Mission statement of the School of Optometry and Vision Science Residencies

To provide graduate optometrists with a programme of concentrated mentored clinical experience and education designed to produce practitioners with advanced knowledge, skill and judgement in a selected area(s) of optometric practice. This will enable them to deliver excellent clinical care, practice life-long learning and educate members of the profession.

General description of residency:

The Residency in *Ocular Disease and Glaucoma* is designed to extend and refine the optometrist's knowledge and clinical skills in the diagnostic and therapeutic management of patients with a variety of ocular diseases with an emphasis on the management of glaucoma. While the main focus of the one-year programme is on clinical training, the resident is strongly encouraged to engage in scholarly activity and will be required to present at and participate in organised seminars, as well as actively contribute to the clinical training and practical education of optometry students. The benefits of teaching and scholarly activity in refining skills and knowledge are self-evident.

**Dates of residency: July 20, 2020 – August 20, 2021**
**Salary:** $38,000 per year prorated for the additional days

**Supervisor information**
Primary Supervisors: Dr. S MacIver, Dr. C.L Prokopich

**Location:** The majority of the residency will take place in the School of Optometry and Vision Science and the Health Science Campus, Kitchener. Some sessions will be scheduled in ophthalmology offices.

**Hours:** For the majority of the residency the scheduled hours are office hours (approximately 8.30 am-5.00 p.m) for five days per week. Self-study is expected in the resident’s own time, although half a day per week is also given for self-study and administration tasks. Occasionally an evening clinic may be scheduled in lieu of a clinic during the day. The resident may also be scheduled to be on-call for one week in two or three and there may be a requirement to participate in Saturday clinics at the discretion of the Associate Director Clinical Programs, which would be expected to be one week in four or five.

**Eligibility**
Residencies at the University of Waterloo are available to those who are eligible to hold a full or an academic license with the College of Optometrists of Ontario.
If you are a graduate of an ACOE accredited programme you should apply for a full General license. All of the ACOE accredited programs are currently in North America. This means taking the CEO-ECO and the jurisprudence examinations in sufficient time to obtain the license, see Information on applying for a General Certificate of Registration, College of Optometrists of Ontario.

An academic license is available to those who have successfully completed an optometry degree programme in the United Kingdom and who hold current or past membership in the British College of Optometrists and who are certified to administer Therapeutic Pharmaceutical Agents i.e. have a TPA certification.

In all cases, the license must be in place on entry to the residency. This includes taking and passing the jurisprudence examination and obtaining the license through the College. Applicants are encouraged to take the CACO exams at the earliest opportunity, in order to obtain the Ontario license by the start of the residency.

The immunization requirements are the same as for undergraduate students admitted to the OD programme (see https://uwaterloo.ca/optometry-vision-science/future-optometry-students/admission-requirements/additional-considerations).

Residency Goals and objectives:

Goal 1: To train the resident to examine diverse and complex clinical cases in the sub-specialty areas of glaucoma, anterior segment disease, retina, and acute care.

Objective 1: To train the resident to accurately and efficiently assess patients in each of the identified subspecialties

Outcome measures:

I. The resident will be required to examine patients in each subspecialty area at the UW optometry clinics.

II. The resident will be required to provide primary care to new refugees (as part of the community grant project) – this diverse subset of patients presents unique challenges such as language barriers and a higher incidence of disease

III. The resident will be required to spend a day a week in the acute care clinic

IV. The resident will discuss each patient encounter and/or have patient files reviewed by a supervisor until the resident displays adequate competency for each specific type of examination

V. There will be bi-weekly meetings with a supervisor to discuss case management

VI. The resident will be required to see a minimum of 350 glaucoma patient encounters, 200 imaging patient encounters, 300 anterior segment patient encounters, 200 imaging patient encounters, and 300 anterior segment patient encounters.
encounters, 300 retina patient encounters, 300 acute care patient encounters (direct and supervision encounters)

VII. The resident will submit ePortfolio/Reflections based on a patient or teaching situation in which s/he will reflect on experiences gained, knowledge and skills learnt and changes to implement for improvement.

Objective 2. The resident will become proficient in utilizing and analyzing the results of imaging instruments for the management of ocular disease

Outcome measures

I. Training will be provided to allow the resident to become more proficient with the use of the following:
   a. OCT (Spectralis, Zeiss, Nidek) – anterior and posterior segment
   b. HRT
   c. Fundus Autofluorescence
   d. B-Scan Ultrasonography
   e. Fundus photos
   f. Perimetry

II. The resident will spend half-day per week in the imaging clinic providing imaging services to patients

III. The supervisor will review the files from the patients seen in imaging clinic until adequate level competency has been demonstrated

Goal 2: The resident will develop and solidify strong clinical diagnostic and management skills in the area of ocular disease and primary care.

Objective 1: To train the resident to appropriately identify when a patient needs a referral and to understand advanced management options for more complex cases

I. The resident will spend one half day a month shadowing a glaucoma specialist/general ophthalmologist.

II. Information from Visual Eyes will be used to ensure exposure to the following:
   a. Fluorescein angiography analysis
   b. SLT/ALT, peripheral iridotomy, YAG
   c. Glaucoma filtration surgery – including post op follow ups
   d. Cataract surgery
   e. Pan-retinal photocoagulation and macular grid laser
   f. Anti-VEGF injections – including post op care

III. The resident will discuss outcomes of patient care during meetings with supervisor.
IV. The resident will submit ePortfolio/Reflections based on a patient or teaching situation in which s/he will reflect on experiences gained, knowledge and skills learnt and changes to implement for improvement.

Objective 2: The resident will be scheduled to see primary care and ocular disease patients in diverse settings

Outcome measures:

I. The resident will be required to provide primary care to new refugees (as part of the community grant project)
II. The resident will be scheduled once per week in the acute care clinic
III. The resident will be expected to provide continuity of care and follow up with all patients seen whenever possible and necessary.
IV. The resident will discuss patient management and/or have patient files reviewed by a supervisor until the resident displays adequate competency in diagnosis and management
V. A supervisor will be available on-call or on-site for consultation on patients when needed
VI. The resident will submit ePortfolio/Reflections based on a patient or teaching situation in which s/he will reflect on experiences gained, knowledge and skills learnt and changes to implement for improvement.

Goal 3: To develop the resident’s knowledge in the area of ocular disease and ability to critically review the literature

Objective 1: Create three evidence based rounds presentations to present (one will be grand rounds).

Outcome measures:

I. Supervisor will work with resident to develop three evidenced based rounds to be presented over a lunch hour or during the UW residency rounds sessions. One will be grand rounds and one must be glaucoma.

Objective 2: To expose the resident to different continuing education experiences on various disease topics

Outcome measures:
I. Attend at least one large optometric/vision conference (AAO preferred). If the resident attends the AAO meeting, he/she will be required to attend the Optometric Glaucoma Society meeting as a guest – the OGS meeting is an annual meeting which outlines the up and coming clinical and translational research in glaucoma.

II. Attend CE events held at UW School of Optometry and Vision Science whenever possible (ie. Allergan Glaucoma Rounds held approx. 4x/year)

III. The resident will attend the UW June Optometry Conference

IV. Attend evening local optometry meetings (Waterloo Wellington District Optometry Society holds quarterly CE meetings – run COPE approved lectures)

V. Undertake the Evidence Based Medicine and Clinical Statistics course offered by Dr Leat

Objective 3: Efficiently and effectively use library resources to access literature and use evidence based medicine

Outcome measures:

I. The resident will attend a library tutorial at the beginning of the year.

II. Participate in a directed reading journal club with the focus of developing skills to critically appraise the clinical literature and which will cover Evidence Based Medicine and clinical statistics.

III. Appraise four journal articles at set times throughout the year

IV. The resident will read specified articles/chapters/on-line material and participate in discussions based on the material

Goal 4: To become a skilled clinical communicator

Objective 1: The resident will participate in speaking and writing opportunities.

i. The resident will present four oral presentations during the year, with the first in the Fall term. Two of these will be short rounds presentations, one will be a full Grand rounds presentation and one will be an open style oral presentation such as a 50 minute continuing education lecture, Grand rounds or seminar suitable for the UW June CE or equivalent CE event suitable for COPE approval based on patient management in which they were involved. The latter will be presented at a CE event, grand rounds or residency seminar setting.

ii. The resident will be encouraged to submit a poster to a recognized optometry conference. A supervisor will work with the resident during August to develop an acceptable abstract with the goal of submitting for ‘Resident’s Day’ at the AAO (abstract submission due end of August)

iii. Develop a publishable quality paper based on a case in which the resident was involved

iv. The resident will participate in a series of workshops on writing skills, oral communication skills and case study development.
Goal 5: To develop skills to become an effective clinical educator

Objective 1: The resident will be scheduled as a lab-teaching assistant in the advanced clinical disease lab for third years.

Outcome measures

I. The resident will work with the course instructor (presently Dr. S. Maclver) to instruct and teach one of the clinical techniques in the lab. The resident will be responsible for preparing a pre-lab and performing a demonstration as well as be responsible for ensuring all the materials for the lab are prepared in time for lab.

II. The resident will receive teaching feedback from the course instructor and from the undergraduate students.

III. The resident will assist with the injections for optometry workshop that is held over the course of a day in the winter term for third year optometry students.

Objective 2: The resident will be involved in the clinical supervision of optometry interns

I. The resident will be scheduled to supervise undergraduate UW optometry interns in the Ocular Health Clinic and the Health Sciences Optometry Clinic.

II. The resident will participate in a series of workshops to prepare and develop the resident’s skills for supervising undergraduate UW optometry students.

III. The resident will discuss cases seen when supervising with the supervisor if they are present – a supervisor will always be available for consultation in person or by phone.

Goal 6: To develop the resident’s communication and knowledge base to be able to engage in interprofessional education, collaboration, and care.

Objective 1: The resident will collaborate with the family health team while at the Health Sciences Optometry Clinic.

Outcome measures:

I. The resident will have access to the EMR of the patients at Center for Family Medicine (CFFM, this arrangement between HSOC and CFFM already exists) to check blood work, request blood work, and send reports about mutual patients.

II. The resident when available, will sit in on trans-disciplinary/inter-professional rounds that run for the family medicine, pharmacy and optometry learners.
III. The resident will participate in optometry teaching days to the family medicine residents and medical students

Objective 2: The resident will communicate effectively through referrals/reports to ophthalmology and reports to other health professionals regarding patient care

Outcome measures:

I. The resident will have a seminar with their supervisor(s) on how to effectively and efficiently communicate with other health professionals

II. Letters/reports for complex patients (ex. Blood work requests, glaucoma surgery referrals, etc.) will be reviewed by supervisor(s) prior to sending until appropriate level of competency has been demonstrated

Objective 3: The resident will collaborate with ophthalmology

Outcome measures:

I. As above, the resident will be required to shadow a local ophthalmologist one half a day each month

Anticipated Weekly Curriculum:

TERM 1 : Fall

<table>
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<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>8:30 am–12 pm</td>
<td>OH – Direct Care (2-3 pts)</td>
<td>Acute Care – direct care</td>
<td>HSOC Direct Care – Glaucoma patients (2-3 patients)</td>
<td>OH – direct care</td>
<td>OH</td>
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<tr>
<td>1:00-4:00 pm</td>
<td>Acute Care – Direct Care</td>
<td>OPT 375L</td>
<td>Self Study</td>
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<td>ACC</td>
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<td>5:00-9:00</td>
<td>OH imaging clinic</td>
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**Notes**

- OH = Ocular Health clinic

Φ **Shadow an ophthalmologist:** Once a month, the resident will have the opportunity to shadow and be an intern with a local ophthalmologist (depending on OMDs availability) – we anticipate this being with Drs. Chan (Glaucoma specialist) and/or McAllister (general OMD) who have expressed interest in helping with our program.

**Notes**

- Between the terms the schedule will turn to 8:30am-5pm of direct care in the same designated clinics during regular schedule with the exception of Thursday afternoons remaining self-study.
- Part of Tuesday mornings are reserved for classes, workshops and rounds.

**TERM 2: Winter**

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<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
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<tbody>
<tr>
<td>8:30 am– 12 pm</td>
<td><strong>OH – Direct Care</strong> (3-4 pts)</td>
<td><strong>Acute Care Clinic</strong></td>
<td><strong>HSOC Direct Care –3 patients</strong></td>
<td><strong>Acute care – direct care</strong></td>
<td><strong>OH</strong></td>
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<tr>
<td>1:00-4:00 pm</td>
<td><strong>OH – Supervision ( 3 interns – 4-5 patients)</strong></td>
<td><strong>HSOC – Glaucoma patients (3 interns – 4-5 patients)</strong></td>
<td><strong>Acute care - supervising</strong></td>
<td><strong>Acute Care Clinic</strong></td>
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<tr>
<td>5:00-9:00</td>
<td><strong>OH imaging</strong></td>
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**Notes**
• Between the clinic terms the schedule will turn to 8:30am-5pm of direct care in the same designated clinics during regular schedule with the exception of Thursday afternoons remaining self study

TERM 3: Spring

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<tbody>
<tr>
<td>8:30 am– 12 pm</td>
<td><strong>OH – Supervision</strong> (2-3 interns)</td>
<td>Self study</td>
<td>HSOC</td>
<td><strong>Acute care – direct care</strong></td>
<td><strong>OH/ACC – supervising</strong></td>
</tr>
<tr>
<td>1:00-4:00 pm</td>
<td><strong>OH – Supervision (Glaucoma)</strong></td>
<td><strong>OH</strong></td>
<td><strong>HSOC</strong></td>
<td><strong>Acute care – supervising</strong></td>
<td><strong>OH/ACC</strong></td>
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**Notes**

• Part of Tuesday mornings are reserved for classes and workshops.

**HSOC shift on Fridays may become supervision depending on comfort level and skill level of the incoming Resident.

**Supervision:**
Drs. Maclver and Prokopich will be the main mentors and supervisors of the resident.

**Health Science Clinic (Glaucoma and Primary Care):** The majority of the supervision when the resident is scheduled at HSOC clinic will be with Dr. Maclver. At times other optometrists will be involved.

**Ocular Health and Acute Care** Dr. Nadine Furtado and Dr. C.L. Prokopich will be the main supervisors of the resident in the OH and Acute Care clinic. At times other optometrists who are in clinic will be involved.

**Clinical Experience:**

Residents will start in the fall session with direct care focusing on the areas of disease management, acute care, and glaucoma management, as well as some primary care when at HSOC. The number of patients per session will depend on the clinic in which they are working. Patient numbers and complexity of management skills will be expected to increase during the year. This will be monitored closely to be sure the resident is seeing a good variety of disease patients, with an emphasis on glaucoma management. The resident will get more autonomy with management as the residency year progresses and he/she starts to supervise interns.

A portion of the resident’s time will also be devoted to self-reflection, critical analysis of the literature, and professional self-development. The resident will do this through case review/consultation and by having access to library resources.

**Scholarly/didactic activities**

In addition to the clinic curriculum, the Resident must also complete the following:

- **a)** Present two rounds and one grand rounds presentations. One case is to be glaucoma. This will be given in the Rounds sessions arranged by the Head of Residencies.

- **b)** Present an open style oral presentation such as a presentation (50 min) suitable for the school CE program, Grand rounds or seminar or equivalent during their residency and suitable for being COPE approved (or equivalent). This should be presented at a CE event, grand rounds or residency seminar setting.

- **c)** Submit a case report/review article in a form suitable for publication which may be based on one of the three grand rounds presentations.

- **d)** Attend one external optometry meeting (the American Academy of Optometry, if possible - a travel budget is made available) and the UWSOVS June CE program. The resident is encouraged to submit a poster or participate in the development of a poster for the meeting they are to attend, for example, submitting for the Resident’s day at the AAO. If the resident would like to
submit a poster for the Resident’s day, the supervisors will work with the resident ahead of time to prepare a submission.

e) Review 4 journal articles in a write up that are to be submitted to the supervisors for evaluation at designated times throughout the year (dates to be determined by supervisors).

f) Participate in a directed reading journal club with the focus of developing skills to critically appraise the clinical literature. This may include on-line elements and will include topics on clinical statistics, evidence-based medicine and research design.

**Educator/knowledge sharing component**

**The resident will:**

- Be a Teaching Assistant (TA) for a lab course in the UW optometry curriculum (OPT 375L)
- Be a TA for the Injections for Optometry Workshop that runs during winter term for third years (a day long workshop)
- Supervise the fourth year optometry interns in disease clinic setting
- The resident is encouraged to submit an abstract on a case to a credible optometry conference (e.g. AAO)
- Present two rounds and one grand rounds presentations.
- Present an open style oral presentation such as a seminar, lecture (50 min) or Grand rounds suitable for presentation at June CE event or equivalent and suitable for COPE approval. This will be presented at a CE event, grand rounds or residency seminar setting.
- Participate in a series of workshops on writing skills, oral communication skills and case study development.
- Participate in a series of workshops to prepare and develop the resident’s skills for supervising undergraduate UW optometry students.

**Additional activities**

Clinical research projects – if the resident is interested in expanding clinical research skills, then an opportunity to participate in ongoing clinical research projects can be explored.

**Assessment and Evaluation of the Resident**
Clinical skills evaluation:
- There will be at least one midterm-evaluation of skills and case management each term (oral and written feedback generated by supervisors)
- Final evaluation of skills and case management (oral and written feedback generated by supervisors)
- The resident will receive ongoing oral feedback during bi-weekly meetings with supervisors
- The resident will receive an evaluation of his/her ePortfolio/Reflections

Teaching evaluations:
- Peer- evaluation of the teaching seminar in the lab course (done by supervisor)
- Teaching evaluations from undergraduate students in the clinic and laboratories

Didactic component evaluations:
- Review paper will be graded using global rating scale
- Grand Rounds/Seminars will be graded by audience (faculty, other residents and students) and supervisors using a written global rating scale

Overall progress
- The resident will receive a written evaluation at least once per term on their overall progress in the residency.

Requirements for residency completion and awarding of certificate
To successfully complete this residency, the resident must complete all components of the program outlined, including patient care, laboratory teaching, attendance at required classes and workshops, all oral presentations, portfolio/reflection, patient log and article completion.

Approved leaves of absence for reasons such as sickness or compassionate reasons in excess of six days per year must be made up at the end of the program.

Certificates will be awarded at the end of year WOVS Residency ceremony.

Liability Insurance
The University of Waterloo’s general liability insurance policy, including professional and malpractice liability insurance, provides coverage for current University of Waterloo Optometry Residents in respect of any activity required by the discipline within their University of Waterloo residency program, whether their education or training is conducted on or off the campus.
Benefits

**Vacation and Sick Leave:** The Resident is entitled to 10 days of paid vacation, 10 days of leave for attending conferences, up to 6 days of sick leave, and to paid statutory holidays.

The following public and University of Waterloo holidays will be observed during the residency year:

New Years Day  
Family Day  
Good Friday  
Victoria Day  
Canada Day (July 1)  
Civic Holiday  
Labour Day  
Thanksgiving  
Christmas Day (December 25)  
Boxing Day (December 26)  
University of Waterloo Holiday Break (rotates yearly)

The list of paid holidays can be found at: [https://uwaterloo.ca/human-resources/support-employees/payroll/paid-holidays](https://uwaterloo.ca/human-resources/support-employees/payroll/paid-holidays)

**Medical:** The resident will be enrolled in the University of Waterloo, Extended Health Care Plan. For more information see [https://uwaterloo.ca/human-resources/support-employees/benefits/benefit-eligibility-and-eligible-dependents](https://uwaterloo.ca/human-resources/support-employees/benefits/benefit-eligibility-and-eligible-dependents).

**Optometric Licensure:** WOVS will pay one year of fees to the College of Optometrists of Ontario. This will be for the year commencing in January of the Residency program.

**Termination of Residency**

Termination of the Residency may be considered in situations where the Resident is functioning in a manner considered to be of potential danger to the well-being of patients, or contrary to policies or procedures of the Clinic or workplace, or contrary to regulations or standards of care of the regulating body of Optometry or the prevailing laws of the Province or Canada, or for unsatisfactory performance.
Should a termination of employment be deemed necessary, Employment Standards Act guidelines will be followed.