We have all at some time in our lives sat by ourselves or with others, and taken up the challenge of putting together a jigsaw puzzle. An image that defines the finished puzzle is propped up for reference behind a large pile of jigsaw pieces. You patiently begin the task of gathering pieces and fitting them together. The edges are slowly formed into a framework and pieces are then steadily linked, filling in the centre, and the image slowly takes shape. The directorship of the School of Optometry can be likened metaphorically to conducting such an exercise. Similarly, a multi-faceted vision for the school has been defined, and day by day we fit the small pieces together. Some pieces fit together with relative ease, while others elude a linkage for quite some time. However, if we are lucky, after a time we find that we have completed a good part of the picture, and while much remains unfinished we can pause to reflect and realize we have moved significantly closer to our vision. As my term as director draws to an end (June 30th), this is a good time to review the parts of the puzzle we have put together and what remains to be completed.

Our OD program and graduate program accreditations have been snapped into place. We have received full accreditation for both. We achieved this status through the efforts of many faculty and staff members here at the School who took time away from their own teaching and research activity in order to allow the School to continue to enjoy excellent rankings from the accrediting bodies.

For many of our goals, however, the picture has formed but not all the pieces are in place. Certainly, the largest and most important project is our program expansion. This vision, begun by my predecessor Dr. Graham Strong, has many, many pieces. Due to the scale of this project we have sought assistance from our profession and industrial partners. The program expansion was envisioned to address many important goals. It will repatriate many Canadian students who now must study in the United States. More Canadians can now study at a Canadian university, receive an excellent education and graduate with a lower, more manageable debt load. Next fall, we expect to admit 80 students. The growing expansion will provide increased resources that will ensure that we can continue to develop and deliver a curriculum that is current in light of the ever changing scope of optometric practice. As many of you know, a new building addition is required to support this enrolment expansion as well as to modernize our teaching resources. Our fund-raising campaign of $7.2 M is the foundation of the expansion. We have raised close to $4M from our alumni and industrial partners. We still have a long way to go. Because we are small in number and Canada is vast, a network of optometrists is being developed. These individuals have donated and then kindly agreed to champion our cause to their peers.

In truth, the jigsaw puzzle which we are attempting to complete grows and changes constantly. Its edges never remain fixed. The puzzle is forever comprised of parts which are completed and parts still to be fully filled in. Recently, we were delighted to learn that we will be teaching more optometrists but not just because of our expansion. We have received a $550K contract from the Ministry of Training, Colleges and Universities in Ontario to develop a program to bridge international optometric graduates to licensing qualification in Ontario. Our hope is that through the Canadian Optometric Regulatory Authority (CORA), this program may serve other provincial jurisdictions across Canada. Change continues.

As you may know, the University of Waterloo has created a School of Pharmacy in collaboration with the University of Toronto. The new School of Pharmacy will be located in a new building in downtown Kitchener as part of the Health Sciences complex that will also house a family practice health team of 9 family physicians. This will no doubt create teaching and research synergies that will benefit the School.

In closing, I thank the faculty and staff here at Waterloo who have helped me fill in our part of the ongoing development of the School of Optometry. I say thank you to our industrial partners who have supported us in the campaign. However, I save my fondest farewell to the profession. Many of you through your donations and encouraging words prove once again that the School is well supported by its alumni. It has been gratifying to come to many of your venues across this country, to meet and reacquaint myself with many of you.

Adieu from the office of the director.
Scott Brisbin to be Honoured - Dr. A.P. Cullen

At this year's convocation in June, the University of Waterloo will confer the degree of Doctor of Laws (LLD) honoris causa upon Scott D. Brisbin, O.D., F.A.A.O. for distinguished contributions to the profession of Optometry.

Scott was the valedictorian of Optometry's class of '65, a class of only twenty-two that didn't produce a single academic. However, it did produce a lot of political activists for the profession, including one provincial college president, five provincial optometric association presidents, three Canadian Optometric Association (CAO) presidents, two world optometric presidents, a couple of mayors, and even one federal member of parliament. “We were obviously a bunch of malcontents who wanted to change the world,” he is fond of saying. As a quintessential member of the class, he had held every executive position on his local, provincial, and national optometric associations, including president of the Alberta Association of Optometrists (1975-77) and the Canadian Association of Optometrists (1986-88). His service to Canadian Optometry was recognised with the CAO’s highest honour, the President’s Award, at the CAO Congress in Vancouver in 2001.

At the urging of the late Professor Ted Fisher, Dr. Brisbin completed the requirements for fellowship in the American Academy of Optometry (AAO) in 1971. He went on to serve on this renowned international body’s admittance committee for many years, chairing the Foreign Admissions Committee from 1990 to 1996. He was granted a Life Fellowship in the AAO in San Diego in 2002. He was very familiar with North American optometry by the time he had finished his CAO activities, but the Academy adjusted his sights to challenges further afield.

In 1994, he began representing Canada on the World Council of Optometry, joining its governing board two years later. In June of 2000, he became the first WCO President of the new millennium. When Dr. Brisbin became president-elect, the WCO had only enough funds, generated by country members’ dues, to maintain an office and secretariat in Philadelphia and to hold the occasional special event such as the first and second World Conference on Optometric Education. He took it as a personal challenge to put in place non-dues: fund-raising programs that would make the WCO the international force the profession needed. The result was an aggressive campaign aimed at, firstly, the ophthalmic industry, secondly, the Hofstetter Leadership Fund, named after one of optometry's international icons and thirdly, the Give One Exam Foundation. He put in place non-dues: fund-raising programs that would make the WCO the international force the profession needed. The latter encourages a grassroots optometrist anywhere in the world to donate the equivalent of the fee for one eye examination per year. This was tested in Canada; it quadrupled expectations in its first year and continues to spread around the world, finding support even in many developing countries. The World Optometry Foundation was created to receive and redistribute the funds raised.

By the time he assumed the presidency of WCO, there were sufficient funds to embark on a number of projects. The WCO Fellowship Program was established and selected Fellows are sent to developing countries for periods ranging from a few weeks to two years to help establish new optometry schools, upgrade existing ones, and support humanitarian work. One of his other achievements was to assure Optometry's recognition by the World Health Organization (announced in Philadelphia in 2003), and its acceptance as a valuable member of the international health and eye care team. He was named International Optometrist of the Year by the WCO in 2004. Optometrists have long been participating in international humanitarian work as individuals or in groups, but the WHO has never formally acknowledged the profession's worth. Vision 2020 – The Right To Sight Program was recently launched, and is aimed at eliminating preventable or avoidable blindness from the world by the year 2020. Eighty percent of the world's blindness falls into this category, and there is a significant amount of that which can be addressed by optometrists. It is the perfect opportunity for optometry to show what it can do. “We have said we can make a difference. Now we have to deliver,” Dr. Brisbin told an international optometric gathering recently.

Scott practices in Edmonton, Alberta and lives on a wooded acreage with his wife, Calli. They have two adult children, Dallyce and David. He sums things up, “We have been so fortunate. I wouldn’t trade our life experiences for anything.” Despite all his national and international commitments he admits, “I still enjoy practice, that’s why after 40 years I have no intention of retiring. I just enjoy the patients, they’re almost like family in a lot of ways.”
Dr. Anthony P. Cullen retired as Professor of Optometry on December 1, 2004, ending a career that spanned the globe over 43 years. A well-attended reception in his honour was held at the University Club on November 22, 2004.

Tony Cullen received his Diploma in Optometry with honours from the Northampton College (later The City University) in London, England and qualified with the General Optical Council in 1961. Following three years of practice in Kent, he served with the Royal Air Force as an optometry officer. He returned to England from his two-year posting in Aden after being wounded in a terrorist attack. Soon afterward, he and his wife, Cheryl, were on their way to Saskatoon where Tony took up a faculty appointment with the Department of Ophthalmology at the University of Saskatchewan. In 1971, the Cullens moved to the College of Optometry, University of Houston, where Tony began his association with Dr. Donald Pitts, studying the adverse effects of optical radiation on the eye. He also began studies with Prof. Gordon Ruskell of The City University that culminated in the awarding of his PhD in radiation biology.

In October 1978, Tony and Cheryl brought their three children, Sean, Bridget and Ailish to Waterloo. Tony began teaching anterior segment disease, systemic disease and ocular health diagnostic techniques, and established the Optical Radiation Laboratory. After serving as Admissions Officer and Associate Director, he became Director of the School of Optometry in 1992.

In addition to his extensive record of publications including important book chapters and reports, Tony has been prominent in the efforts of Canadian optometrists to gain the use of DPAs and TPAs since his arrival at Waterloo, and has given continuing education lectures in all provinces. He has also been active internationally, most recently with the World Council of Optometry, which named him the 2001 International Optometrist of the Year in recognition of his work in developing Optometry in Sweden, the Netherlands, Germany, Malaysia and elsewhere. He was the second Canadian optometrist to serve as President of the American Academy of Optometry in 1995-1996. He has also represented Optometry well in his work with the Government of Canada, the World Health Organization and the United Nations on environmental issues and eye health. He has received many honours including a DSc honoris causa from The City University, and Life Fellowship in The College of Optometrists (UK). With the initials DipOpt (Hons), MSc, OD, PhD, DSc(hc), FC Optom, FAAO, DipCLP behind his name, he has almost caught up with Duke-Elder!

Even in retirement, he shows no signs of slowing down. After attending the American Academy of Optometry meeting in December, where he received the William Feinbloom Award, Tony and Cheryl took a well deserved cruise holiday before Christmas. There was a January trip to Paris for a French optometry meeting, and after a vacation in Peru in March, Tony will be off to England for another speaking engagement in April. He will be an invited speaker at the CAO Biennial Congress in July and the European Society for Photobiology in September. In between there are the frequent trips to Peterborough with Cheryl to visit Bridget and her daughter Taite. Tony moved out of his office at the School in late February, but he reports that his new home office is now fully functional with telephone and high-speed internet connections.

We wish him and Cheryl all the best, and Bon voyage! ☺️
This is the fifth article in our series covering the evaluation and implementation process of the Electronic Optometric Medical Record (EOMR) system in the School of Optometry. Happily, we are able to report significant progress towards successful implementation.

The first phase of the implementation plan to introduce the EOMR to our patient clinic is to launch the system in our pre-clinic environment this fall. Graduates of the School of Optometry will recall the pre-clinic. Students are taught clinical techniques in the pre-clinic prior to entering the public patient clinic. This fall, our expanded 24-lane pre-clinic will be equipped with computers that will allow students to record results electronically through the use of the EOMR.

We have been working closely with our software vendor P&P Data Systems to complete the development of the EOMR. P&P developed the system specifications through working with us and several private practitioners; this is in an attempt to ensure the EOMR will not only meet the School of Optometry’s needs, but also the needs of the commercial optometry market. The EOMR has an intuitive user interface that will allow users, to navigate easily through the entire eye exam. It consists of 5 pages, not unlike a paper chart. Special attention has been paid to some of the more unique and critical needs of optometrists. For example, a drawing tool has been integrated into the product so that diagrams previously generated with a pen and or pencil can now be drawn electronically and included as part of the examination record.

As you read this newsletter, we are testing and reviewing the Beta version of the EOMR. This process takes several months. It is focused mainly on clinical usability, database quality, data storage and information retrieval, as well as assessment of overall system performance.

We have prepared a test environment in the pre-clinic that consists of a central server and five workstations. We have chosen to implement a wired network with desktop PCs rather than other technologies such as notebooks, tablet notebooks, wireless networking, etc., as this approach will allow us to benchmark the system’s usability and performance without the confounds of other technologies. The pre-clinic will also serve as the training environment for all users (students, clinical instructors, and faculty and staff members).

Implementation of the EOMR in the pre-clinic will allow more thorough testing of the software prior to its full implementation in the patient clinic. It will also enable us to identify clinic implementation issues and strategies. Furthermore, it will ensure that students are familiar with the software prior to using it the public patient clinic.

The School’s commitment to provide high quality, contemporary education and research is supported.
Thank You Johnson and Johnson Vision Care!!

In October 2004, the Faculty and Staff at the School of Optometry in Waterloo gathered to pay tribute to Johnson and Johnson Vision Care for their generous leadership donation of $250,000 toward the School’s expansion campaign. Their continued support of the School exemplifies their level of commitment to advance optometric care in Canada through education. Cindy McLean Leone and Tom Roberts were on hand to join in the celebration.

“As a leader in vision care, we are committed to supporting Canadian-based optometry schools,” said Tom Roberts, Business Director for Johnson & Johnson Vision Care Canada. Their donation will support necessary updates and improvements to library resources, and expand teaching labs, student computing facilities, as well as the public clinic. The School of Optometry thanks Johnson & Johnson Vision Care for once again standing by us in our time of need!

From Left to Right:
DR. DESMOND FONN, Director, Centre for Contact Lens Research
DR. GEORGE DIXON, Dean, Faculty of Science
CINDY MCLEAN LEONE, Central Regional Manager, Johnson and Johnson Vision Care
DR. BILL BOBIER, Director, School of Optometry
TOM ROBERTS, Business Manager Johnson and Johnson Vision Care

by the implementation of the EOMR. This vision coincides with one of the major recommendations of the Institute of Medicine (IOM) with respect to the medical education:

“Healthcare professional schools and organizations should enhance educational programs for students and practitioners in the use of computers, CPRs (computer-based patient records), and CPR systems for patient care, education, and research.”

The use of the information technology in general, and the electronic medical record in particular, holds great promise to promote educational competence and enrich students’ learning experiences. Some of the expected benefits of the EOMR implementation in the School of Optometry pre-clinic environment are:

> Enhancement of clinical educational quality and improvement of students’ learning experience by exposing them to contemporary standards of practice delivery.

> Offer enhanced electronic communication pathway among students and clinical supervisors.

While the 5-page EOMR will support a complete optometric examination we have asked P&P Data Systems to develop and enhance a Contact Lens Module. This module will be based on the School of Optometry’s standards and guidelines for ideal contact lens eye examinations. While this contact lens module will be designed for our specific requirements, we believe it will be of a great interest to private practitioners. The development and implementation of this supplementary functionality will follow the pre-clinic implementation, likely some time in 2006.

1. Institute of Medicine, The Computer-based patient record – an essential technology for health care.
The annual meeting of the American Academy of Optometry held in Tampa, Florida in December 2004, proved successful for members of the School of Optometry. Dr. Mitra Sehi became a Fellow of the American Academy of Optometry (FAAO). Dr. Luigina Sorbara and Dr. Kathy Dumbleton both became Diplomates of the Cornea and Contact Lens Section of the Academy. Dr. John Flanagan was the recipient of the Glen Fry Award, an award given in recognition of a distinguished scientist or clinician for his or her current research contributions; it includes an invitation for the recipient to present a special paper at the annual meeting of the American Academy of Optometry. Dr. Tony Cullen was the recipient of the William Feinbloom Award (established in 1983), which is given in recognition of an individual who has made a distinguished and significant contribution to clinical excellence and the direct clinical advancement of visual and optometric service and thus the visual enhancement of the public. This award is not limited to optometrists or Academy Fellows.

Congratulations to all the participants!

The Centre for Sight Enhancement (CSE) has been granted five year accreditation status for all programs and services reviewed in its on-site review by the National Accreditation Council for Agencies Serving People with Blindness and Visual Impairment (NAC). The CSE was commended for its implementation of an outreach service to the Windsor area for high tech assessment. The NAC also commended the CSE on the quality of its services and the opportunity for learning afforded to optometry students.

Congratulations to the CSE for a job well done!
The science of perfecting vision and improving visual outcomes continues to change rapidly! A myriad of innovations and new technologies are emerging across the entire eye and vision care industry.

> New contact lens materials and designs have enabled enhanced vision and healthier wear for our patients. Overnight wear can reshape our patients’ vision, while newer options can provide better vision to our presbyopic and astigmatic patients.

> Pharmaceutical advances are producing modern topical and oral agents that treat ocular disease as well as promote improved general eye health.

> Emerging surgical products and techniques may soon offer better options in multifocal IOls and focusing implants, as well as enable improved outcomes for our patients with retinal and optic nerve disease at increased risk for complications in surgery.

This year’s three-day program will address the science behind these developments and their impact on our patients and practices. Plus, a timely lecture will guide you through the web of information out there to keep up with this emerging evidence-based information!

Again this year, we present the Distinguished Dr. Emerson Woodruff and Dr. Clair Bobier Lectures on June 10th and 11th. Please join us to celebrate these very special events.

The School is pleased to welcome back Optometric Assistants and Staff with their own 1 1/2-day program including a full day of informative lectures including AMD, new technologies and forensics on Saturday, June 11th and two hands-on workshop choices on Sunday, June 12th.

The tent event has grown! And we will be moving to a larger ‘big-top’ this year. The lunch in the tent will feature a variety of exhibitors highlighting various educational materials and equipment items on Saturday, June 11th from noon to 2pm. Please join us for the evening barbecue and live music venue in the tent! The Lost Faculties will entertain us all evening on Saturday, June 11th from 6-11pm.

Is it your UW Class Reunion this year? That depends if you are in the class of 2000 (5 year), 1995 (10 year), 1990 (15 year), 1985 (20 year), 1980 (25 year), or 1975 and before (30+ years!). The University of Waterloo and the School of Optometry are highlighting the “5-year” reunion classes at a special dinner on Friday, June 10th. Don’t miss this great chance to meet up at your old alma mater!
The 2005 Emerson Woodruff & Clair Bobier Lectures
- Gary Marx

On Friday June 10th at 4:45 pm, the 11th annual lecture to honour Dr. Emerson Woodruff and his significant contributions to the School of Optometry will be presented. The topic for this year’s Woodruff Lecture is “Pirenzepine - A Novel M1 Antagonist for Treatment of Myopia Progression” and will be presented by Dr. Jimmy D. Bartlett.

Dr. Jimmy D. Bartlett
OD
Dr. Jimmy Bartlett attended Arkansas Polytechnic University in Russellville, Arkansas, and received his BS degree in Biology and Doctor of Optometry degree from the Southern College of Optometry in Memphis, Tennessee. He is currently a Professor of Optometry in the School of Optometry, as well as Professor of Pharmacology in the Department of Pharmacology and Toxicology at the University of Alabama School of Medicine. Dr. Bartlett’s research interests are in clinical ocular pharmacology, toxicology and investigational ophthalmic drugs, with emphasis on drug delivery and glaucoma.

ABSTRACT
Various methods advocated to slow the progression of myopia have included bifocals, orthoptics, contact lenses, and anticholinergic medications such as atropine. The development of pirenzepine, an M1 antagonist, is discussed, and recent clinical investigations in children are reviewed. The efficacy and safety of this new agent, as well as clinical implications for optometric practice, are considered.

On Saturday June 11th at 4:45 pm, the 16th annual Clair Bobier Lecture in Vision will be presented to honour Dr. Clair Bobier’s immense contributions to the Optometric profession. The topic for this year’s lecture is “The Pathogenesis of Contact Lens-Related Infection” and will be presented by Dr. Suzanne Fleiszig.

Suzanne M. J. Fleiszig
OD, PhD, FAAO
Dr. Fleiszig obtained her Optometry, Masters and PhD degrees from the University of Melbourne in Australia, after which she completed a 3-year post-doctoral fellowship at Harvard Medical School in the Department of Medicine, Division of Infectious Disease, and a one-year faculty position at Harvard. While there, she taught first year students at Harvard Medical School in microbiology, pathology and immunology. She joined the School of Optometry at Berkeley in 1994, and was promoted to her current position of Professor in 2004.

Dr. Fleiszig is the Associate Dean of Basic Sciences and is currently on the faculty of three graduate groups at Berkeley: Vision Science, Microbial Biology, Infectious Diseases and Immunity, and trains graduate students in each of these programs. Dr. Fleiszig’s research focuses on the pathogenesis of bacterial infection of the eye. Under this heading, she works on understanding how the eye defends itself against infection, how contact lens wear compromises those defenses, and pathogenic strategies of infecting bacteria.

ABSTRACT
Research in my lab is focused on understanding why contact lens wear predisposes the cornea to bacterial infection. Our approach is to study basic mechanisms involved in defense against infection, bacterial interactions with corneal epithelial cells, and how contact lens wear changes the story. This lecture will summarize our findings, which suggest exciting new strategies for preventing disease of the ocular surface and other sites.
The University of Waterloo, School of Optometry is excited to announce the creation of a new program for internationally trained optometrists.

The School has been awarded $551,000 by the Ministry of Training, College and Universities (MTCU) of Ontario to develop an International Optometric Bridging Program. Dr. Susan Cooper is leading the development and implementation of this new program that will see qualified international optometric graduates being able to move forward to seek registration in Ontario.

The seeds for this program lie with both the provincial and federal governments, who are encouraging provincial licensing bodies to provide or create opportunities for new Canadians to pursue a path leading them back to the professions in which they were originally trained.

Ontario welcomes more than 120,000 new immigrants each year and over the last couple of years, the College of Optometrists of Ontario has received many registration inquiries from International Optometric Graduates. In 2001, the College implemented an academic credential assessment program for these individuals. While it helped determine academic equivalency, it offered no remediation mechanism for those whose academic credentials were deemed not to be equivalent to those of a North American optometric graduate. It was also noted that those who were deemed equivalent had difficulty passing the licensing examinations.

In 2003, the School was contracted by the College of Optometrists of Ontario to launch a pilot project to determine how to best eliminate the barriers to registration faced by these internationally trained graduates. Twelve IOGs (International Optometric Graduates) from nine countries who had been deemed academically equivalent or nearly equivalent to a North American graduate participated. The pilot project consisted of a Prior Learning Assessment of optometric knowledge and clinical skills and was followed by a concentrated, one-week bridging program. When six of the participants sat the CSAO for the first time in October 2003, three candidates passed all components. The remaining three passed the exam at the second sitting. Prior to offering this pilot program, no IOG had passed the CSAO in its entirety on the first attempt.

The development of the new, MTCU funded, bridging program will build on the lessons learned from the pilot project and result in programs that focus on the specific needs of the international graduate. The programs will reduce or eliminate issues related to the primary barriers faced by the IOGs: educational gaps and lack of occupation-specific language and communication skills.

We are hopeful that this new program, developed for Ontario, will support similar goals for other Canadian provincial jurisdictions; that way, a consistent, national program for Optometry would exist.

CORA, the Canadian Optometric Regulatory Authority, has formed a working group with representatives from across Canada to work with the School to bring this to fruition.

When discussing international optometric graduates, it is important to acknowledge the unique value they bring to their practice. Enabling these optometrists to practice their profession in Ontario has the added benefit of allowing a vast number of new immigrants who come to Ontario each year access to eye care in their native language.

The goal of the proposed program is to ensure that qualified IOGs are able to practice in Ontario while ensuring that the profession of optometry continues to provide a high level of care to the people of Ontario.
The Centre for CONTACT LENS RESEARCH:

It has been another busy year at the CCLR. Clinical trials have continued to focus on silicone hydrogel materials, RGP lenses, solutions, and orthokeratology, as well as the effects of refractive surgery. We have also continued to develop basic research supporting this clinical research, performing 22 complex research studies. In collaboration with the Vision Cooperative Research Centre (Vision CRC) in Sydney, Australia, we continue to expand our efforts in the field of global contact lens education, in addition to laying the groundwork for developmental research relating to visual performance and presbyopia.

In addition to presenting 47 conference papers and posters, CCLR researchers were guest lecturers at 135 events worldwide. CCLR-affiliated graduate students have increased from 9 to 12 students; they continue to excel in their own areas of study as well as in their contributions to the CCLR.

The CCLR recently hosted a visit from members of Bausch & Lomb's International Professional Services team, who were invited to view our facilities and meet our research staff during a day of professional development. Members of the CCLR presented different aspects of the CCLR's research profile, including the influence of silicone hydrogels on ocular physiology and an overview of clinical work relating to these lenses, an overview of optical coherence tomography and its applications, the measurement of aberrations induced by LASK and orthokeratology, orthokeratology and RGP lenses, esthesiometry and the measurement of ocular redness, and an overview of the online search and bibliography capabilities of www.ReferenceSight.com. These visitors represented a number of countries, including France, Russia, Poland, Egypt, Spain, Italy, the Netherlands, Belgium, Germany, and the U.K.

SPOTLIGHT ON RESEARCH

Tear film and dry eye symptoms - The novel use of optical coherence tomography as a non-invasive technique for measuring tears has been useful in our studies quantifying tear volume, flow and meniscus height. We have also continued to investigate the constituents of the tear film, characterizing its biochemical composition and quantifying mucomimetic components in tears collected from patients that commonly report dry eye symptoms. Finally, the sensation of dryness and discomfort experienced by patients, difficult to characterize with conventional instruments and scales, has been more quantifiable with the use of novel technology designed to take continuous measurements of subjective symptoms.

Biocompatibility - Our research has investigated the deposition of proteins and lipids on the surface of model polymer substrates as well as the uptake and release of pharmaceutical agents as they interact with contact lens materials.

Anterior segment physiology - We have continued to use a Belmonte esthesiometer in the measurement of ocular surface sensitivity, and both optical coherence tomography and optical pachymetry have been useful in our investigations of the corneal swelling and desensitisation response to hypoxic conditions induced by overnight wear of contact lenses. Our work has confirmed a sympathetic swelling response that is particularly significant in light of the growing body of evidence that silicone hydrogel materials provide more than enough oxygen to the eye with both daily and continuous wear. Our research has shown that virtually all hypoxic signs with overnight wear have been eliminated with silicone hydrogel lenses.

Visual and subjective performance indicators - New research developments have included assessment techniques relating to presbyopia and visual performance.
SPOTLIGHT ON GLOBAL EDUCATION:
In addition to our board level affiliations with a variety of international organizations including the International Association of Contact Lens Educators (IACLE), the International Center for Eyecare Education (ICEE), and the International Society of Contact Lens Research (ISCLR), we continue to collaborate in the development of innovative educational initiatives, including:

The Global Contact Lens Education Program – Dedicated to developing and delivering education on silicone hydrogel lenses in the form of seminars, workshops and interactive technology.

www.ReferenceSight.com – An educational website featuring a comprehensive collection of references and resources on contact lenses, refractive surgery and external ocular disease, including a gallery of over 100 clinical images and an extensive database that is updated weekly. The database allows one to search 2,000+ journals and professional periodicals, save search parameters and receive notification of new results, maintain personal reference collections, export references directly into bibliographic software or documents, view abstracts and links to e-text, publishers and reprint sites (where available), and cross-reference searches by author, journal and keyword.

www.SiliconeHydrogels.com – An independent resource on silicone hydrogel lenses that is updated monthly and includes editorials, article reviews, first-person accounts from practices, international conference synopses, a list of research publications on silicone hydrogels and continuous wear, a moderated question and answer forum, a monthly poll, and a glossary of terms.

NOW AVAILABLE – A Chinese version of the site, at http://translation.SiliconeHydrogels.org is expected to provide up-to-date content matching the English site later this year. For now, view selected archives, including editorials, a glossary of terms, and a question and answer forum in Chinese.

ALSO AHEAD – Look for live, synchronous lectures, archived CE modules and an interactive assessment tool.

Congratulations to Kathy Dumbleton and Gina Sorbara

who became Research Diplomates of the American Academy of Optometry’s Cornea and Contact Lens Section, a status awarded to AAO Fellows who have made a substantial contribution to cornea and contact lens research. Dr. Sorbara heads the School of Optometry’s Contact Lens Clinic in addition to being a Research Associate at the CCLR. Dr. Dumbleton is a Senior Research Associate with the CCLR.

Drs. Dumbleton and Sorbara at the American Academy meeting in Tampa, Florida.
Searching for journal articles on the Web?  
A quick guide for eye care professionals  
- Carol Stephenson and Tim Ireland

Over the past decade, the use of the Web to provide access to full text scholarly information has become pervasive in the academic community.

For example, the University of Waterloo (UW) Library now spends more of its budget on Web accessible resources than on print resources. The UW Optometry Research Starting Points Web site (http://www.lib.uwaterloo.ca/discipline/opt) is the gateway to Optometry related Web resources, some of which are restricted to current students, faculty, and staff. Library purchased electronic resources allow access anywhere/anytime for current students, faculty, and staff. However, many of these resources are not accessible to eye care professionals outside of the university. Fortunately, there are some free Web sources to help eye care professionals uncover biomedical scholarly material.

Obtaining citations on your subject

Reference Sight (http://cclr.uwaterloo.ca/vsrd/) was developed by the Centre for Contact Lens Research (UW), with funding from Bausch and Lomb. It indexes over 2,000 journals, including some not indexed in PubMed. Subjects covered include contact lenses, refractive surgery and external ocular diseases.

PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi) is the most comprehensive and current journal index for biomedical topics (over 15 million citations).

Google scholar (BETA) (http://scholar.google.com) is easy to use and provides more relevant material than a standard Google (http://www.google.com) search. However, PubMed indexing via this interface is about a year behind, and only selected publishers have provided content to Google.

Scirus (http://www.scirus.com/srsapp/) is produced by Elsevier, one of the largest scientific publishers. Scirus focuses on scientific content indexing: Medline, ScienceDirect, BioMedCentral, preprint servers, patents, and Web sites. It has content that is not offered in PubMed. An interesting feature of this index is its ability to limit results to journal articles or Web sites.

Obtaining your material

Once you have discovered articles of interest, the next step is to obtain the full text. PubMed uses icons to indicate if the article is free online, and will often link to a publisher web site. Open Access initiatives have resulted in a large archive of academic journal content being available “free” via the Web. Individual journal Web sites may provide some of their content free or it may be grouped into a journal collection, such as:

BioMed Central (http://www.biomedcentral.com/)
PubMed Central (http://www.pubmedcentral.nih.gov/)
HighWire Press (http://highwire.stanford.edu/lists/freeart.dtl)

Many commercial journal Web sites also have article purchasing features, but these tend to be expensive. Some less expensive suppliers of articles include: CISTI Source (http://cisti-icist.nrc-cnrc.gc.ca/docdel/docdel_e.html) and Visionet (http://www.visionet.sco.edu/).

The Optometry Learning Resource Centre (OLRC) will provide 4 articles from prints free to CAO member optometrists. For more information, consult the Information Services for Optometrists Web site (http://www.optometry.uwaterloo.ca/olrc/infoservO.html).

Finally, if you are researching a topic and would like assistance, you can contact the OLRC staff (optlib@sciborg.uwaterloo.ca). OLRC staff members Tim Ireland and Carol Stephenson will be presenting “Just in time information; diagnostic information retrieval skills” at the June 2005 CE. We hope to see you there!


Fonn, D. (editor-in-chief). The IACLE Contact Lens Curriculum. Module 7: Contact Lenses – Related Complications 462 pages. Published by IACLE.


Haque, S., Fonn, D., Simpson, T. and Jones, L. Corneal and epithelial thickness changes after 4 weeks of overnight corneal refractive therapy lens wear, measured with optical coherence tomography. Eye & Contact Lenses 2004; 30;189–93.


Jones, L. SILMO, Paris, France, Oct 2004


Making a bequest is a wonderful way to show your lasting support and leave a legacy that will benefit the School of Optometry for years to come. Providing a charitable gift in your will can be easily accomplished by including a bequest to the School of Optometry. “Bequest” is simply a term used to describe a gift in your will specifying that a certain percentage, a particular asset, or a specific dollar amount of your estate will be directed to a named beneficiary.

You can designate how you want your gift to be used, or ask the School of Optometry to use it where it is needed most. Throughout our history, gifts have provided the resources to establish scholarships which recognize the academic excellence of our students, and to fund bursaries, which provide financial support for students to help them achieve their academic goals. Other gifts have enabled the University to improve facilities and programs essential to teaching and research activities.

A gift of life insurance is an economical vehicle for giving a larger and more lasting gift than might otherwise be possible, without drawing on your assets now or depleting your estate. If donated irrevocably, your gift will not be included in the value of your estate; therefore there are no probate fees with respect to such a gift. In the case of an irrevocable gift, a donation receipt would also be issued for any premium payments made to maintain the policy.

A gift of publicly traded securities is another way to support excellence in teaching and research, and benefit from very favourable tax credits.

There is a real advantage to giving shares directly to UW rather than selling the shares and donating the proceeds. When gifting shares directly, you’ll receive a charitable tax receipt for the fair market value on the day the shares were given to UW and only have to claim 25 percent of the capital gain as income. If however, you sell the shares yourself and donate the proceeds, 50 percent of the taxable gain must be included as income.

The tax credits associated with the charitable receipt will invariably more than offset the tax payable on the capital gain.

A charitable gift annuity combines your gift to the University of Waterloo with an annuity. The University purchases the annuity on your behalf through a licensed life insurance company. Your guaranteed annuity payments will continue to be paid to you throughout your lifetime; unaffected by changes in the economy or interest rates. If you wish, the annuity can be written to cover both you and your spouse for life or for a specific number of years.

The exact amount of your annuity payments will depend on annuity rates in effect at the time, your age(s), and the size of your contribution (typically, the University retains 25% of the contributed amount and the balance is used to purchase the annuity). Often, the annuity interest rate will be greater than the interest you might receive on a GIC or other fixed-income investment.

For further information, please contact Sharon McKay-Todd Development Officer, Planned Giving University of Waterloo 519-888-4567, ext. 5413 E-mail: smckayto@uwaterloo.ca Web: www.development.uwaterloo.ca/plannedgiving

The above is provided as general information, and should not be taken as formal legal or tax advice. Donors should consult with their own legal and financial advisors before taking any action.

“Do you take pleasure in your profession? Are you making a comfortable living? Do you enjoy your life? After answering yes to these questions, I then asked myself “How did I get here?” There are a multitude of answers – self motivation, personal sacrifice, industry, drive and many more – but mainly it was my education.

I considered that without my education I would not have the happiness and lifestyle that I enjoy today. So I further asked myself, “What do I owe to my education and to the School?” Besides everything for me, the answer is support – not only moral and invested time, but also financial. A gift today to the expansion as well as a planned gift in the form of a bequest to benefit the School of Optometry in the future makes sense.

The profession would not have advanced as quickly without the backing of Schools of Optometry in Canada. With the decline in government financing of post secondary education today, our School needs our support for the present and the future of the profession. Since they have given us so much, I feel we owe it to the School to leave our legacy behind.”

Brian L. Trump, OD ’74
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Like all health fields, the process of providing quality vision care is increasingly dependent on the ability of optometrists to make use of new information technologies (IT) in assessing and treating their patients. Interestingly, very little is known about the role currently played by IT in supporting the delivery of optometric services. Likewise, little is known about potential opportunities for practicing optometrists to take advantage of new IT-related methods to enhance the care of their patients.

Researchers at the University of Waterloo are working on a project to bridge this knowledge gap. Dr. Ian McKillop of the School of Computer Science and the Department of Health Studies, together with Drs. Paul Stolee, Graham Strong and Deborah Jones of the School of Optometry, are planning to survey optometrists across Canada about their current use of information technology and information systems in their practices. They will also be conducting in-depth interviews and site visits of optometry practices to gain an understanding of opportunities and barriers related to increased use of IT in optometry. Study results will be reviewed by an expert advisory group of practicing and academic optometrists. The study will invite discussion and debate on the role of IT in optometry, and on what an IT-enabled optometry practice might look like in the future. In turn, the study will lead to recommendations for the kind of health informatics training that will be needed in schools of optometry.

If you receive a survey questionnaire for this study, please take a few minutes to complete and return the questionnaire. Your response will make an important contribution to the future of optometry. For further information on the study, please contact Dr. Paul Stolee (stolee@uwaterloo.ca) or Dr. Ian McKillop (imckillop@uwaterloo.ca).