

HELPING PEOPLE SEE 2024-25 PROGRESS REPORT



TABLE OF CONTENTS

Director's Message	1
Goal 1: Waterloo Eye Institute	2
Goal 2: Patients and communities	6
Goal 3: Research	11
Goal 4: Develop talent	18
Goal 5: Sustainable and diverse communities	24
Goal 6: Innovation and Entrepreneurship	28

SCHOOL OF OPTOMETRY & VISION SCIENCE BY THE NUMBERS

98%

of patients would recomend our clinic services

\$10.2M

Research funding from all sources, 2024–25¹

74

Peer-reviewed journal articles catalogued by Scopus, 2024

97%

of OD students graduated within 4 years, 2024

100%

of graduating students ultimately passed board exams, 2024 ²

14

Student clubs, 2024-25

96

Clerkship sites offered to 4thyear students for 2025-26 \$4.6M

Total fundraising,
May 1, 2024 - April 30, 2025

8

Medals or prizes won at international invention exhibitions since 2023³

¹ Fiscal year. Not including funding for CEVR, a research collaboration with The Hong Kong Polytechnic University.

² OEBC and/or NBEO exams to practice as optometrists. One student didn't complete the program for non-academic reasons.

³ By startup companies involving members of the School of Optometry & Vision Science as founders.

DIRECTOR'S MESSAGE

Since we published the University of Waterloo School of Optometry and Vision Science 2024-2029 Strategic Plan in early 2024, this is our first opportunity to reflect on the progress made so far. It is our commitment to provide regular updates to highlight what we have accomplished with our partners and what exciting opportunities we see on the horizon.



This is a particularly important time for the School and optometric profession as advocacy efforts ramp up provincially and nationally with the call for a national strategy for eye care. With the passage of Bill C-284 in November 2024, we are supporting the Canadian Association of Optometrists' effort to ensure that the Minister of Health tables a strategy that recognizes optometrists' important primary eye care role in health and the role of vision scientists in research that will result in better diagnosing, managing and treating diseases of the eye and beyond.

As the only English-language school of optometry in Canada, we strive to be a national resource to the profession by providing not only excellent education for the next generation of optometrists but also evidence for advocacy, research-informed continuing professional development and partnership for policy development and research. In recent years, we have strengthened our relationships with associations and colleges across the country and we hope to further strengthen these partnerships going forward.

A major milestone was the groundbreaking for the Waterloo Eye Institute (WEI) in June 2024. A once-in-a-generation modernization, expansion and reorganization, the WEI will be Canada's premier centre for optometric patient care, research and clinical education. We successfully moved the Waterloo Clinic to a nearby interim location in October 2024 so patient care could continue with minimal disruption. Construction has since been proceeding well.

On a personal note, I finished my second and final term as School director at the end of June 2025, so it has been especially meaningful to me to witness the amazing accomplishments of our talented teams over the past year. I have every confidence that our next director, Dr. Ben Thompson, will continue to make great progress on our Strategic Plan goals and take the school to new heights.

Going forward, the School will be in excellent hands – not only because of Dr. Thompson's leadership but also because of the empowerment of our faculty, staff, students and partners. I'm proud of how everyone has come together to achieve our collective goals, and the support that we have received from friend and partners both at home and abroad. It's through internal and external collaboration, now and in the future, that we will achieve our mission to help people see.

Stanley Woo, OD, MS, MBA, FAAO

Fenley Now, or

Director, School of Optometry & Vision Science

University of Waterloo

STRATEGIC PLAN GOAL 1: WATERLOO EYE INSITUTE

Establish and build the Waterloo Eye Institute as Canada's leading eye and vision care centre of excellence.

OBJECTIVES

- 1. Provide exceptional care to patients through the continuum of eye and vision care from wellness to rehabilitation.
- 2. Modernize clinic technology and infrastructure, including clinical research infrastructure.
- 3. Bring new techniques and treatments from the lab to the clinic through a cross-disciplinary research program that enhances the delivery of patient care and creates global impact.
- 4. Develop the Waterloo Eye Institute Teleoptometry Centre to increase access to comprehensive remote eye care and provide infrastructure for best-practice clinical education.
- 5. Build upon the strengths of the Waterloo Eye Institute Seeing Beyond 20/20 campaign to more deeply engage with alumni, the optometric profession, industry, government and philanthropic groups.
- 6. Successfully operationalize building phasing and completion with minimal disruption to the School's multiple missions.



GOAL 1: ACCOMPLISHMENTS

Construction of the WEI and move to interim clinic

We are building a new national centre of excellence in optometric patient care, vision research and clinical education.

The Waterloo Eye Institute is a once-in-a-generation, \$53 million initiative that will create 68,000 square feet of new and renovated space that will improve patient experience, modernize our facilities and create space for new vision research centres and teleoptometry.

In spring 2024, Harbridge and Cross was chosen as the contractor to build the Waterloo Eye Institute. After a ceremonial groundbreaking in June 2024, construction on the exterior began in the summer with work being done to prepare the site.

The Waterloo location of the Waterloo Eye Institute Optometry Clinic closed at its original campus location on October 11, 2024. Over the period of a week, under the direction of a dedicated project manager, we moved operations to a nearby interim location to allow patient care and clinical education to continue with minimal disruption during construction. A comprehensive communications plan was deployed to inform stakeholders about the move and its implications.

The interim location, just a few minutes away, opened on October 21, 2024, and patient care began the same day. Since the move, patient numbers have remained steady and patient experience survey scores have slightly risen.

Construction at 200 Columbia St. W. has been going smoothly, and as of May 2025, is on track for a completion date of late 2026.



Technology for diagnosis and treatment

Five new pieces of state-of-the-art equipment were added to the Waterloo Clinic in 2024-25, thanks to a \$800,000 donation by the FDC Foundation, which supports charitable organizations in the areas of health, education and housing.

The technology enables sophisticated imaging of the retina at the back of the eye and the cornea at the front of the eye, as well as measuring factors, such as the length of the eyeball, that affect the progression of myopia. One piece of equipment adds intense pulsed light (IPL) therapy to our suite of tools to manage dry eye disease.

In addition, we have expanded our dry eye treatment options to include amniotic membrane treatment for cases involving corneal pathology. With IPL therapy, these advanced, non-invasive options offer improved outcomes for patients with chronic or complex ocular surface disease.



Fundraising

As of April 30, 2025, we have raised \$29.4 million of our \$35 million fundraising goal to build the Waterloo Eye Institute (WEI). More than 1,000 individuals have donated, from students to multinational corporations. Between May 1, 2024 and April 30, 2025, more than \$3.3 million was raised for the WEI. In total, the School raised \$4.6 million during the same period for all purposes.

We thank all our donors, with special recognition to the following for their gifts or pledges of \$100,000 or more in 2024-25:

- FDC Foundation
- Mike Stork
- HOYA Vision Care Canada
- Ihnatowycz Family Foundation
- Anonymous donor

WEI Fundraising

\$29.4M

Total funds raised for WEI as of April 2025

1000+ donors

87%

of donors are alumni



Kelsey Gagnon, associate director of advancement, with the Hon. Judy Sgro and François Couillard, CEO of the Canadian Association of Optometrists, at a celebration for the passage of Bill C-284, December 2024.

Engaging with a national eye care strategy

Bill C-284, which calls for a national strategy for eye care, was given royal assent in November 2024. We took a moment to savour the milestone, which came after years of advocacy led by the Canadian Association of Optometrists (CAO).

However, passage of the bill was just the beginning – it started the clock on the 18 months the Minister of Health has to table a framework for what Canada will prioritize in eye and vision care. This represents a pivotal time for the profession, patients and the nation, so it's essential optometrists have a strong voice.

The CAO is spearheading federal advocacy efforts with stakeholder groups and the School is fully supportive and engaged. We are doing our part to help by convening stakeholders to gather the ideas and priorities of eye care stakeholders. In April 2025, we met with about 20 industry representatives for a Blue Sky Summit to review the areas highlighted in the national strategy and seek common ground. We shared results widely with provincial associations to encourage dialogue through the spring, leading up to the CAO Congress in July 2025.

STRATEGIC PLAN GOAL 2: PATIENTS AND COMMUNITIES

OBJECTIVES

- 1. Provide outstanding patient experience through excellent customer service, clear communication and ongoing enhancements in service delivery.
- 2. Nurture a culture of learning and continuous improvement through effective staff and faculty training, resourcing and recognition.
- 3. Provide quality, safe, contemporary and evidence-informed care that achieves excellent patient outcomes in comprehensive care and clinics for specific needs.
- 4. Modernize the Waterloo Eye Institute's infrastructure using advanced technology, streamlining administrative tasks, and ensuring efficient, cost-effective clinic management.
- 5. Advance health equity by increasing access to eye and vision care for underserved communities and individuals, including through initiatives focused on leadership in outreach, advocacy, culturally competent care and teleoptometry, as well as patient and community education about eye and vision health.



GOAL 2: ACCOMPLISHMENTS

Patient experience

Initiatives to improve patient experience in 2024-25 included:

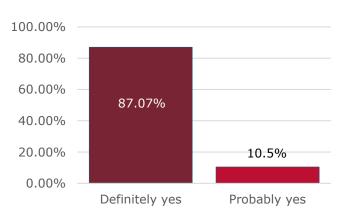
- The launch of an upgraded patient website that improves navigation and provides more patient education and information about specialized services.
- Significant work on improving patient communication, including a new patient newsletter and updates to automated emails/texts.
- Standardizing processes, such as the implementation of a single check-in desk at the interim clinic location, with all staff trained to assist patients requiring a range of services.

Patient experience survey results have remained roughly steady over the last few years, with 2024 (full calendar year) numbers as follows:

Overall experience with visit

100.00% 80.00% 60.00% 40.00% 20.00% Excellent Very good Good

Would you recommend our services to family and friends?



Patient satisfaction slightly rose in the winter 2025 term, after the move to the interim clinic location, with 81.56% reporting an excellent experience and 90.38% reporting they would definitely recommend our services to family and friends.

Patient satisfaction, Jan-Apr 2025

93%

97%

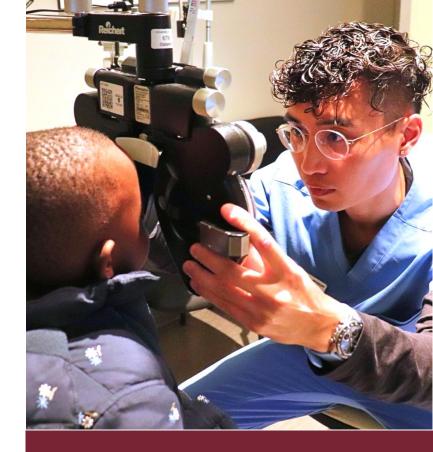
WEI at Surrey Place

Waterloo Eye Institute @ Surrey Place is a partnership between the University of Waterloo School of Optometry & Vision Science and Surrey Place, a Toronto-based organization that serves people with intellectual and developmental disabilities.

Funded by an anonymous charitable foundation, the partnership exists to provide high-quality eye and vision care to Surrey Place clients, as well as to research the prevalence of vision disorders within this population and the best methods of providing individuals with appropriate eye care.

We started seeing patients at Surrey Place's Etobicoke location in July 2024 and have provided eye exams to dozens of historically underserved patients. We have also provided clinical education to upper-year students with the aim of providing enriched training and experience with patients with special needs.





Community impact

Outreach activities continued with the goal of providing more access to eye care for underserved populations. In partnership with Reception House Waterloo Region, clinics for newcomers to Canada increased in frequency to monthly dedicated days at our downtown Kitchener location.

A November 2024 outreach trip focusing on youth in the Jane and Finch area of Toronto was held in partnership with Youth Association for Academics, Athletics & Character Education (YAAACE) and the Humber River-Black Creek constituency office of MP Judy Sgro.

In collaboration with Region of Waterloo Public Health, our third-year students participated in a vision screening program for senior kindergarten children across Waterloo Region. The program provided screenings to 5,161 students in 140 schools over the academic year, helping identify those in need of additional care and ensuring appropriate referral and follow up in partnership with local optometrists.



A patient is examined using teleoptometry-enabled equipment during an in-person to Churchill organized by the Manitoba Association of Optometrists in partnership with the School and Churchill Health Centre.

GOAL 2: IN PROGRESS

Teleoptometry

Many people in rural, remote and Indigenous communities lack the access to ongoing eye care needed to monitor chronic conditions such as age-related macular degeneration, glaucoma and diabetic retinopathy.

One possible solution, currently being piloted in Churchill in partnership with the Churchill Health Centre and the Manitoba Association of Optometrists, is to establish regional hubs with teleoptometry-enabled equipment. Optometrists could use the equipment when they visit in person, and between trips, a trained local optometric assistant could operate the equipment while optometrists provide patient care remotely.

The vision is for the Waterloo Eye Institute Teleoptometry Centre to facilitate access to remote eye care as a complement to in-person care. We are also developing models to increase access to specialty care such as low vision rehabilitation and vision therapy with optometric partners.

In 2024-2025, progress was made in work with partners to research best practices for teleoptometry as well as patient and health-care provider experiences with this technology. Faculty member Dr. Tammy Labreche is spearheading an effort to explore new models for low vision rehabilitation using teleoptometry.

Pan-Canadian Strategy for Indigenous Access to Eye Care

With partners across the country, we aim to develop a national framework and guidance on improving access to eyecare services to remote Indigenous communities. The Pan-Canadian Strategy for Indigenous Access to Eyecare is being developed in partnership with the many optometrists and organizations doing incredible work in community and on reserve. We have already made great strides in learning from BCDO and its efforts with the rural access program.

In 2024-25, \$150,000 was raised for Indigenous outreach program support to continue research and exploration of best practices from associations and optometric partners. To support these efforts,



Medicine wheel unveiling, 2023

the University approved the recruitment of a faculty member to oversee community outreach. In April 2025, Dr. Yongjiang (John) Chen was appointed to the position, which will support the continued development and enactment of this strategy. We continue to listen and learn from optometrists who have established trusted relationships with Indigenous communities. We continue to explore opportunities to engage more optometry students in this important work with a view towards expanding the number of providers excited to learn from and share with interested communities.

Co-developing eye data governance policies

The University of Waterloo is co-leading the development of data governance policies for eye data with the Southern Chiefs' Organization, which represents 33 Anishinaabe and Dakota Nations and more than 88,000 citizens in what is now southern Manitoba.

The interdisciplinary project, including the School of Optometry and Vision Science and School of Public Health Sciences, is funded by the Digital Research Alliance of Canada's DRI EDIA Champions pilot program. With co-developed data governance policies, planned eye data research will be built on equitable, ethical and culturally safe foundations following OCAP principles of ownership, control, access and possession.

The Manitoba Association of Optometrists have been key partners as they seek to provide eye and vision care services in community through the development of dedicated eye lanes. The hope is to



Dr. Helen Chen, Memoona Maah, Gina Najiman and Dr. Stanley Woo, Waterloo members of the team working on eye data governance.

incorporate teleoptometry capabilities to continue to expand timely access to care.

STRATEGIC PLAN GOAL 3: RESEARCH

Harness our research strengths to solve real-world problems with a focus on the global vision crisis.

OBJECTIVES

- 1. Lead nationally and globally at the interface of society, health and technology by enabling high-impact, world- class eye, health and vision science research through:
 - Fundamental bioscience Examining the processes that form the basis of vision.
 - Applied studies Applying scientific discoveries made in the lab to the development of trials and studies.
 - Societal impact Transforming scientific results into new treatments and approaches to care, improving the health of the population.
- 2. Promote the impact of cell-to-society research within our research pillars to enhance the visibility of research and clinical innovation.
- Promote the communication and mobilization of research, including through community- and patient- focused communication, engagement with professional and public health partners, and working to shape public health policy regarding eye and vision care.
- 4. Explore, promote and nurture interdisciplinary research between faculties and through engaging with the University's Transformative Health Technologies initiative.
- 5. Promote and nurture national and international collaboration, including through increasing strategic research partnerships, deepening relationships with national and international institutions and leveraging the strengths of the Waterloo Eye Institute, Centre for Ocular Research and Education (CORE), Centre for Sight Enhancement (CSE) and Centre for Eye and Vision Research (CEVR).
- 6. Increase research impact through strategic partnerships, including with private, public and not-for-profit organizations, to enhance competitiveness and innovation and to impact policy.
- 7. Foster an environment that stimulates entrepreneurial pursuits and leverage networks to expand opportunities in innovation and entrepreneurship, including through creating interdisciplinary teams to solve problems relevant to Canada's economy and increasing infrastructure to support research commercialization and policy application.
- 8. Attract, develop and retain tomorrow's research leaders, including through robust faculty hiring and development, as well as through community outreach to raise awareness of optometry and vision science as career paths.

GOAL 3: ACCOMPLISHMENTS

Research awards

School faculty received multiple research awards in 2024-25, including:

- NSERC Discovery Horizon grant: Dr. Paul Murphy received a five-year grant for a set of interdisciplinary studies to answer fundamental questions about dry eye disease.
- NSERC Discovery Grant: Dr. Jennifer Hunter received a grant for her project, "High Resolution Non-linear Imaging of the Retina."
- NSERC Discovery Grant and Discovery Launch Supplement: Dr. Krista Kelly received grants for her project, "Ocular motor control and its role in the development of eye-body coordination."
- New Frontiers in Research Fund (CIHR, NSERC and SSHRC): Drs. Ben Thompson, Lisa Christian
 and Marlee Spafford were awarded interdisciplinary research funding with colleagues from
 Engineering and Psychology to study the impact of a social robot in improving children's
 adherence to amblyopia treatment.

The journal *Ophthalmic and Physiological Optics* named two University of Waterloo papers as being among the most impactful it has published since 1981, with a 1992 paper on eye growth in chicks, by Drs. Elizabeth Irving, Jacob Sivak and Murchison Callender, recognized as number one.

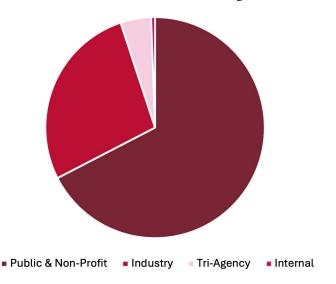
Outstanding graduate students won various awards, including the following:

- Ontario Graduate Scholarship Program (OGS) Doctoral Research Award: Nijani Nagaarudkumaran and Sharon Qiu
- NSERC Alexander Graham Bell Canada Graduate Scholarship Doctoral: Anne Marie Yeboah
- President's Graduate Scholarship: Nijani Nagaarudkumaran, Sharon Qiu and Anne Marie Yeboah
- WS Rickert Graduate Student Fellowship in Science: Nijani Nagaarudkumaran
- 2024 Fighting Blindness Canada (FBC) Clinician Scientist Emerging Leader Award: Sharon Qiu

In addition, 16 School of Optometry and Vision Science projects were awarded funding through the 2024 Canadian Optometric Education Trust Fund (COETF) research awards. Of these, 10 were led by undergraduate or graduate students and two by postdoctoral fellows. We are grateful for the support of the COETF and their donors for their promotion of optometric research.



Research funding*



April 2024-March 2025

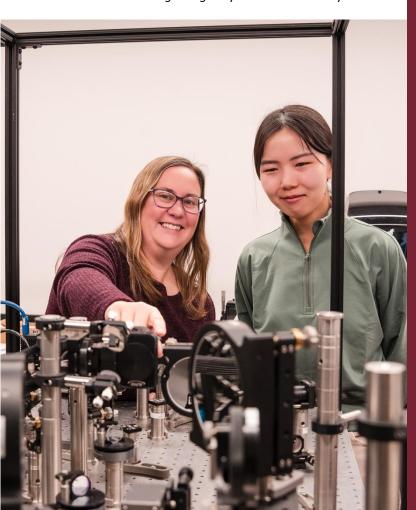
Public Sector & Non-Profit: \$6,873,663

Industry: \$2,798,289

Federal Tri-Agency: \$460,000 Internal Awards: \$58,928

Total: \$10,190,880

Does not include CEVR research funding, which is shared with The Hong Kong Polytechnic University.



Research output

Publications, 2024 calendar year

74

Refereed journal articles

4

Refereed conference proceedings

5

Letters and editorials

* Limited to publications in the Scopus research database including a faculty member as author. Includes publications from CORE fitting those criteria.

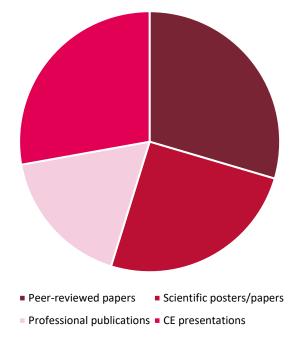
Selected conferences 2024 calendar year

- American Academy of Optometry: 39 posters or presentations with School author, 24 as first author
- Association for Research in Vision and Ophthalmology: 48 posters or presentations with School author, 18 as first author



Drs. Chelsea Bray, Lyndon Jones and Jill Woods

CORE research output 2024 calendar year



34: Peer-reviewed papers

29: Scientific posters/papers

20: Professional publications

32: Continuing education presentations

* Includes publications not in Scopus and that don't list a faculty member as author.

Centre for Ocular Research & Education

The Centre for Ocular Research and Education (CORE) is the School's oldest and largest research centre, having begun as the Centre for Contact Lens Research (CCLR) in 1988 under the leadership of Dr. Desmond Fonn. Over the years, it has been involved in some of the most important advancements in the history of contact lenses, including the development of disposable lenses and the evolution of silicone hydrogel lenses. Since it began, CORE has trained more than 100 graduate students, postdoctoral fellows and overseas thesis students.

In April 2025, CORE announced a plan to expand its scope to a broader range of fields of research, moving beyond its traditional front-of-eye work to research involving the whole eye and visual system. It will also seek to partner with principal investigators in fields outside vision science to apply its research expertise to processes such as study design and clinical trials.

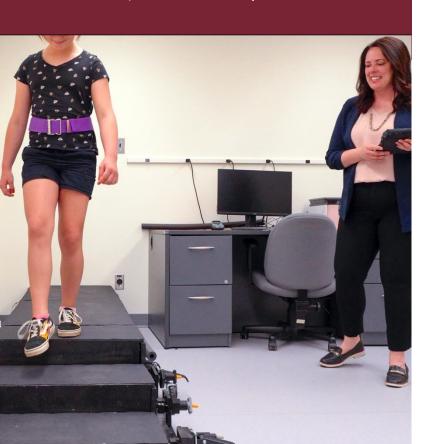
As part of the transition, Dr. Lyndon Jones stepped down from his position as director at the end of June 2025, moving to a new position of principal scientist. He remains on faculty at the School. A steering committee consisting of Drs. Jill Woods, Austin Roorda and Chelsea Bray has taken over the leadership of CORE as it embarks upon a new phase of research and development.

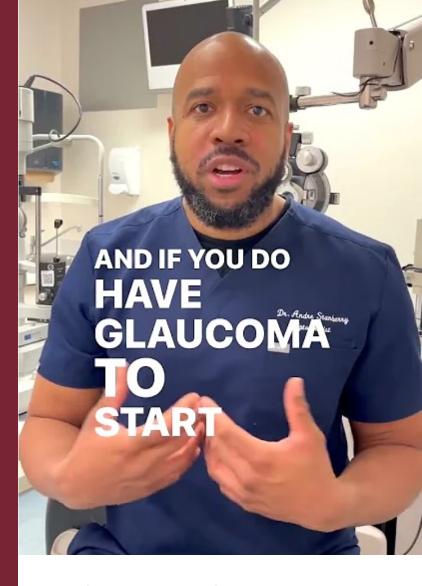
Interdisciplinary research

The following interdisciplinary research groups including School faculty members received Centre for Bioengineering and Biotechnology seed funding in 2024:

- Can-View: Establishing a national eye data repository for AI-driven vision care policy and innovation – Drs. Stan Woo and Andre Stanberry, School of Optometry and Vision Science; Drs. Helen Chen and Plinio Morita, School of Public Health Sciences
- Eye-body coordination during stair climbing in children with amblyopia – Drs. Krista Kelly and Lisa Christian, School of Optometry and Vision Science; Dr. James Tung, Mechanical and Mechatronics Engineering
- Harnessing technology and AI to advance the pediatric assessment of sensorimotor and cognitive functions

 Dr. Ewa Niechwiej-Szwedo, Kinesiology and Health Sciences; Drs. Lisa Christian and Ben Thompson, School of Optometry & Vision Science; Dr. James Tung, Systems Design Engineering; Dr. Nino Zahirovic, AdHawk Microsystems





Patient education

The School ramped up patient education initiatives starting in 2024. Since then, 12 pieces of patient education content have been created on various topics, most of them including both an article and video.

A refreshed clinic website launched in March 2025 put all these pieces of content in one easy-to-find place. Between May 1, 2024, and April 30, 2024, these articles got nearly 3,500 views on the clinic website. On YouTube, the full videos got more than 2,000 views and short reel-style videos got nearly 4,000 views. Patient education content has also been promoted on social media, where our reach has grown significantly in the last year. A single patient education post often got more than 2,000 views on Instagram alone.

GOAL 3: IN PROGRESS

Graduate studies

The Vision Science Graduate Studies program offers research-based MSc and PhD degrees. The School also offers a combined OD/MSc program and joint degree programs in areas such as biology, systems design engineering, and aeronautics.

Historically, the School has been one of the largest providers of postgraduate research training in vision globally. To date, the program has graduated 167 MSc and 74 PhD students. However, enrolment has declined in recent years, in part due to a wave of retirements amongst the School's faculty and in part due to lingering effects of the Covid-19 pandemic having curtailed mobility and research. As of May 2025, there are 22 students enrolled in vision science graduate studies at the School.

To rebuild graduate student numbers, the School has developed a focused plan to recruit five new research-active faculty members, ideally to start in 2026. Approval for recruitment has been obtained from the University and School advisory committees are in process of being established.

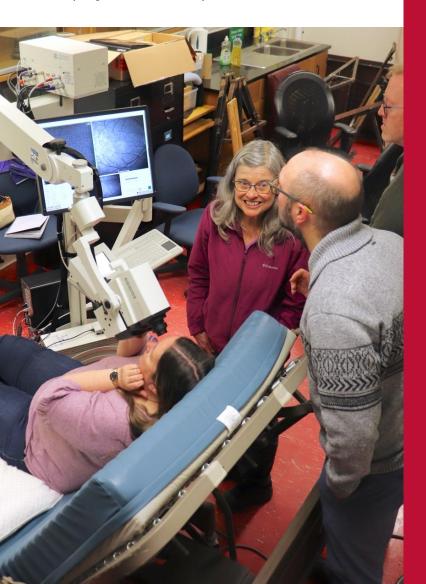
With the successful recruitment of new faculty, it is anticipated that graduate student numbers will return to the program's historical average of around 35 students a year within a few years. In the longer term, we aim to grow graduate student numbers to a higher level of 45-50 students a year.

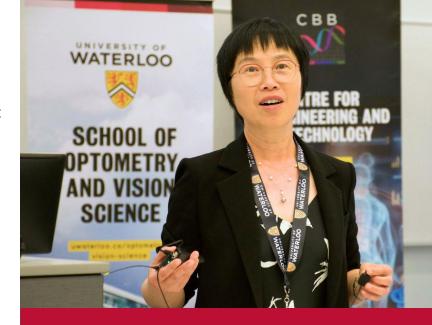


Canadian Vision Imaging Centre

A new research centre is being established that aims to use advanced eye imaging to make breakthroughs in better understanding, diagnosing and treating eye conditions and diseases. The Canadian Vision Imaging Centre also aims to use the eye's unique properties to find biomarkers that could aid interdisciplinary teams in the early identification of systemic disease.

The Canada Foundation for Innovation (CFI) and the Ontario Research Fund (ORF) each provided \$2.36 million to establish the new centre, which will be headquartered in the Waterloo Eye Institute. The funding from the CFI and ORF makes up the bulk of the \$6.2 million setup cost and will go towards purchasing state-of-the-art equipment for the new centre. Some of this equipment has begun to arrive and researchers are excited to get their projects underway.





Can-View Eye Data Repository

The Can-View project aims to establish an eye data repository with clinical data and imaging from optometrists across Canada including our own WEI. Optometrists see patients that may have ocular disease and also systemic conditions such as hypertension, diabetes and brain injury. Optometry practices are a unique source of longitudinal health data that could potentially be used for breakthroughs such as finding new biomarkers to predict ocular, neurological and systemic diseases.

The project kicked off with the Eye Data & AI Summit in June 2024, at which experts in artificial intelligence, cybersecurity and privacy gathered with leaders from industry and the optometry profession in Canada to discuss how to work towards a national eye data repository.

Work is now ongoing to co-develop governance policies for eye data with the Southern Chiefs' Organization and Manitoba Association of Optometrists. We are also working to develop the structure of the eye data repository.

We anticipate Can-View's high-quality, deidentified eye data will advance AI-driven research, policy and innovation led by optometry to address eye health and vision nationwide.

STRATEGIC PLAN GOAL 4: DEVELOP TALENT

Develop talent to meet the eye health and vision challenges of a complex future.

OBJECTIVES

- Deliver an evidence-informed curriculum that anticipates changes in health systems, technologies and scope of practice; facilitates best-practice pedagogy and technology-enabled learning; offers a roadmap for learning aligned with accreditation processes; and incorporates continuous review and evaluation processes.
- 2. Promote a positive, student-centred environment where students are supported and engaged and wellness is prioritized.
- 3. Develop expanded opportunities for clinical education, work-integrated learning and advanced training, including exploring ways to offer clinical experiences in the first and second years; adding an additional term between the second and third years; further developing the fourth-year clerkship program; and expanding accredited residency training opportunities for the development of advanced competencies.
- 4. Establish centres of excellence in patient care in Western and Eastern Canada to support regional clerkship programs with the goal of evolving them to include specialty care, residency training and, where feasible, the establishment of satellite campuses for optometric education, patient care and research.
- 5. Enhance graduate and postdoctoral studies by strengthening graduate student support, growing graduate work-integrated learning, increasing external research partnerships including with industry, and exploring pathways for the formation of graduate programs, e.g. OD/PhD.
- 6. Be the leading national resource for continuing optometric education and professional development, including through identifying growth opportunities in professional development and working with partners to establish national-level standards for professional development and specialty certification for optometrists.

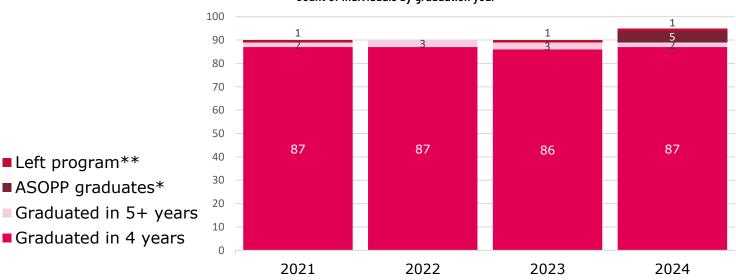


GOAL 4: ACCOMPLISHMENTS

Student success

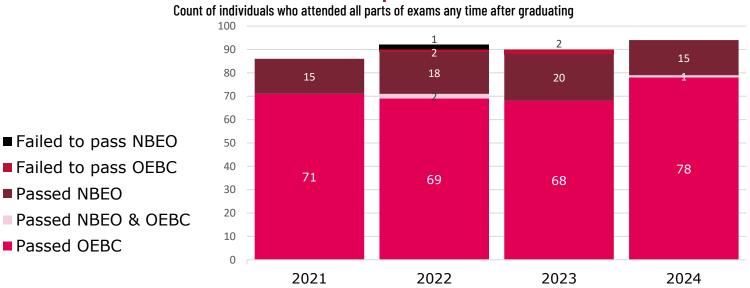
Student success rates have remained high and steady over the last several years, with nearly all students graduating and ultimately qualifying to practice as optometrists.

Student graduation rates Count of individuals by graduation year



*Advanced Standing Optometry Preparatory Program students are qualified internationally trained optometrists who enter the OD program in third year. The first ASOPP graduating year was 2024. **Attrition for any reason.

Board exam pass rates

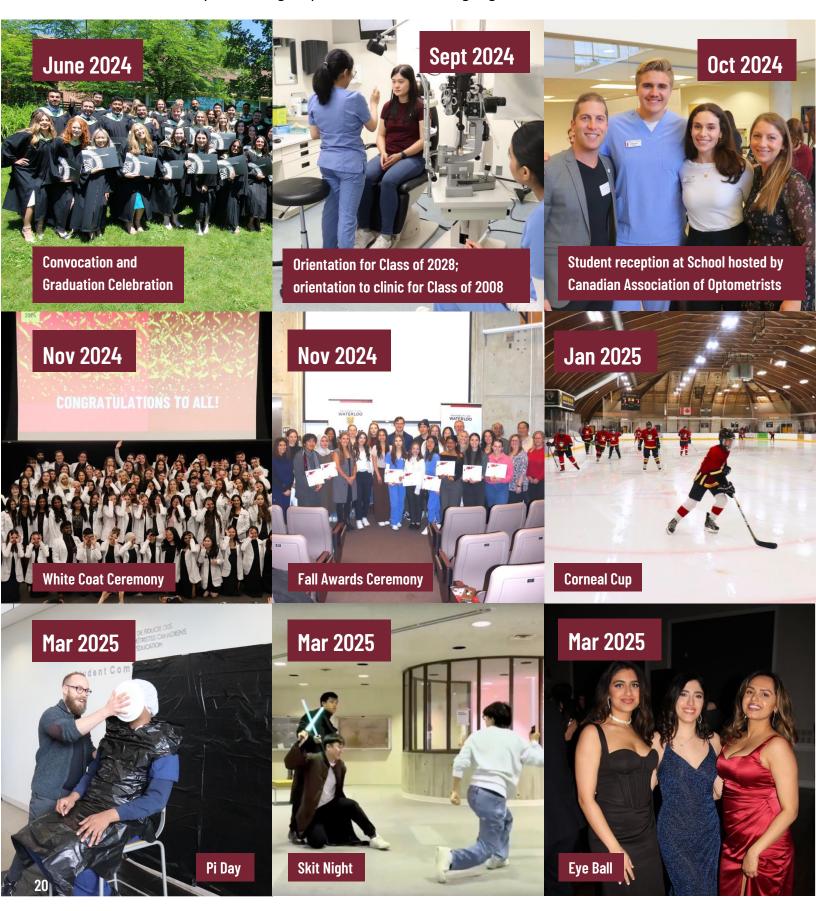


OEBC: Optometry Examining Board of Canada

NBEO: National Board of Examiners in Optometry (U.S.)

Student engagement

Many student engagement initiatives take place throughout the year, some organized by faculty and staff and others by student groups or clubs. Some highlights of 2024-25:



Entering students

266

Applicants for 2024

90

Students admitted

8

Provinces represented, Class of 2028

366

Average OAT score, admitted students

372

Average OAT Science score, admitted students

8

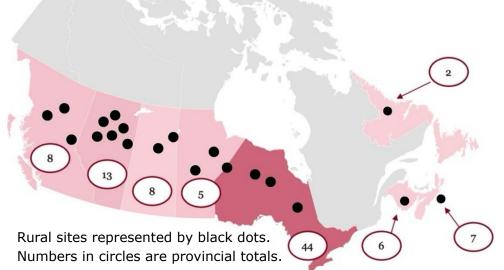
OD students received entrance awards and scholarships, 2024

Clerkships

The fourth year of the OD program consists of three four-month clinical placements across Canada. In 2024-25, there was a significant increase in number of clerkship sites available to students for the 2025-26 year, with a total of 96 sites available thanks to the extraordinary response of the profession.

Optometrists across the country have embraced offering clinical teaching at their practices, resulting in an increase of approximately 65 percent more sites over the last five years, with six new sites in Atlantic Canada added this past year alone. While we have a few U.S. sites, we are grateful to have the depth, breadth and quality of experiences closer to home for our students.

Going forward, we are working to increase clerkship sites outside Ontario, particularly in Western Canada, with a focus on offering placements in rural and underserved communities.



Sites by province

BC: 5 urban, 3 rural AB: 7 urban, 6 rural SK: 4 urban, 4 rural MB: 2 urban, 3 rural ON: 41 urban, 3 rural NB: 4 urban, 2 rural NS: 6 urban, 1 rural NL: 1 urban, 1 rural

USA: 2 FL, 1 OK

Total: 96 sites (93 Canada)

Continuing professional development

Our continuing professional development team continued to provide high-quality, evidence-informed continuing education (CE) to practicing optometrists.

Office-Based Laser and Minor Surgical Procedures for Optometrists

The Office-Based Laser and Minor Surgical Procedures for Optometrists course (renamed in 2025, formerly Advanced Procedures), consists of online self-directed modules beginning in February, virtual live lectures in April/May, hands-on lab-based workshops and a review session in Waterloo in May, and a certification exam.



The 2024 course had 41 participants, while the 2025 course had 29 participants in Waterloo. We took the course on the road for the first time by offering it to 47 optometrists in Saskatchewan in May 2025. We're grateful for the partnership with SAO and the opportunity to continue the mantra of "education before legislation" in support of scope modernization efforts.

Alumni Weekend

Our June 2024 Alumni Weekend (renamed CE Weekend & Alumni Reunion in 2025) welcomed 86 optometrists, optometric staff and students for two days of continuing education, connection and celebration, including a trade show. We recognized our award recipients – Drs. Sophia Leung, John Mastronardi, Harvey Bass and the Region of Waterloo – and the Class of '74 enjoyed a reunion.

Waterloo Eye Institute Fall Conference & Trade Show

The School's flagship CE event takes place in Markham, Ontario, over three days and is put on in alliance with the Ontario Association of Optometrists. In November 2024, 163 optometrists, 44 optometric staff and eight sponsored students participated. We also had 37 vendors and organizations participating in the trade show. The Woodruff Distinguished Lecture was given by Dr. Etty Bitton and the Bobier Distinguished Lecture was given by Dr. Donald Hood.

Oral Therapeutic Prescribing Agents, Lab Testing and Glaucoma Certification Modules

In 2024, we planned changes to this online offering, last run as a single course in 2023. In 2025, we split the course to provide flexibility for those looking for certification in only one of the areas. The certification exam became optional for those interested in simply refreshing their knowledge.

Optometry 5in5

Optometry 5in5 was created to meet the need for quick hits of information that are evidence based and convenient. An online platform enables optometrists to check knowledge and think through tricky cases, providing quick feedback incorporating fun gamification tools. After the success of two pilots on glaucoma and neuro-optometry, the platform expanded with a three-year contract with the Alberta College of Optometrists. A module about office-based laser and minor surgical procedures was launched in August 2024, with plans to launch more in 2025 and 2026.

GOAL 4: IN PROGRESS

Curriculum renewal

An internal committee has been working on a curriculum review and renewal project that is proposing the addition of an additional term in the summer between years 2 and 3 (spring term).

Adding another academic term provides the increased contact time to build upon the clinical skills established in the second year. The additional term will accelerate the development, efficiency and effectiveness of clinical skills. There will also be more space to introduce and delve deeper into emerging trends, advanced techniques and a broader scope of modern optometric practice.

The proposal will need to be approved by the Accreditation Council on Optometric Education (ACOE), and internally by the Faculty of Science, University of Waterloo Senate Undergraduate Council, and Senate. The target implementation date is September 2026.

Establishing new optometry schools

In 2024-25, the University of Waterloo School of Optometry and Vision Science signed memoranda of understanding with both Mount Royal University in Calgary and the University of New Brunswick's Saint John campus. The purpose is to explore the establishment of new schools of optometry in Western and Atlantic Canada respectively.

Both memoranda emphasize the goal of increasing the number of practising optometrists particularly to rural and Indigenous communities. As part of that goal, the partners aim to improve access to optometric education for qualified applicants from these communities.

Both partnerships are supported by the associations and colleges of optometrists in their provinces. They are currently in the exploratory phase to assess feasibility and develop solid business cases. No timeline has yet been established for the opening of new schools of optometry, though the Alberta government has committed \$300,000 for a planning grant.



GOAL 5: SUSTAINABLE AND DIVERSE COMMUNITIES

Strengthen the School of Optometry and Vision Science as a sustainable, diverse and inclusive

OBJECTIVES

- Nourish a supportive, people-centred culture that fosters a sense of belonging, collective
 purpose and shared responsibility, including through celebrating individual and collective
 achievements and sustaining meaningful relationships with alumni, the profession and other
 partners.
- 2. Promote a positive environment where staff and faculty are supported and engaged and wellness is prioritized.
- Be a sustainable and effective institution, including through the optimal use and planning of human, infrastructural and financial resources to realize the School's long-term vision of success.
- 4. Nurture a culture of equity, diversity, inclusion, anti-racism and decolonization. Ensure these values are reflected in the curriculum, clinical spaces, recruitment and admissions processes, and relationships with community partners and equity-deserving groups.



GOAL 5: ACCOMPLISHMENTS

Teaching cultural safety

Based on research informed by Truth and Reconciliation Commission recommendations and current practical theories in healthcare curriculum development, cultural safety training has been integrated within the School's first- and second-year clinical experience courses and third-year patient care courses.

These courses focus on student self-reflection, a critical component of cultural safety training. Over the last several years, the curriculum has gradually been updated to focus on the five key principles of the cultural safety framework:* reflective practice, power differential minimization, engagement and discourse, decolonization and regardful care.

*Ryder et al, 2017





Director's Message

Hard to believe we're already approaching the end of the winter term, but the flurry of student activities leaves no doubt that students aren't just studying for finals – they're making memories through events such as Eyeball, Skit Night, the UWAGD Coffeehouse and more. Judging Skit Night was, as always, an amazing experience – I am in awe of each class's talent, ingenuity and sense of humour. A round of applause to every person who participated, with special thanks to the UWOSS executive for their organizational efforts.

Turning the judging tables around, we had the first-ever Soup Day Director vs. Director Challenge on March 25, which pitted my soup-making skills against those **Dr.**Andre Stanberry, the clinic director. It was a ton of fun and we're grateful to all who participated.

Congratulations to Andre on the well-deserved win! (I voted for his soup, too.) Thanks to the social committee, particularly Lucy Le, Ann Rabano, Kelsey Gagnon, Melissa Santo and Janelle Kelly, plus ad hoc helper **Dr.**Lisa Woo (who did not in any way try to influence the votes!) for organizing. Check out the pictures on Instagram, Linkedin and Facebook.

We're preparing to welcome next year's class – the Class of 2029. Applicants were recently informed of admissions decisions, and we're excited to welcome a great group of talented students who will start in September. Huge thanks to the admissions team, including everyone who participated in interviews

IN THIS ISSUE:

- Student farewell to Dr. Stan Woo as director
- <u>Directorial candidate</u>
 <u>confirmation process</u>
- Board exams
- Curriculum Review
 and Renewal
- Waterloo Eye Institute construction update
- <u>Updated clinic</u> <u>website</u>
- WestGroupe donation
- Kudos
- Engaging with the profession and the industry
- Engaging with the community
- Engaging with the research community
- Student Initiatives
- Patient education
- <u>Upcoming events</u>Opportunities
- Housekeening

Improved internal communications

A monthly internal newsletter relaunched in October 2023 to help people feel more in the loop with happenings at the School. Initially only sent to faculty, staff and graduate students, the distribution was expanded to OD students in 2024. Parttime clinicians and retirees also receive the newsletter, which enjoys a relatively high average open rate of 66 percent. Informal feedback has indicated people feel better informed. The "kudos" section celebrating people's accomplishments spotlights the wonderful work of our community.

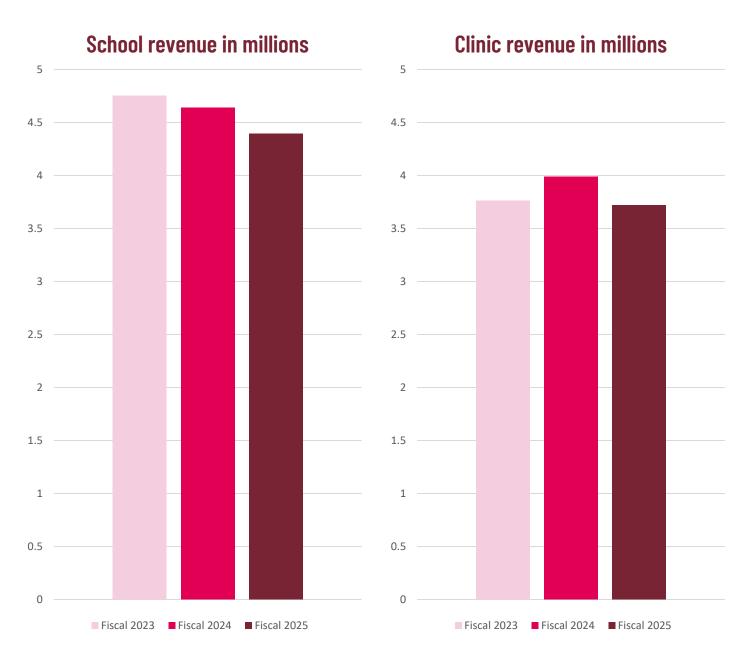
In addition, SharePoint intranet home pages for faculty, staff and students were reorganized and are being updated more regularly to provide School community members with an easily accessible source of news, information and resources.

Finances

The Canadian post-secondary sector as a whole is facing financial challenges, and the University of Waterloo is no exception, with a structural deficit of \$32 million for the 2025 fiscal year (F25; May 1, 2024–April 30, 2025).

The School of Optometry and Vision Science faced a mixed fiscal year:

- School revenue was up 3% over F24.
- Clinic revenue was down 6.7% over F24, largely due to disruptions from the clinic move.
- The long-term trend is increasing clinic revenue compared to the 2020 fiscal year, F24 revenue was up 31.6%.
- Expenses are down 3.1% over F24 if one-time expenses for the interim clinic are removed.
- Cost control both at the School and the clinic has been strong, with non-salary expenses down 4.8% over F24 and 11.5% over F23 once one-time interim clinic costs are removed.



GOAL 5: IN PROGRESS

Indigenous admissions pathway

In 2024-25, a new pathway for admissions was created for Indigenous students to reduce barriers. We received feedback that opportunities to shadow optometrists may be limited and fees for the Ontario Universities' Application Centre could be challenging. Requirements like the minimum Optometry Admission Test score and six terms at a full course load were maintained for students to demonstrate potential for succeess in an academically rigorous program. Our pathway was modelled after a successful initiative by the School of Pharmacy.

A group of optometry students has started a club focused on Indigenous outreach. We are hopeful that we can attract more interest and partners to recruit and develop Indigenous optometrists to serve their nations in the future.



GOAL 6: INNOVATION AND ENTREPRENEURSHIP

Become a global leader in optometric innovation and entrepreneurship.

OBJECTIVES

- 1. Foster an environment that stimulates entrepreneurial pursuits through creating interdisciplinary teams to solve problems relevant to Canada's economy and fostering pathways to entrepreneurship for optometry and graduate students.
- 2. Increase infrastructure to support research commercialization and application, including through:
 - Leveraging networks to expand entrepreneurial opportunities and partnerships with industry.
 - Further strengthening the emphasis on innovation, entrepreneurship and spin-out companies at the Centre for Eye and Vision Research (CEVR) and Centre for Ocular Research and Education (CORE).
 - Engaging with the University's Velocity Health and Innovation Arena initiatives to boost entrepreneurship in the health technology sector.



GOAL 6: ACCOMPLISHMENTS

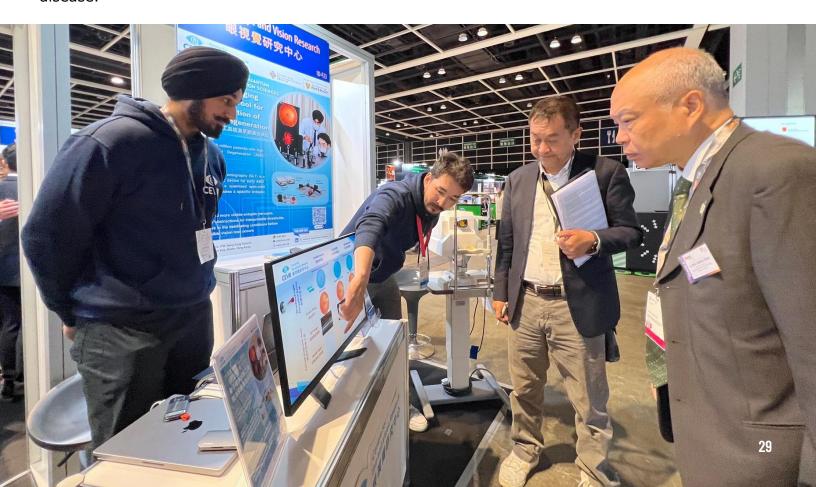
Centre for Eye and Vision Research

The Centre for Eye and Vision Research (CEVR) is a research collaboration between The Hong Kong Polytechnic University and the University of Waterloo, funded by the InnoHK initiative of the Innovation and Technology Commission of the Hong Kong Government. Launched in 2020, CEVR has quickly seen success in its mission to carry out international, interdisciplinary ocular research and commercialization, with multiple spinout companies established from CEVR research. Highlights involving School researchers include:

SLOPE

The team behind the Structured Light Observation and Perception Evaluation (SLOPE) device won gold medals at both the Asia Exhibition of Innovations and Inventions Hong Kong in December 2023 and International Exhibition of Inventions Geneva in April 2024. At the latter event, SLOPE also received a special prize from the Lucian Blaga University of Sibiu, Romania, to honour its scientific creativity and originality.

SLOPE is the world's first application of quantum technology in vision science. It uses quantum spin-orbit beams of light to generate unique patterns that can be perceived by the human eye – but are perceived differently by people in even the earliest stages of age-related macular degeneration (AMD). It can therefore detect AMD before irreversible vision loss has occurred, allowing patients to make changes or get treatments to slow down or stop the progression of the disease.

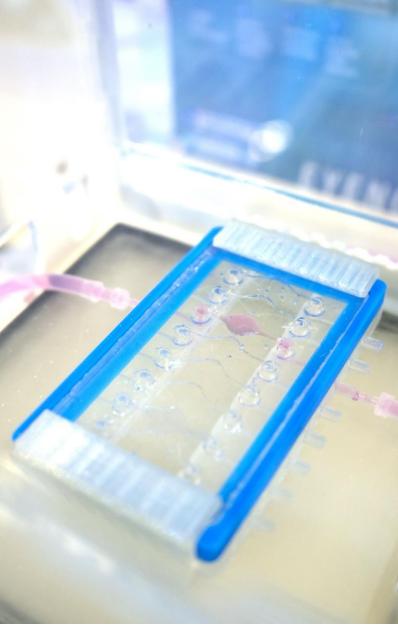


ObstAR

ObstAR is an augmented reality navigation system for people with vision loss that can be used with any extended reality headset system. Using AI, the system uses data from the headset's camera to identify what's in the user's surroundings and find a safe path through obstacles. This path is indicated with an arrow that can be calibrated to be visible to individual users, no matter the pattern of their vision loss.

The researchers behind ObstAR also won gold medals at both the exhibitions of inventions in Hong Kong (December 2023) and Geneva (April 2024).





Eyenova Biotech

Eyenova Biotech aims to help improve the likelihood of success of candidate drugs going to clinical trials by developing an 'eye on a chip' – a preclinical microfluidics testing platform that replicates the complexity of the eye's cellular environment and performs multiple tests at once, which saves time, costs and animal testing.

The team behind Eyenova Biotech won a gold medal and a China Association of Inventions award at the fourth Asia Exhibition of Innovations and Inventions in Hong Kong in December 2024. It also won a gold medal at the International Exhibition of Inventions Geneva in April 2025.

Interdisciplinary engagement

Our researchers have increasingly become involved in interdisciplinary research groups or projects. For example, at the University of Waterloo, our faculty members and graduate students have joined the:

- Network for Aging Research
- Centre for Bioengineering and Biotechnology
- Waterloo Institute for Sustainable Aeronautics
- Waterloo Institute for Nanotechnology

In 2024-25, our researchers organized or participated in opportunities to share their research and explore potential collaborations with people from:

- Systems design engineering (twice)
- Biomedical engineering
- Faculty of Science (across departments)





Interdisciplinary research awards

In 2024, Dr. Lyndon Jones received a Research Leader Award from the Waterloo Institute for Nanotechnology in recognition of his being part of the multi-institutional team that won the national (NSERC) 2023 Brockhouse Prize for interdisciplinary research.

The same year, he also won the Carel C. Koch Memorial Medal Award from the American Academy of Optometry, presented annually to a person who has made outstanding contributions to the enhancement and development of relationships between optometry and other professions. Jones is cross appointed to the Waterloo departments of physics, biology, chemistry and chemical engineering.

GOAL 6: IN PROGRESS

ThermOcular Al

ThermOcular AI, a company started by University of Waterloo vision science and engineering researchers, aims to bring a patented thermal imaging system to market that can measure in detail the temperature of the cornea, the transparent part of the eye that domes over the iris and pupil. The novel device could be used to screen for dry eye and potentially other ocular diseases.



Postdoctoral fellow and ThermOcular AI CEO Dr. Ehsan Zare Bidaki has been working on measuring eye temperature since he started his PhD in 2017 under the joint supervision of Dr. Paul Murphy of the School and Dr. Alexander Wong, a Waterloo systems design engineering professor. All three are partners in the venture, which has been working with Velocity, Waterloo's startup incubator, to access funding and get help with product-market fit, sales traction and founder network support as the focus shifts from research to entrepreneurship.

New regional hospital and health innovation coalition

In July 2024, it was announced that a new regional hospital will be built on the University of Waterloo's north campus. This will lead to opportunities for our School to partner with the new hospital in research, education and patient care. Drs. Stanley Woo and Sarah MacIver, plus student Mariam Bhatti, had the opportunity to meet with Premier Doug Ford as part of a health innovation showcase connected to the announcement of the new hospital site.

Dr. Vivek Goel, the University president, has spoken about the new hospital leading to opportunities to grow the School's interdisciplinary engagement in education, research, and patient care.

As part of laying the groundwork for the new hospital, tentatively called Waterloo Region Health Network @ University, a partnership has been developed between the University and the Waterloo Regional Health Network (formerly Grand River Hospital and St. Mary's General Hospital). The CareNext Coalition aims to bring together clinicians, researchers and entrepreneurs to create educational programming, test drive technological advances and create integrated health care systems that will reach people where they are. The School looks forward to supporting this coalition and the future hospital as it becomes a reality.



School Leadership

Dr. Stanley Woo Director (to June 2025)

Dr. Ben Thompson Director (as of July 2025)

Dr. Lisa Christian

Associate Director of Clinical Education

Dr. Natalie Hutchings

Associate Director of Academics and Student Affairs

Dr. Vivian Choh

Associate Director of Research

Dr. Andre Stanberry

Clinic Director

Dr. Lyndon Jones

Director, Centre for Ocular Research & Education (CORE) (to June 2025)

Dr. Tammy Labreche

Director, George & Judy Woo Centre for Sight Enhancement; Head, Low Vision Service

Dr. Kristine Dalton

Graduate Officer

Dr. Paul Murphy

Graduate Officer

Dr. William Ngo

Admissions Officer

Dr. Denise Hileeto (to June 2025) | Dr. Darren Gigliozzi (as of July 2025)

Admissions Officer

Dr. Shamrozé Khan

Undergraduate Officer, Student Affairs

Dr. Ernest Lucchetti

Co-Head, Primary Care Service

Dr. Olivia Ricci

Co-Head, Primary Care Service

Dr. Chelsea Bray

Head, Advanced Contact Lens Service

Dr. Nadine Furtado

Head, Ocular Disease and Imaging Services

Dr. Sarah MacIver

Interim Head, Ocular Disease and Imaging Services

Dr. Julie Shalhoub

Head, Binocular Vision Service

Dr. Lisa Woo

Head, Health Sciences Optometry Clinic (Kitchener Clinic)



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200 University Avenue West Waterloo, ON N2L 3G1

uwaterloo.ca/optometry-vision-science

Physical address:

200 Columbia Street West Waterloo, ON N2L 3G1

519-888-4567



Waterloo Eye Institute Waterloo Clinic

419C Phillip St. (Interim location) Waterloo, ON N2L 3X2 519-888-4062

uwaterloo.ca/waterloo-eye-institute

Waterloo Eye Institute Kitchener Clinic

10B Victoria St. S. Kitchener, ON N2G 1C5 519-888-4455

uwaterloo.ca/waterloo-eye-institute/kitchener