstrate ways of attempting to resolve conflict and role strain.
f. Know and understand the professional, legal and ethical codes to which physicians are bound. [Anticipate problems before they occur]

g. Recognize, analyze and attempt to resolve in clinical practice ethical issues such as truth telling, consent, advanced directives, confidentiality, conflict of interest, resource allocation, research ethics, interactions with the pharmaceutical industry.

h. Understand and apply relevant legislation that relates to the health care system in order to guide one's clinical practice.

i. Recognize and know how to deal with unprofessional behaviours in clinical practice, taking into account local and provincial regulations. [proceed in a collegial fashion but keep the interests of the patient first]

<table>
<thead>
<tr>
<th>Neuro/Oncology Rotation Goals &amp; Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary evaluator: Dr. K. Paton</td>
</tr>
</tbody>
</table>

Goals and Objectives

This rotation represents the major neurology component of the program. The ocular oncology clinic is one component of this rotation, at one half-day per week, and constitutes the only exposure of residents to this area where ocular disease and systemic disease/malignancy intersect. Many of the cases seen are uncommon, or present unique situations, and individualized appropriate investigation and management are emphasized. Exposure to ambulatory care, surgery, and radiation methodology should be obtained.

PGY5

Medical Expert

a) Has the necessary basic Science and clinical knowledge
   - Familiar with ophthalmologic manifestations of malignant intraocular, orbital and adnexal disease (AAO manuals)
   - Familiar with metastatic potential and identification of and surveillance for metastasis
   - Familiar with ophthalmic complications of medical, surgical and radiation oncology therapy
   - Familiar with masquerading syndromes
   - Familiar with current basic science concepts of malignant disease
   - Familiar with standard and novel methods of treating malignant disease

b) Has necessary knowledge to request appropriate investigations
   - Is aware of the place of various forms of imaging in diagnosis and management
   - Is aware of immunomarkers of disease
   - Understands the role and limitations of pathology identification of disease

c) Demonstrates understanding of genetic inheritance patterns in retinoblastoma and could counsel family appropriately in important ocular genetic areas.

d) Recognizes emergency conditions and how to manage them

e) Recognizes situations in which case conferencing is essential to management, and can effectively participate in such conferencing

f) Familiar with and able to incorporate Quality of Life scientific information in evaluating and dealing with patients

Procedures and Technical Skills

a) Knowledge of treatment options and specific procedures
Radiation
Brachytherapy, proton therapy, external beam radiation, conformal radiation
Chemotherapy
Systemic, periocular, intraocular
Immunotherapy
Observation
Surgical options
Iridocyclectomy, eye wall resection, enucleation, exenteration

b) Preparation for OR:
Complete collated investigation
Adequate prediction of potential challenges and complexities

(c) Appropriate handling of malignant tissue to prevent spread of disease
d) Knows own limits
e) Identifies potential malignant disease early to avoid inappropriate therapies
f) Listens and learns from instruction
g) Assists well, anticipating appropriately
h) Interacts effectively with all members of OR staff

Communicator
Estabishes good rapport with patients and families
Obtains a complete, organized and succinct history and physical examination
Elicits relevant information on social circumstances, available support network, work impact and quality of life
impact of disease and medical process on patients
Listens and responds effectively to patient and family articulation of concerns
Can adequately articulate uncertainty – in diagnosis, prognosis, outcome, and inform patient effectively
Discusses appropriate information with patients, families and healthcare team
Consultation reports and progress notes are organized, legible, complete and signed

Collaborator
Interacts effectively with other health professionals, recognizing their roles and expertise
Collaborates with imaging and investigation units to identify best
Effectively communicates ophthalmologic concerns to oncology care team
Identifies and uses resources from non-ophthalmologic setting for benefit of patient
Coordinates care to facilitate patient investigation and treatment from distant sites taking travel, health and family needs into account
Consults and delegates effectively
Identifies resources local to the patient and appropriate times to employ them
Demonstrates appropriate leadership within the interdisciplinary health care team
Demonstrates the ability to provide and receive effective and constructive feedback

Manager
Punctual in attending to responsibilities
Understands and makes effective use of information technology
Collates diverse testing and resources from different sources, different health authorities
Sets realistic priorities and uses time effectively in order to optimize professional performance
Makes clinical decisions based on sound evidence and efficient use of available resources
Scholar

Critically appraises medical information, integrates information from a variety of sources
Demonstrates the ability to conduct a research project, including generation of a hypothesis, development of a protocol, statistical analysis and presentation of results
Effective teacher of Residents, Medical Students, and other staff
Identifies existing gaps and opportunities in scientific knowledge
Identifies appropriate resources for obtaining reliable information
Understands and can explain multicentre trials, their role in treatment evaluation
Demonstrates the ability to effectively prepare and deliver an oral clinical presentation
Develop lifelong learning skills

Professional

Demonstrates integrity, honesty, compassion, respect for diversity
Fulfills medical and legal obligations of the specialist
Understands the principles of ethics and applies these to clinical situations
Demonstrates an awareness of own limitations
Seeks advice when necessary, accepts advice and responds appropriately

Health Advocate

The resident, on completion of the rotation, should be able to:
1. Be familiar with current guidelines and patterns of practice for ocular oncology.
2. Respect and empower patient autonomy.
3. Assist patients to identify “best practice” referral sites internationally and aid referral where appropriate
4. Apply the principles of quality improvement and quality assurance.
5. Identify and understand the role of patient, parent and disease specific advocacy groups and interact effectively with them on behalf of an individual, and in advancing disease
6. Establish advocacy relationships for non-medical reasons: eg. School support for children impaired by retinoblastoma, community, work, insurance support for adults with impairment of vision from malignancy

10. Final Surgical Objectives for Residency Training

CATARACT SURGERY
Familiarity with small incision phacoemulsification surgery
Extracapsular cataract extraction
Intraocular lens implantation
YAG laser capsulotomy
Management of lens trauma in globe lacerations
Anterior vitrectomy
Regional blocks

CORNEA AND EXTERNAL DISEASE
Expected
Understand principles of surgical repair of the cornea
Tarsorrhaphy
Pterygium +/- mitomycin
Conjunctival tumour excision
Anterior segment foreign body removal
Use of tissue glue
AC Taps
Understand principles and complications of keratorefractive surgery
Repair and management of anterior segment trauma

**Not Expected**
- Penetrating keratoplasty
- Iridocyclectomy
- Conjunctival flaps

**GLAUCOMA**

**Expected**
- Iridotomy
- Laser trabeculoplasty
- Trabeculectomy
- Cycloablation
- Cataract surgery on glaucoma patient

**Not Expected**
- Combined cataract and glaucoma surgery
- Cyclodialysis
- Ahmed/Baerveld valve implantation

**LACRIMAL**

**Expected**
- Lacrimal probing
- Understand dacryocystorhinostomy
- Simple punctal malpositions

**Not Expected**
- Conjunctival dacryocystorhinostomy
- Repair canalicular lacerations

**NEURO-OPHTHALMOLOGY**

**Expected**
- Temporal artery biopsy

**OCULOPLASTICS SURGERY**

**Expected**
- Temporary and permanent tarsorrhaphy
- Biopsy of eyelid, conjunctiva or cornea
- Management of non-cicatricial entropion and ectropion
- Acute eyelid reconstruction following trauma or surgery
- Blepharoplasty
- Perform most steps in anterior levator advancement (for acquired ptosis)

**Not Expected**
- Cryo therapy to the eye and ocular adnexa
- Split thickness and full thickness skin grafts
- Mucous membrane grafts
Brow lift
Other ptosis procedures
Mullerectomy/levator recession

**ORBITAL**

**Expected**
- Evisceration
- Enucleation
- Lateral canthotomy, cantholysis

**Not Expected**
- Repair blowout fracture
- Repair tripartite fracture
- Drainage of acute orbital abscess
- Biopsy and/or removal of anterior or posterior orbital lesions

**PEDIATRICS**

**Expected**
- Recess-resect strabismus procedures
- Adjustable suture strabismus technique
- Inferior oblique myectomy

**Not Expected**
- Congenital and infantile cataracts
- Congenital and infantile glaucoma
- Complicated strabismus
- Vertical or cyclo deviations
- Botulinum injection
- Treatment of retinoblastoma and other childhood oncology

**RETINA**

**Expected**
- Pan-retinal photocoagulation
- Cryotherapy
- Peripheral laser or peripheral cryotherapy
- Viterous tap for aspiration and injection
- Repair of simple detachment with laser photocoagulation and corneo-scleral laceration

**Not Expected**
- Laser of choroidal neovascular membranes
- Focal treatment for macular edema with laser
- Posterior vitrectomy
- Radio active plaques
- Pneumatic retinopexy
a. Minimum Surgical Experience Upon Completion of Residency Training  
(Pending Revision)

<table>
<thead>
<tr>
<th>SURGERY</th>
<th>Assistant</th>
<th>RESIDENT-PRIMARY SURGEON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataracts</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Pterygium</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Trauma /Emergency Repair</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Temporal artery biopsies</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Corneal transplant</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Chalazia</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Fistulizing glaucoma surgery</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Strabismus</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Congenital cataracts</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Congenital glaucoma</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Orbit</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Enucleation/Evisceration</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Tarsorrhaphy</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Lid (Ptosis, Plasty, Pexy)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Lacrimal (DCR, Probe, Repair)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Retrobulbar Injection (block)</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Intravitreal injection</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Peritomy &amp; Looping Muscles</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cryocoagulation retinal tears</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Scleral Buckle</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Vitrectomy</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Laser Peripheral Iridotomy (L)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Laser Retinopexy (L)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>PanRetinal Photocoagulation(L)</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Laser Capsulotomies (L)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>ALT / SLT (L)</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

11. Special Sections Objectives

Introductory Summer

1. To become familiar with ophthalmic terminology.
2. To obtain working skill in the use of basic diagnostic instruments.
3. To be capable of handling ophthalmic emergencies with confidence knowing the limit of own knowledge and ‘referring’ appropriately.
4. To develop history taking skills.
5. To obtain an overview of ophthalmic anatomy and those diseases seen in common emergencies and ambulatory care situations.
6. To gain some experience in handling soft tissue and to gain an overview of macro and micro surgical techniques and instruments.
7. To gain an introduction to Ophthalmic Pathology.
Academic Block Sessions

To provide a systematic supervised review of the basic and clinical science course of the American Academy of Ophthalmology and to provide the necessary time for discussion of the reviewed information.

a. Expectations of Residents Around Academic Events

In Regards to Academic Activities

Attendance at Grand Rounds, sub-specialty teaching rounds, Professor’s rounds, journal clubs and clinical days is mandatory for all Residents.

Grand Rounds:
Residents are expected to contribute to grand rounds discussions. In order to do so, they should sit in the front ½ of the audience (first 10 rows of the ECC auditorium). Like Staff, Residents are required to sign in at the start of rounds, and to fill in an evaluation sheet. The latter will be collected by the Undergraduate Coordinator. Attendance will be included in the material discussed at 6-monthly meetings with the Residency Director.

Sub-specialty Rounds:
All Residents are expected to attend sub-specialty teaching unless on vacation, away on elective or at Fort St John. These rounds are an integral part of the program and an important opportunity to demonstrate competence in many of the CanMEDS areas, especially medical expert, communicator and collaborator.

Academic Block:
Academic block attendance is mandatory for residents. Friday 12:00pm – 4:30pm is protected time during academic block only. During academic block teaching, residents are not expected to answer their pager. They should contact the covering staff person before the teaching session to let them know they will be covering call and at the end to enquire about any calls or patients seen by staff who may require follow-up.

Clinical Days:
Clinical days are important academic activities and resident attendance is mandatory. It is acceptable for the on call surgical resident to be absent only if engaged in emergency surgery.

Vacations:
As per the PAR-BC agreement, Residents are paid to work 48 weeks per year. There is vacation entitlement of 4 weeks per annum. In addition, 10 days per annum are public holidays during which Residents except those on-calls are freed from duties. Residents on duty over public holidays are given a day off in lieu.

Vacation entitlements must be utilized in any given year as roll-over of entitlement into the following year will not be possible.

Over the Christmas break, residents take it in turns to be on-call. If Clinics are still scheduled to occur during the Christmas Break, the Resident on the appropriate rotation is expected to attend. Residents are strongly encouraged to take the days they are not on-call over this period as part of their annual vacation entitlement to minimize vacation interference with rotations at other times of the year.
b. Expectations around Adult Ambulatory Clinics – Section E, SPH

Below is a list of performance-related expectations of the residents. These expectations are not the same as the academic objectives found elsewhere in the manual. These expectations are not examined formally, but they will contribute to the overall evaluation of the resident’s performance record in the rotation. They will also serve to ensure and enhance an efficient and pleasant relationship between residents, faculty and patients.

Dress code

Proper dress code will ensure that the patient feels comfortable with their doctor and conveys a sense of responsibility.

Appropriate business attire should be the standard for both men and women. Shorts, collarless shirts, runners or open toed sandals are not allowed for men, and denims of any colour should be avoided for men or women. Men should preferably wear a shirt and tie. All hospital staff working on hospital facilities must have a hospital issued identification badge visible at all times; both for security reasons and for easy identification by patients.

Proper dress will help build trust with patients and respect with colleagues. If in doubt, err on the side of looking overly formal.

Time management

The clinic at VGH (Section E) generally books patient appointments Monday to Friday 9:00am to 12:00pm; except for public holidays, RAD days and certain academic events. There are usually 2 residents staffing the clinic, one junior and one senior.

1. Both residents are expected to arrive at the clinic prior to 9:00am. This will allow them to discuss any special cases or problems
2. If any resident assigned to the ambulatory clinic needs to be absent for any reason (eg Ft. St. John, personal health issues) he or she must communicate this in writing to the clinic, the clinic director, the clinic nursing and secretarial staff, the residency director, the residency secretary, VGH locating, the department head and the other fellow residents. Absences for other reasons will be documented and “Doctor’s Notes” may be required as per PAR BC agreements. Please note, as stipulated elsewhere in the manual, the resident designated in "Section E" as a rotation is to avoid any elective leave - eg. vacation - during this rotation.
3. The clinic patient load varies. However, the attending residents, who take the role of “most responsible physician”, must ensure that all clinic patients are seen and discharged prior to leaving the clinic. The supervising staff is encouraged to help see some of the patients at their discretion, but this should not be expected. Under no circumstances should a patient be left unattended or turned away because of poor time management.

The general outpatient clinic at St. Paul's Hospital is attended to by the resident on "SPH" rotation. The resident is expected to be present at the eye clinic by 9:00am. The resident will be involved in both seeing patients from the specialty clinic of the day and brought urgently from SPH-ER or consult patients from the ward. Rarely, the resident may be asked to attend a true emergency within the Emergency Department. The supervising ophthalmologist will be either running a day clinic in the facility or the case may fall to the On Call staff of the day. It is expected that the supervisor will be rapidly available to review cases as needed.

Clinic duties (all sites)
Besides the expected learning objectives and CanMEDS objectives as stated in the Residency manual, there are a few other duties in which the resident should participate and be proficient.

1. The physical facilities and equipment in the ambulatory clinic should be treated with respect and care - as if they were the resident’s own. The clinic’s residents are held responsible for the equipment state and safety. The resident should ensure that all equipment is properly turned off, put away and accounted for at the end of each clinic. They should also ensure that each piece of equipment is properly maintained and if servicing is required, they should inform the clinic staff or director. The resident and program are held responsible for any loss or damage to equipment by the resident and there will be financial consequences.

2. The resident should ensure that all examining rooms are clean at the end of each clinic. Medications and chart material should be put away and the countertops should be neat and tidy. This is important for patient’s privacy and infection control. State of repair and overall tidiness will affect patient perception of the clinic and of the overall competency of the physicians working there. Taking active ownership of the cleanliness and physical order of the clinic will play into each resident’s "Manager" CANMEDS rating.

3. The resident must ensure that each referred case has a consultation report (and/or procedure report/OR record) sent to the referring MD or ward; whether written or on the dictation system. This should be done immediately after seeing the patient or before the end of the clinic session. It is not only good practice but is required by MSP (billing) and the BC College of Physicians & Surgeons.

4. Lab reports/Diagnostic tests should be reviewed the day they arrive and signed off by the reviewing resident.

5. The resident must ensure that all patients seen in the clinic each day are “signed off” by the supervising staff and properly coded for billing purposes.

6. The level or intensity of supervision will vary with the Staff of the Day. Each resident should ensure that they are aware of each particular Faculty member’s requirements in regards to which patients require mandatory review and which can be discharged by residents alone.

7. The clinic is open to all patients, including previously seen walk-ins, hospital patients, and referred-in patients. The clinic is also expected to see patients from physicians who are ophthalmology staff at each respective hospital, if requested. Patients should not be turned away except in certain circumstances:
   i. Patients from Emergency departments outside the Vancouver Coastal Health Region, but from the Lower Mainland, where there is a different ophthalmology call group.
   ii. Patients from ophthalmologists not on staff at the respective hospital. If in doubt, please ask the supervising staff in clinic that day or the clinic director. Do not accept transfer on your own; these must be discussed directly with the attending staff.

8. The clinic resident is expected to arrange, follow up and interpret all labs/investigations that originated at the clinic.

9. The resident is expected to assist in the teaching of medical students when they are present in the clinic

**c. Expectations of Residents When On-Call**

1. Ophthalmology Residents provide full time, continuous, call coverage for Vancouver Coastal Health Region, Providence Health Care and BCCH. This includes calls from the Emergency Rooms, from physicians in regards to patients admitted to the hospitals, and for ophthalmologists with admitting privileges to the hospitals in these areas. This is because the staff at each site is a de-facto call group and each member provides cross coverage to their fellow staff in their absence.

2. Residents are always “backed up” by a Staff Ophthalmologist who is officially the most responsible physician during his/her time on call (usually one week at a time) The on-call Resident should make every effort to accommodate the referring doctor’s sense of urgency. Depending on the nature of the case, and after appropriate triage by the Resident, most urgent cases should be seen within 1 to 2 hours of being accepted (or ASAP for true Emergencies)
3. Ophthalmology Residents are not expected to provide call coverage to private doctors’ offices, walk-in clinics and Ophthalmology staff from the Lower Mainland outside the 3 aforementioned call groups. Calls or requests by these groups should be routed through the emergency departments of the hospital where the call coverage is provided. E.g. an ophthalmologist or ER calls from Chilliwack requesting a patient to be seen, they should be told that this is not possible because they are outside the Vancouver call coverage area and that this patient should either be seen at their own ER or sent to another region’s ER. We, provide courtesy ophthalmology consultative service to northern isolated communities where there is no ophthalmology coverage. Before providing service to these specific areas (ie. transferring a patient), the resident is expected to discuss it with the on-call staff.

4. The on-call Staff person is not expected nor required to take any pages or phone calls from any source during on call except from the first call resident, or unless the staff request otherwise. All calls requesting ophthalmic emergency consultations should be routed through to the ophthalmology resident first where the patient’s history can be triaged and synthesized for presentation to the staff person.

5. The ophthalmology resident is expected to see patients after hours in a safe and proper environment – for the patient and resident.
   a. The resident should never see any patient alone - particularly female residents.
   b. Patients should be seen in a neutral high traffic area - e.g. treatment room in the VGH ER or the exam lane on TSB in the JP tower. Seeing patients alone in a desolate area such as ECC after hours is discouraged.
   c. If possible, patients seen after hours should be seen with a third person present in the room.
   d. Any invasive procedures should be done in a proper environment with proper and adequate personnel and equipment support (e.g. monitoring, crash cart). It should never be attempted in an isolated setting.

6. The resident is expected to discuss each case seen on call with the staff responsible, unless the staff explicitly indicates that this is not necessary.

7. Before accepting any patients for transfer from an “off site physician” and provision of care, the resident must seek approval from the staff on-call first. Without the Staff’s approval, the transfer cannot be accepted. There is no exception to this rule. Also, approval must also be sought from BC Bedline, after approval from the staff.

8. If a patient is deemed to require emergency sub-specialist care, after reviewing with the staff on call, it is the on-call staff member’s responsibility to arrange this transfer of care (with administrative duties support by the on-call resident).

9. Each patient seen on call must:
   a. Have a proper consultation report filled out and sent to the supervising staff, their referring MDs and FPs.
   b. Proper follow-up arranged at one of the following:
      1. Outpatient clinic at ECC or SPH
      2. Patient’s own ophthalmologist
      3. Ophthalmologists in patient’s home location (Non urgent only)
   c. A copy of the consultation report should be kept in the Ambulatory clinic at Section E (for patients seen through VGH). Consult reports must be sent to the SPH eye clinic and BCCH eye clinic for patients seen through SPH and BCCH emergency departments, respectively.
   d. The clerk at Section E should be informed of the patient consultation and the patient’s visit be billed by Section E if the on-call staff does not bill for it.
e. The patients disposition should be arranged by either direct face to face or telephone contact with the accepting physician – this includes other resident taking over “call” for the next period (or the next morning’s clinic resident). Patients that have not been properly transferred over will continue to be considered under the direct care of the primary contact resident (TRANSFER OF CARE IS ALWAYS PHYSICIAN TO PHYSICIAN).

d. Expectations of residents around emergency surgery

“Senior surgical call”

A senior resident is on-call between 5:00pm – 8:00am weekdays and 8:00am – 8:00am weekends for any cases seen on-call requiring surgery in the main ORs. For example: globe rupture, orbital abscess drainage, or any other cases requiring operating room management. Senior residents will be on-call for “senior surgical call” for periods of one month at a time, and are free to trade shifts amongst each other so long as full coverage is maintained.

The following list constitutes the responsibilities required for a patient seen on-call that requires surgery in the main OR. Note duties of junior resident in parentheses.

1. Initially see the patient and work them up. (junior)
2. Inform and see the patient with the staff on-call and senior resident on-call. (junior)
3. Arrange the paperwork for OR booking. (junior)
4. Arrange the booking with the OR +/- anesthesia. (junior)
5. Make sure all the pre-operative paperwork, consent, orders and investigations are completed. (junior)
6. Inform the staff of the approximate OR time. (junior)
7. The OR should be instructed to call the resident(s) on-call and staff on-call when the case is ready to proceed. (junior)
8. The senior surgical on-call resident will be present in the OR when the patient is in the pre-operative area, and should be present in the OR before the on-call staff. Attendance of the surgery by the junior on-call resident is optional, depending on other call responsibilities; however, the on-call staff must approve the junior resident not being present during the surgery.
9. The senior resident will accompany the patient from this step forward
   a. The admitting resident must be present for the emergency surgery. However, if the on call resident is at a junior level and with mutual understanding of Staff, senior and junior residents, the senior resident may attend the OR instead of the junior to maximize the teaching benefits. Absence from the OR for emergency surgery falls into the same category of dereliction as not answering pages while on call.
   b. The resident should be on site at the OR suite before arrival of the attending staff to ensure a smooth and efficient process.

(e. Expectations of Residents around anterior segment OR

Guide for Residents on Anterior Segment Surgery Rotation

This is a summary of comments/advice taken from our anterior segment surgical teachers on how to make teaching days in the OR better for the surgeon, staff and patients.

General:
- always maintain a positive attitude
- be aware that some difficult/interesting cases are brought in specifically for demonstration purposes and not for direct resident participation
- always be polite to OR staff and patients
Pre-op:
- try to arrive in the OR before the surgeon and before the first case
- help prepare room by bringing in trolleys, trays, etc.
- read the patient’s chart before the case – understand and discuss with the surgeon the patient’s ocular issues as well as other factors like refraction goals, medical/physical disabilities, occupation, where the patient lives, etc.
- go through IOL power selection and ensure the proper IOL is in OR
- position the microscope and foot pedals for the next case
- begin to fill in chart paperwork as time permits (ECC)
- help position the patient properly on the chair, including head position
- offer assistance to ensure patient is comfortable
- help place ECG leads, BP cuff and pulse oximeter on patient as required
- administer pre-op eyedrops
- offer to prep the patient
- after scrubbing, help prepare the instrument table
- drape the patient and place the speculum at the surgeon’s discretion

Intra-op:
- learn the details of how each surgeon performs each step of surgery
- change places with the surgeon during the case quickly and smoothly, including PD and focusing
- know the names of the instruments
- know the microscope and phaco foot pedals well
- learn the settings and parameters of the different phaco machines
- always do as instructed by the surgeon – eg. stop and remove instruments right away when instructed
- do not perform new/different techniques that the surgeon may not be comfortable with without first discussing them.
- be aware that the patients are alert during surgery and assume that all patients may understand English despite appearances – comments and discussion should remain appropriate for the situation

Post-op:
- help gather and take out the garbage and laundry (ECC)
- finish chart paperwork (ECC)/offer to do dictation (MSJ)
- if OR day is Friday, offer to arrange to see follow-ups Saturday with the surgeon
- call the surgeon the next day to follow-up any complications, especially your own.

Guide for Booking of Add-on Ophthalmology Cases (MSJ OR)

1. Whenever possible, an add-on anterior segment case will bump the Procedure Room slate.

2. Booking of add-on ophthalmology cases – Monday to Friday 0700-1500
   - Book via the OR Unit Clerk (604-877-8305).
   - Fax chart to MSJ SDCU at 604-877-8307
   - These cases will take their place in the add-on line up.
   - If possible an add-on case will be done at the end of the slate, but this is not a guarantee.
   - Add-on patients need to be in MSJ SDCU at 1300 in order to be admitted and receive a SDCU bed.

3. Booking of urgent after-hours eye cases (both retina and anterior segment) - after 1500 and on weekends/holidays
• These patients do NOT come through MSJ emergency. Because these cases occur on an irregular basis you may run into problems with staff that are unfamiliar with this process. Make 2 calls in this order please:

1. Call the MSJ Clinical Coordinator (Cell: 604-499-6935) to assist with transfer to MSJ and to set up the OR. Transfer the patient to MSJ 4W. Once the patient has arrived at MSJ, then:
2. Call the anesthesiologist on call to book case (pager 33083) and arrange the OR time.

• After hours/weekend patients need an inpatient bed assigned and will be admitted directly to 4-West to be prepared for surgery.
• Office staff or surgeon may fax patient info to 4-West
  ○ Fax # 604-877-8110
  ○ Nursing station phone: 604-877-8300
  ○ The 4W RN will call in OR and PAR staff. OR & PAR require 90 minutes to arrive.
• Preferably weekend bookings should occur after 0900 as the admitting clerk is not on site until 0800.
• In the event that an emergency case must be done during the night or early morning when there is no Clinical Coordinator on site, the 4-West Charge Nurse can arrange timing/transfer of patient and calling in of the OR staff. The SPH admission clerk can process the admission.
• MSJ Clinical Coordinator info:
  ○ Cell: 604-499-6935.
  ○ Weekday hours: 1430-2230
  ○ Weekend hours: 1000-2200

*It is not necessary to call Dr. Moore/Dr. Lo or designate to book an add-on/emergency eye case at MSJ.
*All add-ons need to be booked by the ophthalmologist (not the resident or fellow) please.

Passed by the University of British Columbia (UBC) Senate Feb. 13, 2013

12. PROFESSIONAL STANDARDS FOR LEARNERS AND FACULTY MEMBERS IN THE FACULTIES OF MEDICINE AND DENTISTRY AT THE UNIVERSITY OF BRITISH COLUMBIA

The Faculties of Medicine and Dentistry are committed to creating a learning and work environment conducive to optimal education, research, and clinical care. This is sustained by learners and faculty committing to the highest level of professional conduct in their communications and interactions in all University-related activities.

Learners, faculty and staff are expected to be familiar with and comply with the policies of the University relating to conduct. This includes, but is not limited to: UBC Policy #3, Discrimination and Harassment; UBC Policy #85, Scholarly Integrity; UBC Policy #97, Conflict of Interest and Conflict of Commitment; and the UBC Statement on Respectful Environment for Students, Faculty and Staff, as amended from time to time. When learners, faculty and staff carry out work or training activities in clinical settings they are also expected to abide by relevant policies and procedures governing conduct within those clinical settings.

Membership in the health professions demands integrity, competence and adherence to ethical standards. Professional conduct is the set of attitudes, behaviours and characteristics deemed desirable in members of a profession and which define the profession and its relationship to its members and to society. Learners and faculty in professional programs are expected to meet expectations regarding professional behaviour set out in the codes of ethics and conduct of their respective professional organizations and regulatory bodies.

The Faculties of Medicine and Dentistry have identified the standards of professional conduct set out in this policy
as minimum requirements for the conduct of learners and faculty in professional programs. All learners and faculty are expected to abide by these standards of professional conduct at all times and in particular while in any setting where academic, research, clinical activities or extra-curricular sports and social activities are carried out under the auspices of the University or where the learner or faculty member is representing the University or its interests.

In the Faculties of Dentistry and Medicine, learners’ professional conduct is evaluated as a component of the academic evaluation required by their program. Learners in professional programs who fail to meet expectations regarding conduct set out in this policy in a training program within the Faculties, or in any applicable Code of Conduct of their respective professional organizations and regulatory bodies, may be deemed to be unsuitable for further training and may be dismissed from their program. Faculty who fail to meet expectations regarding conduct may be subject to discipline by the University.

Concerns that a learner or faculty member has breached these standards may be brought to the attention of the Associate Dean Equity and Professionalism in the Faculty of Medicine, or to the appropriate Department Head, School Director, Site Director, Associate Dean, or Program Director in either Faculty.

1. Learners include undergraduate students, postgraduate learners, graduate students, post doctoral fellows, residents and fellows whether they are enrolled full time or part time in programs offered by the University of British Columbia or whether they are attending the University on a temporary basis as part of an elective or other program.

**STANDARDS OF PROFESSIONAL CONDUCT**

Learners and faculty are required to demonstrate the behaviours and to meet the expectations of professional conduct set out below:

1. **Honesty**

   1.1. Act with integrity and demonstrate personal and academic honesty in all interactions and communications, verbal and written.
   1.2. Conduct research in accordance with University policies and in an ethical and unbiased manner, record and report results truthfully, and credit work and ideas developed by others. Appropriately acknowledge the contributions made by others to your research, publications and other presentations.
   1.3. Accurately report and record history and physical findings, test results, and other information pertinent to the care of the patient.
   1.4. Neither give nor receive, aid in examinations unless such cooperation is expressly permitted by the instructor.
   1.5. Engage in ethical interactions with industry, by declaring and managing conflicts of interest, real or perceived. Disclose to sponsors, universities, journals or funding agencies, any material conflict of interest, financial or other, that might influence their decisions on whether the faculty member or learner should be asked to review manuscripts or applications, test products or be permitted to undertake work sponsored from outside sources.

2. **Respect for Others**

   2.1. Do not discriminate in interactions with others, on the basis of age, race, colour, ancestry, place of origin, political belief, religion, marital status, family status, physical or mental disability, sex, sexual orientation, unrelated criminal convictions, or any other ground protected by human rights legislation.
   2.2. Create and maintain an atmosphere conducive to learning and to the conduct of professional work in all learning environments (classroom and all clinical settings). Maintain personal composure and
consideration for others in all interactions. Model language, appearance, and demeanor appropriate to the academic or professional healthcare setting.

2.3. Ensure that all communications on the internet and social media are respectful and meet the same level of professionalism as would be expected in direct or other written communications with and about colleagues, instructors, learners, and patients.

2.4. Establish and maintain appropriate personal boundaries in relationships with patients, staff, learners and faculty, recognizing your potential influence over others and the vulnerability inherent in relationships in which there is a power disparity.

2.5. Respect the personal boundaries of others including, but not limited to, refraining from making unwanted romantic or sexual overtures, protecting personal information, and respecting individual workspace.

2.6. Do not engage in sexual or romantic relations with patients, or with individuals with whom you have a supervisor/supervisee relationship. Do not engage in exploitive relationships with colleagues, learners, patients, or their families for emotional, financial, research, educational or sexual purposes.

2.7. Treat patients and their families with respect and dignity both in their presence and in discussions with other members of the health care team or academic community.

2.8. Treat all members of the health care team or academic community with respect and dignity in, or out of, their presence, in written communications, and in discussions with others.

2.9. Provide feedback, oral or written, to members of the health care team or academic community, in a timely, constructive and respectful manner to identify deficits and effect change and not to embarrass or humiliate.

2.10. Respect patient autonomy by disclosing findings and test results pertinent to the patient’s care and by discussing treatment options with the patient or legal representative and by involving the patient, or legal representative, in the treatment options where appropriate and with regard to the patient’s preferences.

2.11. Adhere to the guidelines for informed consent and consult with the patient’s legal representative when a patient lacks the capacity to make treatment decisions.

2.12. Respect the intellectual property of others by adhering to University policy and guidelines related to copyright and distribution of written, audio or digital materials.

3. **Confidentiality**

3.1. Respect and maintain the privacy and confidentiality of information about patients and research and educational participants. This includes limiting discussion of patient health issues to appropriate settings for clinical or educational purposes and to those family member caregivers identified by patient consent.

3.2. Avoid potential breaches of privacy and confidentiality when communicating through various modes of communication, especially the internet and social media, and take precautionary measures including using other more secure means of communicating as required.

3.3. Act in accordance with obligations imposed by privacy legislation related to collection, storage and disclosure of personal information and maintenance and use of health records.

3.4. Adhere to data access and security regulations in both academic and clinical settings. Do not share computer login codes, communicate patient data via unsecured networks, or obtain or use any other information outside the bounds of the defined access and use regulations. Use only institution-approved personal data storage devices, such as USB keys, and use appropriate password/encryption to protect sensitive data.

3.5. Do not access personal information related to patients or any other individuals stored in files or computers in the University or clinical setting unless you require that information for research projects approved by the applicable UBC or UBC-affiliated Review Ethics Board, or to fulfill your clinical duties to a patient with whom you have a current health professional/patient relationship.
4. **Responsibility**

4.1. Be accountable to yourself and all relevant stakeholders for personal decisions in the workplace and all learning environments.

4.2. Promote and maintain personal health and well-being and monitor your physical and mental fitness to perform duties in the academic and clinical setting. Seek appropriate assistance as required in the event you are physically or mentally unfit to perform your assigned duties.

4.3. Recognize personal limitations when the situation exceeds your level of experience or competence, and consult with and refer to appropriate professional colleagues.

4.4. Follow specified protocols to disclose and address clinical errors or misjudgments. 4.5. Do not use alcohol or drugs, including prescription drugs, in any way that could interfere with academic, professional or clinical responsibilities.

4.5. Participate in the processes of self-regulation of the profession.

4.6. Report professional misconduct to the appropriate authorities while taking care to avoid unjustly discrediting the reputation of members of the health care team or of the academic community.

4.7. Model behaviour consistent with the Code of Conduct and ethics of your professional and licensing bodies, and teach and promote concepts of professional behaviour, ethical research and practice.

4.8. Maintain and enhance competence through commitment to professional development and practice evaluation.

4.9. Demonstrate self-awareness and responsibility for your actions by accepting and responding appropriately to supervision and feedback regarding academic and clinical and professional performance.

4.10. Meet expectations related to punctuality, attendance and participation in all academic classes and clinical settings including student placements. Meet deadlines for group or individual assignments, or for the submission of requested documentation and information in the clinical or academic setting. Make timely alternative arrangements when you are unable to meet stated deadlines.

4.11. Maintain fiscal responsibility and accountability in relation to clinical and research programs and contracts.

4.12. Use social media responsibly refraining from posting any information or comments related to patients, and from disclosing personal or confidential information about members of the health care team or academic community. Do not post information that is untruthful, hurtful, or disrespectful and use discretion when posting personal information.

4.13. Use computers provided in the academic or health care settings in accordance with the applicable policies and engage for personal use only as provided in the site policies.

4.14. Use personal communication devices in the academic or health care settings appropriately. Use of personal communication devices must not be disruptive or interfere with interactions with patients, families, or other health care providers. Comply with requests from patients or other health professionals to cease using personal communication devices in the academic or health care setting.
13. Policy for On-Call Coverage for Clinical Conference Days

1. Eligible Clinical Days:
   a. Pediatrics Conference
   b. BCSEPS Clinical Day
   c. St. Paul’s Clinical Day (typically held on a Saturday)
   d. Additional Sub-specialty (e.g. Glaucoma or Neuro-ophthalmology) Clinical days (typically held on a Friday)
   e. UBC Ophthalmology Research Day

2. Residents will be covered by the Staff Ophthalmologist on-call for Clinical Days held on a Friday. Clinical Day held on a Saturday do not get special coverage – Residents cover Saturdays as usual.

3. Prior to ‘the Clinical Day in question’, there will be a conversation between the Resident and Staff on-call to clarify call coverage (at least a week ahead is a good idea).

4. When the Staff Ophthalmologist is covering call for the Resident, he/she may “stack” patients to be seen by the Resident after completion of the Clinical Day. It is advised not to “stack” more than 8 (eight) patients. If this is unavoidable, the Resident and staff should cooperate to see the waiting patients.

5. When the Staff Ophthalmologist is covering call for the Resident, the Resident may be paged by the Staff Ophthalmologist during certain emergency situations. These include:
   a. Ruptured globe
   b. Lateral canthotomy/canthalysis for orbital compartment syndrome
   c. Situations where emergency patient care is required (i.e. less than 10 minute response time)

5. Staff remains willing to cover Clinical Day first call for Residents on Friday Clinical days assuming there is 100% attendance by available Residents of Academic Clinical days.

14. Policy for On-Call Coverage During OKAP and Mock Oral Examination

As the annual OKAP examination and Mock Oral Exams are part of the compulsory overall evaluation process for residents in the program, it is important that those residents with call coverage responsibility are allowed a reasonable night’s sleep beforehand. Therefore resident call coverage will cease at 10:00pm (2200hr) on night prior to the examination. Call coverage will resume within 1h of the completion of the examinations. It is the responsibility of the resident involved to Alert the “Staff on call” of the day in question about this gap in coverage. This notification shall happen at least two but preferably four weeks in advance of the OKAP or Oral Exam. In those situations where our residents are assigned exam dates on different days, it is expected that the available (non participating) resident(s) shall cover call for the resident who is sitting the exam. In all cases the residents shall endeavour to minimize a call coverage gap when possible.
15. Safety of Postgraduate Medical Trainees

Purpose

The purpose of this policy is to provide basic standards for resident safety with regards to clinical activities and travel. This policy applies while residents are undertaking activities related to the execution of residency duties.

Principles

Resident safety is a shared responsibility of Faculty of Medicine, the Health Employers Association of BC, clinical and academic departments and the trainees themselves. Occupational health and workplace safety is governed by the Occupational Health & Safety Regulations (WorkSafe BC). The Collective Agreement between the Health Employers Association of BC and the Professional Association of Residents of BC 2006-2011 outlines additional responsibilities of the employer with regard to safety of personal effects, orientation, on-call areas, workload during pregnancy and distributed training sites.

Participating sites must take reasonable measures to ensure resident safety, particularly considering hazards such as environmental toxins and radiation, exposure to infectious agents transmitted through blood and fluid and potential exposure to violence from patients or others.

Awareness of personal safety and assessment of risk is part of professional development inherent in postgraduate medical education. Residents should not suffer academic consequences for declining to participate in an activity they feel puts them at unacceptable risk of physical harm. However residents will be required to meet the educational objectives through alternate educational activities.

Clinical activities

1. Responsibility of the Program

   a) Residents should be made aware of site specific safety risks.
   b) As part of the educational curriculum, residents should be provided with general safety training including personal safety and protection of personal information, with an emphasis on risk identification and management.
   c) Special training should be provided to residents who are expected to encounter hazards such as
      (i) environmental toxins and radiation
      (ii) exposure to infectious agents transmitted through blood and fluid
      (iii) potential exposure to violence from patients or others.
   d) To protect the personal security and privacy of trainees, programs should not publish photographs and rotation schedules of named residents on publically accessible websites.
   e) Specifically related to clinical activities on-call and after hours, residents should not be expected to:
      (i) work alone after hours in health care or academic facilities without adequate support from Protection Services.
      (ii) work alone in private offices, including after hours clinics, without adequate support from Protection Services.
      (iii) walk alone for any major or unsafe distances at night
2. **Responsibility of the Resident**
   a) Residents are expected to participate in required safety sessions and abide by the safety codes of the assigned facility, unit or department including WHMIS, Fire safety or dress codes as they pertain to safety.
   b) Residents should familiarize themselves the location and services offered by the occupational health and safety office of the assigned facility.
   c) Residents should only telephone patients from a clinic or hospital telephone line. If calls must be made with a personal or mobile phone, this should be done using call blocking.
   d) Residents are expected to exercise caution. If a trainee feels that her/his personal safety is threatened, s/he should seek immediate assistance and remove themselves from the situation in a professional manner. The trainees should ensure that their immediate supervisor and/or the program director has been notified.

Pregnant residents should be aware of specific risks to themselves and their fetus in the training environment and request accommodations where indicated.

3. **Ophthalmology Specific**
   1. The ophthalmology resident is expected to see patients after hours in a safe and proper environment – for the patient and resident.
      a. The resident should never see any patient alone - particularly female residents.
      b. Patients should be seen in a neutral high traffic area - e.g. treatment room in the VGH ER or the exam lane on T5B in the JP tower. Seeing patients alone in a desolate area such as ECC after hours is discouraged.
      c. If possible, patients seen after hours should be seen with a third person present in the room.
      d. Any invasive procedures should be done in a proper environment with proper and adequate personnel and equipment support (eg. monitoring, crash cart etc). It should never be attempted in an isolated setting.
   2. The resident should be familiar with any specific equipment & protocols required to guard against accidental operator laser exposure when working with medical lasers.

**Travel**

This policy applies to travel for clinical or academic assignments.

1. **Responsibility of the Program**
   a) There is an unscheduled day between rotations to or from distributed training locations.

2. **Responsibility of the Resident**
   a) When traveling by private vehicle, it is expected that residents will execute judgement especially when driving in inclement weather or when fatigued.
   b) For long distance travel, residents should ensure that a colleague or the home residency office is aware of their itinerary.
   c) There is an unscheduled day between rotations to or from distributed training locations. When long distance travel is required, the resident should request that they not be on call on the last day of the preceding rotation.
   d) Residents should exercise caution when driving home after call if they have not had adequate rest.
16. Supervision of Postgraduate Medical Trainees

Purpose

The purpose of this document is to outline the components of supervision of postgraduate medical trainees and the respective responsibilities of physician supervisors, trainees and program administration. This is a general policy which may require interpretation by programs. It is expected that each program will consider a more specific policy or guidelines that reflect the nature, location and organization of their discipline and training program.

Postgraduate education prepares physicians for independent practice through graded responsibility and autonomy. Clinical supervision is required both to ensure safe and appropriate patient care and to promote resident professional development. Professional development of trainees includes not only clinical competence but also development of professional attributes such as judgment, self-assessment and time management.

Definitions

1. “Postgraduate trainee supervisor” or “PG trainee supervisor” or “PGTS” refers to the faculty member in the Faculty of Medicine who has direct responsibility for supervising the resident or group of residents in a particular practice or service. This physician may be
   a. Most responsible physician or “MRP”
   b. Consultant physician
   c. The on-call physician for a particular practice or service.
   d. The designation of PG trainee supervisor is in relation to a patient who may or may not be responsible for the resident’s clinical academic program during a rotation and may or may not be the Program Director.

2. “Resident” refers to a trainee enrolled in a postgraduate training program at the University of British Columbia. All residents will have licensure with the College of Physicians and Surgeons of BC. Normally this will be a temporary license for educational purposes as described by the CPSBC. In some cases, physicians with full licensure may be undertaking additional training either as ‘fellows’, enhanced skills or re-entry candidates. Regardless of licensure status, physicians undertaking duties in a postgraduate training program are deemed to be in training and requiring supervision by a PG trainee supervisor.

Principles

1. PG trainee supervisor, trainees and programs should be guided by the CMA Code of Ethics, specifically but not limited to:
   Consider first the well-being of the patient.
   Recognize your limitations, and, when indicated, recommend or seek additional opinions and services.

2. Each patient has a “most responsible physician” (MRP) who maintains overall responsibility for patient care. Overall responsibility cannot be delegated to a trainee.

3. The educational environment must facilitate safe patient care and effective learning.
Responsibility of the Postgraduate Trainee Supervisor

The attending/supervising must provide appropriate supervision for residents at all times, specifically:

1. Establish a supportive learning environment with open communication.
2. Assess, review and document resident competence in accordance with program specific policies and delegate responsibilities for patient care accordingly. The attending/supervision physician should take into account patient, trainee and context specific factors. It is expected that the PG trainee supervisor will review the residents findings, diagnosis and management plan in a timely fashion. This should be documented on the patient record.
3. Ensure residents under their supervision are aware of their responsibilities.
4. Advise patients, or their designate, that residents may be involved in their care and obtain consent for such participation. Depending on the setting this may be done by way of signage or practice brochure with negative consent (opting out).
5. Be available by phone or pager, when not available in person, respond in a timely manner and be available to attend to the patient in an emergency. When not immediately available, ensure that an appropriate alternate PG trainee supervisor is available and has agreed to provide supervision.
6. In addition to the above, when delegating specific responsibility for a diagnostic or therapeutic procedure, the PG trainee supervisor must specifically consider the need for direct observation, supervision and/or assistance. Except in an emergency, when a trainee is performing a procedure or act without direct observation, the patient or designate must be advised and provide specific consent.

The responsibility for supervising junior trainees may be delegated to a more senior resident. The PG trainee supervisor must assess trainee competence and delegate supervisory responsibility with the same care and consideration as delegation of clinical responsibility.

Responsibility of the Resident

With respect to clinical supervision, residents must be aware of their status as a trainee, exercise caution and consider their experience when providing patient care, specifically:

1. Advise patients or their designate of their status as a trainee who is working under the supervision of a named physician, the PG trainee supervisor.
2. Notify the PG trainee supervisor of their assessment and actions with regard to a patient. Notification implies direct contact and should be documented in the patient record. Notification is specifically required upon:
   a. Patient admission to a facility or service.
   b. Significant change in status.
   c. Prior to discharge from a facility or service.
   d. In emergency situations.
   e. When the resident, patient or designate has concerns about status or care.
3. Provide clinical supervision of more junior trainees. In this role, residents are expected to abide by the expectations as described for PG trainee supervisors above.
4. Notify their PG trainee supervisor if they are, for any reason, unable to carry out their assigned duties.
5. Notify the residency program director with concerns regarding level of supervision.
6. Strive to develop awareness of their limitations and seek appropriate assistance.
**Responsibility of the Program**

It is the responsibility of the residency program director or designate, in conjunction with the residency training committee, to:

1. Ensure that faculty and trainees are made aware of policies regarding clinical supervision.
2. Review this policy in light of discipline specific needs and, if necessary, develop and distribute a more specific policy or guidelines that reflect the nature, location and organization of their discipline and training program.
3. Ensure a mechanism is in place for residents to report concerns about the level of supervision.
4. Investigate and manage complaints regarding supervision.

**Responsibility of the Office of Postgraduate Medical Education**

In conjunction with the Associate Dean, Faculty Development, it is the responsibility of the Associate Dean, Postgraduate Medical Education to:

1. Ensure educational materials and workshops are available to faculty regarding where there is an identified need.

**Resources**

1. CMPA. Delegation and supervision of medical trainees. IS0888-E. 2008
2. The Faculty of Medicine strictly prohibits any form of discrimination or harassment including abuses of power. Please refer to the following Faculty wide policies:
   a. [Professional Standards for Faculty Members and Learners' in the Faculties of Medicine and Dentistry](#)
   b. [Policy and Processes to address unprofessional behaviour (including harassment, intimidation) in the Faculty of Medicine](#)
   c. [Process to Address Concerns/Complaints of Intimidation, Harassment, Unprofessional Behaviour](#)
17. UBC Ophthalmology Residents Photos

R5 Kailun Jiang
R5 Tom Liu
R5 Salina Teja
R5 Gelareh Noureddin
R4 Katie Clapson
Chief Resident
R4 Gavin Docherty
R3 Mitchell Browne
R3 Rosanna Martens
R3 Colten Wendel
R3 Myra Butler
R2 Wendy Ming
R2 Geoffrey Law
R2 Grace Qiao
R1 Henry Chen
R1 Lauren Sawatzky
R1 Carol Tadrous