World Council of Optometry
Education Mentor Grant 2024-25
Final report

Project: Canada-Switzerland inter-institutional exchange for Swiss therapeutic scope expansion

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(v 2.0)

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BRIEF SUMMARY OF PURPOSE OF GRANT

Switzerland optometry (WHO “advanced” level of proficiency[1], where optometrists use diagnostic pharmaceutical agents) plans to upgrade its scope of practice to include therapeutic pharmacological ocular treatment in the coming years, in the way the Canadian province of Quebec did in the early 2000s. To achieve this, a master’s degree will be developed at the *Fachhochschule Nordwestschweiz* (FHNW), Switzerland's only optometry university. This would allow Swiss optometrists to obtain the WHO “expert” level of proficiency in optometry.

This WCO Education Mentor Grant allowed Dr. Benoit Tousignant, Associate Professor from the *École d'optométrie de l'Université de Montréal* (ÉOUM), to take several short trips to Switzerland to share his expertise for the development of this academic project. He was be based in nearby Italy during this time, while on research and study leave (sabbatical) from his usual position et ÉOUM.

DESCRIPTION OF THE PROJECT

Since the early 2000s, the optometry profession in Quebec has undergone a major expansion of its scope of practice. Prior to this expansion, Quebec optometrists, like those in most Canadian provinces at the time, practiced independently, offering diagnostic ocular services using diagnostic therapeutic agents. The expansion of their scope of practice aimed for optometrists to include therapeutic ocular services, using prescribed pharmaceutical agents for the treatment of ocular diseases. Quebec optometrists currently practice at the WHO “expert” level of proficiency. Faced with sometimes limited access to ophthalmology, the optometry profession can thus offer better eye health services to the population, by increasing access to primary eye care.

Optometry in Switzerland is looking to expand its scope of practice in a similar way. To support this evolution by drawing on Quebec expertise and experience, a collaboration has been set up between Switzerland, through the *Fachhochschule Nordwestschweiz* (FHNW), and Quebec, through the *École d'optométrie de l'Université de Montréal* (ÉOUM).

The reference framework to upskill Swiss optometrists used in this project is the World Council of Optometry (WCO) Competency Framework for Optometry. [2]

[1] World Health Organization, Eye Care Competency Framework; 2022.
[2] World Council of Optometry WCO Competency Framework for Optometry; 2024.

TRIP #1 (IN PERSON)

September 21-22, 2024

- Meeting with Stephane Hinni, Academic Dean of Optometry at FHNW, during Opt-X meeting in Baden (continuing education event for Swiss optometrists)
- Meetings with various faculty members (Tatjana Hug, Daniela Nosch) and FHNW Director Dr. Alex Muntz.
- Exchanges were related to recently expanded optometry scope of practice with regional differences in obtaining diagnostic pharmaceuticals, the recent developments of the potential establishment of refracting opticians, the development of the master's degree to qualify optometrists to TPA
    - Master's degree start date in 2028
    - Tracks and contents are likely to include anterior segment, medical retinal & low vision, binocular vision and pediatrics, diagnostics and therapeutics, public health

TRIP #2 (IN PERSON)
November 25-28, 2024

- Tour of FHNW optometry school by Stéphane Hinni (Academic Dean of Optometry at FHNW) and Dr. Daniela Bosch (Prof at FHNW)
- Introductions to other FHNW teaching staff and faculty
- Meeting with FHNW to discuss master's program content to upskill optometrists.
    - Master's program project is one of the proposed strategies to elevate Swiss optometry to the use of prescribed therapeutic agents, using an "educate then legislate" approach.
    - Other stakeholder consultations by FHNW (local education and professional) are under way
    - Master's program would in English, possibly offered to other European countries (Norway, the Netherlands, etc.) who have optometry at the WCO3 level.
    - Switzerland could become continental Europe's leader in upskilling optometrists to the WHO "expert" level of proficiency
- Quebec - Switzerland mutual professional recognition agreement (MPRA)
    - Another important strategy that has come to the forefront since mid-2024 is a potential Quebec-Switzerland accord for mutual professional recognition
    - Discussions took place to establish what would be needed to reach a mutual professional recognition agreement (MPRA) between Quebec and Switzerland:
        - comparison of competencies and which are lacking in Switzerland optometrists (see Appendix)
        - MPRA would serve as an advocacy tool to change Swiss legislation, by having an external jurisdiction practicing at the WHO "expert" level of proficiency formally recognize Switzerland's level of proficiency
    - Participated in multiple meetings as a representative of ÉOUM, with Stéphane Hinni of FHNW, Order of optometrists of Quebec delegation, Quebec government and SEFRI (Swiss government agency in charge of professional regulation)
- Meetings with representatives of two professional optometric associations: SSOO and AOR, to assist their advocacy strategies.
    - Exchanges on historical perspectives and on how Quebec evolved in its scope of practice early 2000's
    - Discussed challenges related to possible refracting opticians in the future. Ophthalmology seems to be supporting and advocating for this.
    - Discussed relationships with opticians and OMDs generally
- I was invited to lecture to 130 optometrists, motivated to advance their knowledge in ocular disease. Case-based presentation on ocular disease, on conditions relating to WHO "expert" level optometric proficiency.

MEETING 28 FEB 2025 (online)

- Online meeting to discuss progress on Quebec-Switzerland recognition
- FHNW representatives: Alex Muntz (Director of FHNW Optometry), Stéphane Hinni (Academic Dean of Optometry at FHNW), Dr. Daniela Bosch (Prof at FHNW)
- Quebec Order of Optometrists representatives: Marco Laverdière, General Director, Claudine Champagne (Deputy Director), Dr Éric Poulin (President)
- Myself as ÉOUM representative
- Further discussions on plans for Swiss TPA implementation
    - discussed historical aspects of Quebec experience
    - Presentation of predicted path forward by Alex Muntz (see slides below), description of master's program implementation process at FHNW and its progress
        - Stakeholders' meetings underway: ophthalmology, policymakers, FHNW. First meeting was in Sept 2024, next in May 2025 and October 2025
        - Master's program aimed to launch in 2027, in English
        - Focus: Advanced Clinical Training in diagnostics & therapeutic procedures
        - Key Specialization Areas
            - Anterior Eye & CL
            - Medical Retina & Low Vision
            - BV & Peds
            - Diagnostics & Therapeutics
        - Supports primary eye care expansion and collab with ophthalmology
    - Positioned to attain WHO "expert" level of proficiency
    - Aligns with healthcare system needs and WCO education standards (see Appendix)
    - Contents of TPA portion of master's program would contain a strong practical component (advances diagnostic skills) and reteaching of techniques, and patient care.
    - Patient care rotations would be done ideally in settings where optometrists practice using therapeutics
        - talks underway in Scotland
        - possibility in Quebec as well; could be either in academic clinics or affiliated private practices which already host students for rotations or have the capacity and credentials to do so

MARCH 2025 TRIP (in person)

- Follow-up meetings with Stéphane Hinni from FHNW (Academic Dean for optometry)
- Conversation on the progress of the master's program, its content, and the administrative process that is taking longer than anticipated.
- Meetings and exchanges with different faculty members talking students
    - Expectations of how the profession would evolve in the future
    - Marked interest in higher developed competencies in ocular therapeutics

OVERALL ASSESSMENT

Overall, my various trips and meetings in Switzerland have allowed me to get a deeper understanding of the profession there. I find Swiss optometry is prepared to move forward, motivated to do so, willing to follow in many of the steps that North American jurisdictions have taken in the past decades to go towards therapeutic eye care. However, unsurprisingly, there are some challenges: administrative delays, academic resources to develop, and political tensions that are still present and that need to be overcome in the coming years.

SWOT analysis
Strengths:

- Strong motivation from faculty, school administration, student population
- High level of competency in teaching diagnostics levels
- Realistic views of the steps that need to be taken for the scope expansion to become a reality
- Strong presence on the professional and regulation scene of Optometry in Europe
- Very good progress in developing the master's program and realistic views of the timeline to achieve it

Weaknesses:

- With a high number of ophthalmologist per capita and compact geography, there is less of an obvious population-based need or public health need for optometrists to prescribe medication and take on a stronger primary eye care position. Advocacy efforts are focused on ageing population and increase demand for eye care in the coming decades.
- No current reimbursement schemes from insurance companies for optometric fees
- Currently, there is a limited number of places for the practical part of the master's program to be done in Switzerland, as there are no primary care optometry practices. Talks are underway to find international sites (Scotland, UK, Canada)

Opportunities:

- Partnerships and collaborations with other optometry organizations: Canada (University of Montreal and the Québec order of optometrists), UK optometry, Scottish optometry, Norwegian optometry. While some of these jurisdictions do have therapeutically qualified optometrists, other have strong optometry and ophthalmology collaborations, which includes some potential training sites for interns doing the master's program.
- Switzerland would be doing the masters in English, which could serve as an attraction pole for many other European countries to send students. Switzerland could become a leader in continental Europe for moving optometry forward toward therapeutics

Threats:

- There is currently a strong movement from Swiss opticianry to try to introduce refracting opticians. This is supported by the ophthalmology lobby and contested by optometry. This issue takes the focus away from the question of therapeutically qualified optometrists for the regulatory and government agencies and could cause delays. Furthermore, it is seen as a potential threat and erosion to the base of the competencies of optometrists.

Respectfully submitted,

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Appendix - Analysis of current Swiss optometry training level, curriculum and competency elements to develop

Comparison of training and skills

The current FHNW training program corresponds to the “advanced” proficiency level competency of the WHO Eye Care Competency Framework (bachelor’s degree).

The level of training and practice in Quebec corresponds to the “expert” proficiency level competency of the WHO Eye Care Competency Framework (professional doctorate degree).

The training at FHNW is 3 years at university, following a mandatory prior professional training in optics, compared to 5 years for the doctorate in optometry (OD) in Quebec Patient exposure in the clinic is 150 patients, compared to approximately 700 patients in the OD program.

The FHNW program is the equivalent of 90 university credits (80 ECTS).

Curriculum elements and related competencies to be developed

In this context, the curriculum and competencies to be developed to achieve WHO expert level of proficiency for Swiss optometrists can be highlighted using the WCO Competency Framework for Optometry Competency-curriculum domains 3 (Ocular health and ocular disease assessment and management) and 5 (Professional Practice).

They mainly relate to

- Ocular therapeutics for the pharmaceutical or non-pharmaceutical management of urgent or low-morbidity ocular conditions, co-management or referral of pathological ocular conditions of greater morbidity
- Ocular pharmacology, in connection with ocular therapeutics
- Evidence-based practice in the therapeutic care of pathological eye conditions

More specifically, they include the following highlighted (yellow) elements, taken from the WCO Competency Framework for Optometry[3]

- **Competency-curriculum domain 3: Ocular health and ocular disease assessment and management**

Competency (element)	Performance criteria	Curriculum elements	Related competencies as per WHO ECCF*
3.1: Assesses the ocular adnexa and the eye	3.1.1 The components of the ocular adnexa are assessed for their structure, health and functional ability. 3.1.2 The components of the anterior segment are assessed for their structure, health and functional ability. 3.1.3 The components of the posterior segment are assessed for their structure, health and functional ability.	• ocular anatomy and physiology • ocular disease, ocular signs of systemic disease • slit-lamp biomicroscopy • gonioscopy • keratometry • corneal topography • corneal sensitivity • pachymetry • ophthalmoscopy • binocular indirect ophthalmoscopy • fundus biomicroscopy • imaging techniques: fundus photography, autofluorescence, wide-field imaging, optical coherence tomography (as available at time of initial publication) • lacrimal function and ocular surface tests • pharmacology: vital stains, diagnostic pharmaceuticals	**PA3.3 External eye examination** Conducting a comprehensive examination of the structure and function of the ocular adnexa, face, and general observations of the body. **PA3.4 Anterior segment examination** Conducting a comprehensive examination of the structure and function of the anterior segment of the eye, together with a basic systemic review. **PA3.5 Posterior segment examination** Conducting a comprehensive examination of the structure and function of the posterior segment of the eye, together with a basic systemic review, such as for diabetes and hypertension.
3.2: Assesses central and peripheral sensory visual function and the integrity of the visual pathways	3.2.1 Vision, visual acuity and other measures of visual function are measured. 3.2.2 Visual fields are measured. 3.2.3 Color vision is assessed. 3.2.4 Pupil function is assessed.	• ocular anatomy and physiology (e.g., retina, visual pathway, cortex, afferent and efferent pupil pathways) • visual science • communication • objective and subjective methods of assessing visual acuity • amblyopia • static and kinetic perimetry, automated perimetry, microperimetry, Amsler, confrontation • screening and diagnostic color vision tests • pupil reflex testing, cycle time, evaluation of anisocoria • diagnostic pharmaceuticals in pupillary testing	**PA3.7 Examination using specialized equipment** Conducting comprehensive tests to examine, including use of contact tonometry, fundus and peripheral retinal examination under mydriasis, tear film analysis, pachymetry, Optical Coherence Tomography (OCT), axial length biometry, gonioscopy, contact lens assessment; and basic psychophysical and systemic testing where relevant.
3.3: Assesses signs and symptoms found during the ocular examination that have significance for the patient's systemic health	*3.3.1 Signs and symptoms* relating to systemic diseases, such as but not limited to hypertension or diabetes, are referred for further investigation.	• communication and interpersonal skills • health law, ethics and codes of professional conduct • confidentiality and privacy regulations • intra- and inter-professional communication • case history and symptomatology • pharmacology, systemic drugs, drug interactions • ocular anatomy and physiology • ocular disease, ocular signs of systemic disease • systemic diseases with ocular involvement/side effects	**PA3.5 Posterior segment examination** Conducting a comprehensive examination of the structure and function of the posterior segment of the eye, together with a basic systemic review such as for diabetes and hypertension.

*Eye care competency framework. Geneva: World Health Organization; 2022. License: CC BY- NC-SA 3.0 IGO.
WHO abbreviations: PA=Practice Activities, CAC=Community and Advocacy Competencies, PMC=Professionalism Competencies,

[3] WCO Competency Framework for Optometry. Saint Louis, Missouri: World Council of Optometry; 2024.

• Competency-curriculum domain 3: Ocular health and ocular disease assessment and management

Competency (element)	Performance criteria	Curriculum elements	Related competencies as per WHO ECCF*
Element 3.4: Demonstrates knowledge of appropriate prescription of therapeutic pharmaceutical agents for different conditions	3.4.1 Identifying the appropriate pharmacological intervention and alternatives required to address the eye condition, including expected timelines and identifying other care providers who may be involved. 3.4.2 Designing and coordinating an eye care management plan through interprofessional practice, and reviewing progress towards the desired outcome. 3.4.3 Recognizing adverse side effects relating to therapeutic use. 3.4.4 Screening for inappropriate prescribing or misuse of therapeutic agents.	• ocular anatomy and physiology • ocular disease and trauma • clinical assessment of ocular health • neuro-ophthalmology • pharmacology: pharmacodynamics, pharmacokinetics • therapeutic pharmaceutical agents	**PA7.1 Identifying the intervention** Identifying the appropriate intervention and alternatives required to address the goals of a person, their family, and carers, including expected timelines and identifying other care providers who may be involved.
Element 3.5: Prescribes pharmacological and other regimens to treat ocular disease and injury	3.5.1 Pharmacological agents are selected and recommended. 3.5.2 The effect of ocular non-prescription therapeutic treatment is monitored and appropriate changes in management recommended. 3.5.3 Patients are instructed on the correct use, administration, storage and disposal of pharmaceutical agents. 3.5.4 Patients are instructed about precautionary procedures and non- pharmacological and palliative non- prescription therapeutic management. 3.5.5 Patients are instructed in the avoidance of cross-infection. 3.5.6 Non-pharmacological treatment or intervention procedures, therapeutic device fitting and emergency ocular first aid are performed to manage eye conditions and injuries. 3.5.7 The patient's risk factors for poor adherence to instructions regarding the use of non-prescription therapeutic medications is assessed and addressed. 3.5.8 Non-prescription therapeutic medications are supplied.	•ocular anatomy and physiology • ocular disease and trauma • clinical assessment of ocular health • neuro-ophthalmology • pharmacology: pharmacodynamics, pharmacokinetics, therapeutic drugs	**PA8.4 Pharmacological care** Providing pharmacological care, including prescribing ocular therapeutics and myopia control agents, and recognizing adverse side effects relating to therapeutic use, seeking support for complex cases.

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• Competency-curriculum domain 3: Ocular health and ocular disease assessment and management

Competency (element)	Performance criteria	Curriculum elements	Related competencies as per WHO ECCF*
3.6: Provides or directs patients to emergency care	3.6.1 Situations requiring emergency optometric care and general first aid are identified. 3.6.2 Emergency ocular treatment and general first aid can be provided.	• ocular anatomy and physiology • ocular disease and trauma • clinical assessment of ocular health • neuro-ophthalmology • pharmacology: pharmacodynamics, pharmacokinetics, therapeutic drugs • case history • clinical placements (hospitals, acute centers) • practice management	**PA8.3 Clinical care** Providing nonsurgical care, seeking support for complex cases.
3.7: Cooperates with ophthalmologist/s in the provision of pre- and post- operative management of patients	3.7.1 Pre-operative assessment and advice are provided. 3.7.2 Post-surgical follow-up assessment and monitoring of signs according to the surgeon's requirements and the procedure are undertaken. 3.7.3 Emergency management for observed post-surgical complication is provided. 3.7.4 Appropriate referral for further post- operative treatment or assessment of complications is arranged.	• communication and interpersonal skills • informed consent • health law, ethics and codes of professional conduct (including and recognizing scope of practice and professional limitations) • case review and analysis • clinical placements • relative urgency • intra- and inter-professional care and referral • ocular disease • pharmacology • knowledge of surgical procedures, complications and adverse outcomes	**PA8.5 Surgery** Providing minor and non-complex surgery, including managing pre- and post-surgical care, and seeking support for complex cases.

5. Competency-curriculum domain 5: Professional practice

Competency (element)	Performance criteria	Curriculum elements	Related competencies as per WHO ECCF*
5.2: Obtains the case history	5.2.1 The reasons for the patient's visit are elicited in a structured way. 5.2.2 Information required for diagnosis and management is elicited from the patient. 5.2.3 Subject to the patient's consent, pertinent information from previous assessments by other professionals or information from other people is sought and interpreted for relevance to the patient's management.	• health law, ethics and codes of professional conduct • informed consent • legal issues in health care, negligence, tort • confidentiality and privacy regulations • legal and practical aspects of task delegation • staff training and review	**PA3.1 Case History** Evaluating information and tailoring questions to further investigate potential differential diagnoses in the eye. **PA1.2 Confirming consent and assent** Adhering to the legal and/or organizational policies to confirm and obtain consent and assent, including in complex cases.
5.3: Makes general observations of patient	5.3.1 Physical and behavioral characteristics of the patient are noted and taken into account. 5.3.2 Obtains the case history and makes general observations of the patient	• systemic disease • ocular disease • psychology of behavior • psychology of behavior, behavior modification, counselling • communication and interpersonal skills	
5.4: Refers patients and receives patient referrals	5.4.1 The need for referral to other professionals or rehabilitative services for assessment and/or treatment is recognized, discussed with the patient and a suitable professional or service is recommended. 5.4.2 Timely referral, with supporting documentation, is made to other professionals. 5.4.3 Patients can be jointly managed with other health-care practitioners.	• psychology of behavior, behavior modification, counselling • communication and interpersonal skills • informed consent • health law, ethics and codes of professional conduct • intra- and inter-professional care and referral • intra-and inter-professional communication	**PA6.1 Referrals** Initiating referral connections and exploring options for additional services required; identifying those best prepared to address the needs of a person, their family and carers. **PA6.2 Managing referral information** Managing referral information for incoming referrals and providing all necessary information to the provider when referring a person. **PMC6.3 Managing relationships** Manages relationships with a person and other practitioners to work respectfully and collaboratively, addressing any conflicts that may occur.

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