NEW ENGLAND COLLEGE OF OPTOMETRY AT 125: A HISTORY OF LEADERSHIP

Heather Edmonds, M.L.I.S.  
Director of Library Services  
New England College of Optometry  
edmondsh@neco.edu

Matthew Garston, O.D.  
Adjunct Professor  
New England College of Optometry  
gars@med.mit.edu

doi: 10.14434/hindsight.v50i4.28033

ABSTRACT

The New England College of Optometry in Boston turns 125 years old in 2019. Throughout its existence, the institution has undertaken several initiatives that changed the profession of optometry both in the United States and globally. The most significant of these are detailed in this history.

KEYWORDS

NECO; NEWENCO; Massachusetts School of Optometry; Massachusetts College of Optometry; MCO; Klein School of Optics; William R. Baldwin; Larry R. Clausen

2019 marks the 125th anniversary of New England College of Optometry (NECO) in Boston. NECO started life as the Klein School of Optics in 1894, founded by practicing ophthalmologist August A. Klein, M.D., who believed there was a need for special training in the use of new devices that had recently been introduced to evaluate vision. The college has been open since, making it the oldest continuously-operating school of optometry in the United States.1

In the decades that followed its founding, NECO—first as Klein School of Optics, then Massachusetts School of Optometry, then Massachusetts College of Optometry (MCO), and, finally, New England College of Optometry—would play a significant role in the burgeoning field of optometry, both nationally and internationally.

NECO has benefitted from the fine service of 12 presidents and deans during its remarkable 125-year history, and there have been numerous other pioneering individuals at the institution who have followed Klein’s lead in developing optometry in myriad ways. Two presidents, William R. Baldwin, O.D., Ph.D., and Larry R. Clausen, O.D., Ed.D., stand out for the impact their leadership had on changing the scope and reach of the profession.

PRESIDENT WILLIAM R. BALDWIN: EXPANDING THE SCOPE OF PRACTICE

Dr. William R. Baldwin became president of the MCO in 1969 and remained until 1979. (Figure 1) One of the primary

Figure 1. Cover of January 1971 Massachusetts College of Optometry News Letter & Alumni Bulletin. Image courtesy NECO Archives.
reasons he accepted the position in Boston was that, at an independent college, he would have the authority to change the curriculum in ways that would alter the very nature of the role of optometrists. Baldwin’s goal was to “change the scope of optometric practice from refraction and spectacle peddling to primary eye care.” With the help of significant federal grants, he hired additional faculty, and modified the curriculum to mirror those of other major health professions. MCO was thus a pioneer in the advancement of optometry into a full-scope primary eye care profession, a mission that optometry continues to embrace and advance to this day.

**AFFILIATIONS WITH NEIGHBORHOOD COMMUNITY HEALTH CENTERS**

In the mid-1960s the city of Boston implemented community-based health centers (CHC) in response to a shortage of primary health physicians. The goal for these neighborhood centers was to “supplement the specialty and inpatient services of the local teaching hospitals...[with] neighborhood residents” participating in development and oversight of their health centers. Around the same time, MCO was reevaluating and revising its clinical curriculum, with the primary purpose of “enriching and expanding optometric students’ clinical experience.” Baldwin had the foresight to see that there could be a role for optometrists in Boston’s burgeoning community health care system.

Dr. Baldwin assigned the Assistant to the President for Clinical Development, Charles F. Mullen, O.D., the task of meeting with the leaders of various health centers in Boston and negotiating collaborative arrangements. Dr. Mullen was instrumental in connecting the two initiatives. He recalled, “We knew our students would see a higher incidence of ocular and vision anomalies in patient populations from low socioeconomic strata, and also we knew that they would benefit from health care environments in which the optometrist was one of many health care professionals contributing to the care of the patient as a whole person.”

While MCO and CHCs seemed an ideal match, there were some significant challenges to seeing the connection through. Some CHC staff were reluctant to work with optometrists, as they had not done so before. Additionally, there was opposition to the model from some private optometric practitioners, who felt that their practices would suffer as a result. Finally, some in the health center community were unsure about allowing students to participate in the care provided, as it echoed the health care received in the emergency rooms of large teaching hospitals—exactly what the CHC model was trying to avoid. With considerable effort, Mullen and his colleagues surmounted these problems and, in 1972, a preceptor optometrist and fourth-year optometry students were placed at three Boston CHCs.

Over the last half century, the partnership between MCO and CHCs has expanded considerably, with several of the 14 currently-affiliated health centers hosting NECO residency programs, and a requirement that all fourth-year students complete a three-month clinical rotation at one of the affiliated CHCs.

**ACCELERATED OPTOMETRY PROGRAM OF STUDY FOR Ph.D’s**

Dr. Baldwin also established optometry’s first accelerated O.D. program for individuals who already hold a Ph.D. or equivalent degree in the sciences. Developed by Baldwin and the Division of Visual Sciences Director and Coordinator of the Division of Patient Care: General Optometry, John H. Carter, O.D., Ph.D, the program enrolled its first class in 1972. Guided and further expanded by the institution’s first Director of Special Studies, Norman E. Wallis, O.D., Ph.D—who would later become president of the Pennsylvania College of Optometry, as well as executive director of the National Board of Examiners in Optometry—the program “provide[d] a pathway into optometry and optometric education for people who have credentials in scientific research and education.” Many graduates of the program—now known as the Accelerated Optometric Degree Program (AODP)—have gone on to have exemplary careers, and are represented throughout the profession in various influential roles, from education to industry to research, and other related fields.

**TRAINING OF OPTOMETRISTS IN THE USE OF DIAGNOSTIC PHARMACEUTICAL AGENTS**

An additional innovation that took place during the Baldwin era was the credentialing of the first optometrists to legally utilize diagnostic pharmaceutical agents (DPAs). In 1971, Rhode Island became the first state to pass legislation allowing optometrists to use DPAs in the examination of patients. The law required that a course in pharmacology as it applied to optometry be presented by an accredited institution. MCO, in conjunction with the Massachusetts College of Pharmacy, was selected to implement this course. The law required that all optometrists take a 100-hour course in Pharmacology and the Eye in order to be certified.

The course required three days of clinical training, which was held at the Massachusetts College of Optometry. Dr. Wallis, who was assigned to direct the program, approached Matthew Garston, O.D., to assist with both the didactic and
clinical aspects of the course. For the previous few years, Dr. Garston had been a preceptor for MCO at a clinical rotation site at the U.S. Public Health Service Hospital in Boston, where DPAs were routinely used under the direction and supervision of the ophthalmology department. He was in a unique position to learn about ocular pharmacology, side effects, and the appropriate use of DPAs, and administered them to patients several times a day under the direction and training of then-Chief of Ophthalmology Donald Doughman, M.D. The clinical component of the course, as taught by Dr. Garston and others he had trained, involved the use of the biomicroscope and gonioscope to assess the anterior angle of the eye, the indirect ophthalmoscope after pupil dilation with mydriatics, and the Schiotz and Goldmann tonometers.

In 1972, over 90 of the practicing optometrists in Rhode Island passed the MCO course and were the first optometrists in the United States to legally use diagnostic pharmaceutical agents. This landmark legislation would significantly change the way optometry is practiced in America, and MCO had played a significant role in its successful implementation.

PRESIDENT LARRY R. CLAUSEN: EXPANDING OPTOMETRY ABROAD

Dr. Larry R. Clausen was another NECO president (1990-2000) whose visionary insights led to educational innovations that changed optometry not only in the United States, but also throughout the world. Clausen had previously served the college as dean of academic affairs beginning in 1982. Under his leadership, the college significantly expanded its initiatives in the international arena. (Figure 2)

FORMATION OF INTERNATIONAL COLLABORATIONS

NECO’s initial partnership with foreign optometrists and students began in the 1970s, when the school developed an informal collaboration with the School of Optometry at the University of Montreal. At this time, a program was implemented that allowed students to gain a doctor of optometry degree after completing a five-year bachelor’s degree in optometry. The program graduated 15 students between 1972 and 1980, and its success inspired optometrists from other nations to reach out to NECO to establish similar collaborations.

As a response, the basis for what is now known as the Advanced Standing International Program (ASIP) was created in 1984, during Dr. Clausen’s time as dean of academic affairs. ASIP allows for foreign optometrists to graduate with an American doctorate of optometry in two years. Approximately 150 optometrists from 22 countries have received their doctor of optometry degrees from the ASIP program, and many have gone on to change the practice of optometry in their home countries. ASIP continues at NECO to this day, with the current cohort of students hailing from countries as far and wide as Nepal, Madagascar, Spain, Ghana, Iran, and beyond.

In 1992, under the Clausen presidential administration, ASIP launched a major effort to offer a course of study entirely abroad when it delivered a program in Italy. This prompted another new initiative (along with an appropriate acronym): CIAO. The Center for the International Advancement of Optometry, under the direction of Bina Patel, O.D. for the past 27 years, has enjoyed significant achievements, including providing instructional support to a German master’s program of optometry, establishing certificates of advanced study programs for optometrists in South Africa, Spain, and France, and helping to establish the profession of optometry in China. Dr. Patel’s work in international optometric education was honored in 2015 when she received the International Optometrist Award from the World Congress of Optometry. In the words of her colleague, NECO alumni and former faculty member Thomas Freddo, O.D., Ph.D.: “In her years at NECO, Dr. Patel has spearheaded international outreach, long before it became fashionable. . . . These programs have provided the foundations upon which change in scope of the practice efforts have been soundly built. Her standards for international optometric education and training are those to which all such programs should aspire.”

NECO has also welcomed a number of visiting scholars from academic institutions around the world, and many scholars from NECO have taught or conducted research.

Figure 2. Larry R. Clausen (eighth from left in front row) with colleagues and family at the signing of the agreement between Wenzhou Medical College and the New England College of Optometry in Zhejiang, China, 1992. Image Courtesy NECO Archives.
abroad. In 1988, under the leadership of Guang-Ji Wang, M.D., O.D., Wenzhou Medical College in Zhejiang established the first department of optometry in China. Four years later, the college signed an agreement with Wenzhou which “outlined a mutual commitment to the development of the respective faculties and students, to collaborative research and to the promotion of intellectual exchange in the field of optometry throughout China.” Wenzhou became the home to China’s National Optometry Research Center (NORC).

A decade later, Dr. Wang, now a NECO faculty member, initiated a cooperative project between NORC and several U.S. optometry schools to develop six departments of optometry in Chinese medical schools. This project became known as the China Optometry Resource Development Project (CORD). In 2017, NECO was pivotal in helping to establish COORD-2, a new consortium of five U.S. optometry schools and over 100 medical schools in China. The goal of COORD-2 is to develop optometry programs to work in tandem with the ophthalmology departments of Chinese medical schools. Nearly 50 years after its initial foray into partnering with foreign institutions and optometrists, international collaboration remains a hallmark of NECO’s contributions to the profession at large.

125 YEARS OF EXCELLENCE

Beyond the extraordinary accomplishments of Drs. Baldwin, Clausen, and their fellow presidents and deans, NECO faculty, staff, and alumni have also made a considerable mark on the profession. Among the ranks are several former American Optometric Association presidents, American Optometric Student Association presidents, American Academy of Optometry presidents, National Optometry Hall of Fame inductees and major research grant recipients as well as exceptional educators, clinicians, and practitioners. We are extremely proud of the initiatives and achievements realized over the last 125 years by the now-global NECO community, which has far exceeded founder August Klein’s initial vision for the institution. We look forward to the next 125 years as we continue to embody the pioneering spirit that has come to define the New England College of Optometry.

Acknowledgements

The authors wish to thank Bina Patel, O.D.; Ron Ferrucci, O.D.; and Melissa Lydston, M.L.I.S., for their assistance in preparing this history.

References

9. Center for the International Advancement of Optometry. The New England College of Optometry; 1990s.