Association of Schools and Colleges of Optometry

The Association of Schools and Colleges of Optometry (ASCO) represents the professional programs of optometric education in the United States and Canada. ASCO is a non-profit, tax-exempt professional educational association with national headquarters in Washington, D.C.

Officers and Members

President
Dr. Richard L. Hopping, Pres.
Southern California College of Optometry
Fullerton, California

President-Elect
Dr. Edward R. Johnston, Pres.
State University of New York
State College of Optometry
New York, New York

Vice-President
Dr. Jack W. Bennett, Dean
Ferris State College
College of Optometry
Big Rapids, Michigan

Secretary-Treasurer
Dr. F. Dow Smith, Pres.
The New England College of Optometry
Boston, Massachusetts

Immediate Past President
Dr. Willard Bleything, Dean
Pacific University
College of Optometry
Forest Grove, Oregon

Executive Director
Lee W. Smith, M.P.H.

Dr. Henry B. Peters, Dean
University of Alabama
School of Optometry
Birmingham, Alabama

Dr. Jay M. Enoch, Dean
University of California
School of Optometry
Berkeley, California

Dr. William R. Baldwin, Dean
University of Houston
College of Optometry
Houston, Texas

Sustaining Members

AO Scientific Instruments Division, Warner Lambert Technologies, Inc.
Barnes Hind/Revlon Vision Care International
Bausch & Lomb, Soflens
Professional Products Division

CooperVision Optics
Corning Glass, Optical Products Division
Logo Paris, Inc.
Marco Equipment, Inc.
Multi-Optics Corporation

Journal of Optometric Education

Editorial Council

John F. Amos, O.D., M.S.,
Chairman
University of Alabama
in Birmingham
School of Optometry

Henry W. Hofstetter, O.D., Ph.D.
Indiana University
School of Optometry

Penelope Kegel-Flom, Ph.D.
University of Houston
School of Optometry

Thomas L. Lewis, O.D., Ph.D.
Pennsylvania College of Optometry

Editorial Review Board

Arol R. Augsburger, O.D., M.S.
Felix M. Barker, II, O.D., M.S.
Morris Berman, O.D., M.S.
Tom Brungardt, O.D., M.S.
Fredy W. Chang, O.D., Ph.D.
David W. Davidson, O.D., M.S.
Richard H. Dohrn, M.S., O.D.
Ben V. Graham, Ph.D.
Eric R. Greene, O.D., M.A.
Wayne W. Hoelt, O.D.
Nira R. Levine, Ed.D.
William F. Long, O.D., Ph.D.
Paul L. Pease, O.D., Ph.D.
Donald C. Reynolds, M.Opt., M.P.H.
Jack E. Richman, O.D.
Robert P. Rustein, O.D., M.S.
J. James Saladin, O.D., Ph.D.
Paulette P. Schmidt, O.D., M.S.
Clifford Scott, O.D.
Leo Sernes, O.D.
Richard D. Septon, O.D., M.S.
James W. Walters, O.D., Ph.D.
T. David Williams, O.D., Ph.D.
G. Woo, O.D., Ph.D.
Table of Contents
Summer, 1984
Volume 10, Number 1
Official Publication of the Association of Schools and Colleges of Optometry

ILAMO: Partner in Optometric Education
Maria Dablemont
AOA's librarian/archivist reports on ILAMO's history and extensive current collection and examines its uncertain future.

Friends of ILAMO
Henry W. Hofstetter, O.D., Ph.D.  8

Association of Schools and Colleges of Optometry
Annual Report, 1983-84  15

Optical Parameters of Thin Prisms—An Introductory Laboratory Experiment
Laxman G. Phadke, Ph.D.
An experiment designed in the geometric optics laboratory at Northeastern State University helps students gain confidence in the concept of prism dipters.

Measurement and Evaluation
Leon J. Gross, Ph.D.  28
A brief distinction between measurement and evaluation, a distinction which would appear to be obvious but yet is frequently blurred, is provided.

DEPARTMENTS
Editorial: "The Changing Philosophy of Federal Student Assistance"
Robert Graham, M.D.  5
Letters  6
Announcements  6
Classified  6
Newsampler  7
Sustaining Member News  14

On the cover: The Ryer Bookplate—Elmer Hotaling, Dr. Ryer’s partner, designed the bookplate. He said the idea he wanted to convey was “that Ryer built castles in the air but always kept one foot on the ground.” The scroll at the bottom contains the names of some of the authors Dr. Ryer had brought himself up on: Newton, Donders, Helmholz, Lockwood, Cross, Tyndall, and Fresnel. Pictured on the left are (1) the plaque each fellow of the New York Academy of Optometry was authorized to display in his reception room; (2) the ophthalmometer, which Dr. Ryer favored among other instruments and believed to be the most useful in contact lens procedure; (3) the Ryer Astigmometer; (4) the Ryer Dynamic Retinoscope.
Ophthalmic & Physiological Optics is an interdisciplinary journal containing papers dealing with both pure and applied aspects of visual science. While emphasis is given to matters of importance to ophthalmic opticians (optometrists), many of the topics discussed are of interest to visual psychologists, physiologists and others concerned with the development, use and restoration of vision.

The material may be of an experimental, observational, theoretical or historical nature and subjects range from the design of spectacle and contact lenses to the use of drugs and ocular disease. Problems in applied vision in such situations as driving, optical instrumentation and visual displays are also highlighted.

Both full-length papers and short items, in the form of letters or notes on research or instrumentation, may be accepted for publication, following review by the panel of referees. The journal also contains book reviews as well as occasional review articles on matters of topical interest in pure and applied vision.

Subscription Information
Published in four issues per annum (Volume 4)
Annual subscription (1984) US$65.00
Two-year rate (1984/85) US$123.50

A selection of papers
William Edwin Hardy — an appreciation, D A SHEARD.
The effect of reduced visual acuity upon Farnsworth 100-hue test performance, L BROWN et al.
The stability of the fixation disparity curve, K M DAUM.
The effects of moderate doses of ethanol on heterophoria and other aspects of binocular vision, R E HOGAN & P B LINFIELD.
Corneal transparency changes resulting from osmotic stress, R STEVENSON et al.
The working threshold approach to Friedmann Visual Field Analyser screening, I F GUTTERIDGE.
Changes in spatial resolution for pattern and movement detection in clinical cases, F MacCANA et al.
Flash and pattern VEPs: examples of cases of hysterical amblyopia and provoked visual impairment (Uthhoff’s sign), F MacCANA et al.
Optical therapy in Steele-Richardson-Olszewski syndrome, B R CHOU et al.
Reaction-time determination of the latency between visual signals generated by rods and cones, J L BARBUR.
Human tear protein fractions during waking hours, C M HAGGERTY & J R LARKE.
The aniseikonic matrix, M P KEATING.
The Changing Philosophy of Federal Student Assistance

From a historical perspective, federal assistance for students of the health professions is a phenomenon that has been with us only a couple of decades. Except for some limited traineeships for public health graduate study in the 1950s, there were virtually no federal student assistance programs until 1963.

Prior to that date, in fact, the federal role in most other national health issues also had been peripheral. The training of physicians and other health professionals, establishment of credentials for health care practice, provision of health services to those unable to pay, and the setting of standards for services and medical care had largely been in the purview of state and local governments and the private sector for nearly two centuries.

The federal role became a dominant one with the passage of the Medicare and Medicaid bills, the Health Professions Educational Assistance Act of 1963, the Nurse Training Act of 1964, the Allied Health Professions Personnel Act of 1966, and their later amendments. This landmark legislation resulted largely from concerns raised during the preceding decade of an impending shortage of physicians and other health professionals.

When the federal government came into the health professions training area, it came in a big way. Hundreds of millions of dollars were invested in the educational system within the next few years. Under the impetus of federal funding, there was an unprecedented expansion of U.S. health professions training facilities. By the decade ending in 1976, a total of 41 new health professions schools were opened.

In addition to construction and equipment grants, federal programs provided funds for faculty and curriculum development; for increasing enrollments (capitation grants); and for scholarship, traineeship, various student loan, and other programs. In less than 10 years, the annual number of graduates in all health professions rose nearly 85 percent. These expansion programs hit their peaks in the early 1970s, and new concerns were raised by health leaders. It appeared that we had successfully expanded the overall capacity of the educational system to supply health professionals, but that millions of Americans were unable to benefit because care was not available where they lived.

Clearly, something needed to be done to provide better access to health care services, and an evolution began. Federal funds were geared more to Area Health Education Centers (AHECs) and other programs that addressed the problems of maldistribution and the lack of family practitioners in rural and inner-city areas than to increasing the capacity of the educational system.

With the passage of the Health Professions Educational Assistance Act of 1976, the evolution became more evident. The 1976 law targeted on the development of primary care practitioners and on programs to alleviate maldistribution of health professionals, and it tied student assistance programs to commitments from the recipients to practice in underserved areas.

The evolution continued into the early 1980s, when new pressures, such as soaring health care costs and government expenditures, caused many to realize that our resources in the United States are finite. As a result, the Omnibus Budget Reconciliation Act of 1981, which reauthorized health professions programs through fiscal year 1984, placed new emphasis on disease prevention and health promotion, added authority for training primary care physicians, provided support services for practitioners in underserved areas, and extended exceptional financial need scholarships and health professions student loan programs, but at lower levels.

As we move into the mid-1980s, the federal health professions program is in a transition phase. The President’s budget proposals reflect this Administration’s philosophy of decreased federal support and involvement in the training of health professionals and in the control of major health service programs.

Federal support funds in this transition period are focused largely on high priority areas of national concern: improving the current imbalance of minorities in the health professions, and supporting special projects related to geographic distribution of health practitioners and to the provision of primary care. Student assistance is limited principally to two loan programs.

It is difficult to predict with any degree of accuracy what the federal role will be after this transition period. Much will depend on the success of our current efforts, on the technological changes, on the effect environmental and other factors have on the health status, on the perceived health care needs, and on economic factors as well.

The federal role in health professions training currently is shaping up as one of partnership with states and the private sector rather than one of dominance. Federal resources will be limited, and those that are available will be directed toward priority initiatives that clearly are national in scope. A strong partnership is needed, and I believe the federal government will be a willing and contributory participant; but equal efforts are required from state and local governments, health professions educational institutions, health care facilities, health professionals, and others.

Working together, we have the opportunity to reach what is a goal for my agency, the Health Resources and Services Administration, but which also can be a goal for the American health care system: “Equal access to quality health care at a reasonable cost.”

Robert Graham, M.D.
Assistant Surgeon General

Dr. Graham is Administrator of the Health Resources and Services Administration, Public Health Service, Department of Health and Human Services.
Dear Editor:

The publication of educational data from the schools and colleges has been most helpful. Please note the following corrected SUNY figures for the "Annual Student Expenditures" table on page 28 of the Winter 1984 Journal of Optometric Education.

Resident Educational Expenditures:
1st Year—5,870; 2nd Year—5,370; 3rd Year—4,870; 4th Year—4,370; Average—5,120.

Non-Resident Educational Expenditures:
1st Year—7,870; 2nd Year—7,370; 3rd Year—6,870; 4th Year—6,370; Average—7,120.

Average Room and Board:
4,100 (this figure was correct).

Thank you and keep up the high quality of the Journal.

Sincerely,

Michael H. Heiberger, O.D., M.A.
Vice President for Student Affairs and Director of Admissions
SUNY State College of Optometry

ANNOUNCEMENTS

APPLICATION FOR JAOA EDITOR VACANCY

The American Optometric Association is inviting applications for the editorship of the JOURNAL OF THE AMERICAN OPTOMETRIC ASSOCIATION. The appointment will be effective June 1, 1985, upon retirement of the present editor.

The JAOA editor, who must be a doctor of optometry, is responsible for the editorial content of the monthly national magazine in compliance with the objectives and policies of the association. Principal responsibilities include the seeking, receiving and editing of all manuscripts, preparing of editorials, planning of monthly issues' content, maintaining communications with authors and magazine column editors, and other miscellaneous duties pertaining to editorial executions.

The editor is assisted in his responsibilities by the JOURNAL Review Board Vice-Presidency Position

The Southern California College of Optometry invites applications for the newly created position of Vice President. The individual selected will report directly to the President and will perform and coordinate responsibilities delegated by the President. Those applying should possess excellent administrative and communication skills. Educational qualifications for the position include the O.D. or Ph.D. degree. Prior experience in a comparable position, in optometric or higher education is desirable.

Applicants should write to:
Richard L. Hopping, O.D.
President, Southern California College of Optometry
201 Associated Road
Fullerton, California 92631

(Vice Presidency, Southern California College of Optometry is an Equal Opportunity Employer M/F)

The Southern California College of Optometry invites applications for the newly created position of Vice President. The individual selected will report directly to the President and will perform and coordinate responsibilities delegated by the President. Those applying should possess excellent administrative and communication skills. Educational qualifications for the position include the O.D. or Ph.D. degree. Prior experience in a comparable position, in optometric or higher education is desirable.

Applicants should write to:
Richard L. Hopping, O.D.
President, Southern California College of Optometry
201 Associated Road
Fullerton, California 92631

(Vice Presidency, Southern California College of Optometry is an Equal Opportunity Employer M/F)

The Southern California College of Optometry invites applications for the newly created position of Vice President. The individual selected will report directly to the President and will perform and coordinate responsibilities delegated by the President. Those applying should possess excellent administrative and communication skills. Educational qualifications for the position include the O.D. or Ph.D. degree. Prior experience in a comparable position, in optometric or higher education is desirable.

Applicants should write to:
Richard L. Hopping, O.D.
President, Southern California College of Optometry
201 Associated Road
Fullerton, California 92631

(Vice Presidency, Southern California College of Optometry is an Equal Opportunity Employer M/F)

QUALIFIED AOA MEMBERS INTERESTED IN CONSIDERING THIS OPPORTUNITY CAN DIRECT INQUIRIES TO REYNOLD W. MALMER, AOA ASSISTANT EXECUTIVE DIRECTOR/COMMUNICATIONS, AMERICAN OPTOMETRIC ASSOCIATION, 243 NORTH LINDBERGH BLVD., ST. LOUIS, MO 63141, TELEPHONE 314/991-4100. THE DEADLINE FOR THE RECEIVING OF APPLICATION IS SEPTEMBER 1, 1984.

MEGROPTIC CONFERENCE

Metroptic, Inc. is holding its Annual Conference on Sunday, October 28, at The Westin Hotel, O'Hare, in Rosemont, Illinois.

The topic of the Conference will be "The Relationship Between Optometrists, Optical Companies, and Professional Practice.

Metroptic's Conference will include a round table discussion, time to socialize, as well as its annual awards presentation dinner.

For registration information, contact Metroptic, Inc., 309 N. Lake Street, Mundelein, Illinois 60060, (312) 949-2300.
1984 IOOL General Delegate Meeting

Forty-five Delegates representing 28 member national optometric organizations from 21 countries gathered in London, April 14-17, for the 1984 General Delegate Meeting of the International Optometric and Optical League. The Delegates at this year’s meeting discussed the status of the profession of optometry worldwide and approved a committee and administrative work schedule for the coming 12 months.

The IOOL will be developing a new computer based statistical program and improving communications between the IOOL and member organizations on current political, legislative and economic trends affecting the profession such as the growth of multinational optical chains that have a commercial orientation.

Through its newly constituted “Optometric Development Committee,” the IOOL will also be taking a more active role in the advancement of the educational status of the profession and increasing its participation in international development programs that bring optometric care to the many underserved regions of the world.

Health Check 84 Tests 7,000 Ohioans

Nearly 7,000 central Ohio participants were seen in a series of Health Checks held at locations throughout the central Ohio area. Free health education information and free health screenings for height/frame/weight, blood pressure, anemia, vision and glaucoma were offered.

Optometrists of the Central Ohio Optometric Association, faculty and students of The Ohio State University College of Optometry staffed all 25 locations throughout the central Ohio area.

This program called “Health Check 84” in the Columbus area was sponsored by the National Health Screening Council for Volunteer Organizations Inc. (NHSCVO). Through the efforts of The Ohio State University College of Optometry and the Ohio Optometric Association, it was possible to include a measurement of intraocular pressure as a screening for glaucoma at each of the sites.

This is the only major health fair location in the country that has been sponsored by NHSCVO where intraocular pressure has been assessed at all screening sites.

Visual acuity, both distant and near, was also assessed as a possible indicator of health related eye problems. Screening assessments of the external and internal appearance of the eye health were performed, as well as evaluations of gross neuromuscular ocular function using the cover test.

Illinois Optometry Students Sharpen Skills on Tours

Twenty-nine Illinois College of Optometry fourth-year students will travel to the Caribbean, Central and South America and the Philippines to sharpen their clinical skills and bring vision care to impoverished people.

Only fourth-year students are eligible for foreign trips and they must complete at least 40 hours of volunteer work at ICO in Student VOSH. The students participate in various fundraising activities and clean, neutralize, catalogue and bag donated glasses.

Tom Banton and Tim Arbet accompanied an Illinois VOSH mission to Montego Bay, Jamaica, January 9-16. More than 2,200 people were examined in four days.

One student commented, “This VOSH trip gave me the opportunity to travel outside the United States and see a people and a culture I otherwise would not have had a chance to see. I

(continued on page 30)
ILAMO: Partner in Optometric Education

Maria Dablemont, Librarian/Archivist

After one year of unprecedented publicity, everyone should know that the 82-year-old library/archives was chartered in 1972 as a nonprofit institution, bearing the new and rather pompous name of “International Library, Archives and Museum of Optometry” quickly converted to “ILAMO.” Because old ideas die hard it is still called the “AOA Library.” Requests for information are sometimes addressed to AOA or to the Library of the American Optometric Association, frequently followed by ILAMO as an afterthought. We, the staff, have gotten into the habit of answering telephone calls with the friendly identification: “optometry library.”

Adding to the confusion, the library proper, the archives, and the museum were named after Drs. Kiekenapp, Babcock and Ryer, respectively. Requests addressed to Mr. Kiekenapp merely raises an eyebrow. ILAMO weathers it all just fine. After all, what's in a name? What really matters is ILAMO’s future under whatever name users choose to call it.

History

The Board of Regents of the American Association of Opticians was created in 1902 to study proposals to achieve uniformity in the study and teaching of optometry. To that end the Board immediately formed the “Physiological Branch,” later called “Scientific Section.” It is noteworthy that a library/archives, forerunner of ILAMO, was simultaneously created.

Maria Dablemont has been Librarian/Archivist with the American Optometry Association since 1964.
Eberhardt and other early leaders have been miraculously found and sent to ILAMO by friends and supporters.

**Museum**

The museum is located in the lobby of the AOA building.

The largest collection consists of very fine and rare specimens of spectacles (Chinese, Japanese, Eskimo, etc.), eyeglasses, pince-nez (some folding), quizzers, lorgnettes, goggles, chate­laines, elaborate cases and frames. Period photographs such as those of Mrs. Madison, Lincoln and Benjamin Franklin wearing glasses, point out similar types on display. Robert E. Lee’s photo is alongside a pair of spectacles said to have belonged to him.

Particularly interesting is the display depicting the history of contact lenses, which corroborates the key role of optometry in this field.

The collection of optical instruments contains old and newer types, including some used in experimental techniques. Among instruments, the Leland refractor stands out as a rarity. A prized possession is the Ryer retinoscope, which is displayed in the “Ryer case” with other items related to his life and work, or simply collected by him and donated to the museum.

Charles Prentice’s manuscript, “Ten Theorems Essential for Finesse in Optometry,” is a valued document.

Throughout the museum, optometric records, instruments or memorabilia are often one-of-a-kind items that hold the interest of visitors. An example is a gigantic quilt designed and made by the Auxiliary to the AOA. Each block depicts in fine stitchery or applique, the symbolic colors, motifs and characteristics of every state of the union. Other symbolic blocks complete the quilt.

Every item in the museum was donated by optometrists or friends of optometry. It would be good to be able to purchase costly items that are offered to us from time to time.

**The Archives**

Recent library expansion into the area formerly occupied by the AOA lunchroom provided space for shelving more frequently used records.

The archives and library are mutually supportive in reference, documentation and research. This felicitous combination characterizes and enhances the quality and uniqueness of ILAMO’s services. Archival records are available on the premises, to qualified searchers. We also have files containing collected secondary source materials of historical interest that might be loaned.

**Far and Wide**

It is true that optometrists (particularly AOA members), optometric assistants, technicians and optometric organizations constitute the majority of ILAMO’s users. Yet the demand for information on optometry as a profession, optics, the eye and vision cuts across all segments of society, particularly the academic community. It might be students wrestling with a science assignment, candidates for a doctorate degree, or school teachers, lawyers, other health professions, government agencies, industry and corporations. The quality of ILAMO’s services affects optometry’s image. Often searchers come to us after consulting major libraries and never fail to express surprise and appreciation when served beyond expectation.

We urge optometrists to stop at the library when visiting AOA or passing through St. Louis. No optometrist has ever left ILAMO immune to its impact.
It is impossible to provide accurate figures on ILAMO's total holdings, because the bulk of the archives, some periodical titles and books, along with museum items, are kept in rented space, in inconvenient, however safe, commercial storage. It does not prevent us from requesting donations of library, archives and museum materials nor should it prevent owners of such materials from donating them to ILAMO. They are safe with us. There is hope that some day a separate library will be built to house these priceless materials and many more still held by optometrists or their heirs.

Holdings at ILAMO's Premises

**Books:** 8,000 titles cover the entire spectrum of the science of vision and disciplines that bear upon it. Also available are titles of broader interest to the profession.

**Journals and Newsletters:** 740 titles, of which 480 are current and 70 international publications. ILAMO is perhaps the only optometric library that keeps full collections of all journals and newsletters (current or extinct) published by the optometric state associations.

**Audiovisuals:** 814 titles, some for professional use, others appropriate for showing to children and lay adult audiences.

**Special Collections:** Through the years several special collections and subject files have been added to ILAMO's holdings as a result of in-house research.

**Package Libraries:** 564 spiral bound folders containing information on 128 subjects. New packages are constantly being made to meet or anticipate users' needs.

**Publications:** ILAMO publishes VISIONLINK, a lively, informative monthly newsletter, and a quarterly calendar of meetings, both available through subscription.

Specific information, listings and samples, providing further information on ILAMO’s services is available upon request.

Perhaps the most important function of ILAMO is to help optometrists deprived of local biomedical libraries to pursue continuing education at home, keeping abreast of new developments in optometry and the science of vision. Next in importance is availability of materials designed to help in every aspect of practice management. Budget allocations for mailing and telephone expenses are always underestimated. During the last 12 months we spent $10,152.14 for mailing and $6,039.26 for telephone.

Optometric Clearinghouse

ILAMO acts as a clearinghouse to collect and distribute surplus issues of optometric journals. This brings the literature of the profession to new schools of optometry and other institutions here and all over the world.

Libraries that had in the past neglected or refused to collect optometric journals are now soliciting our help to develop a collection. The increased interest in the optometric literature is reflected in interlibrary loaning. In 1983 we received 318 requests from other libraries (1,937 photocopies, 17 tear-sheets, 48 books and package libraries) while we made only 120 requests to other libraries.

Letters of appreciation we receive often recognize the importance of services provided to members by AOA. Of no lesser importance, however, although not so widely recognized, is the
value of this library to every optometric organization.

Staff: ILAMO has a total staff of six, with a combined length of service of 50 years.

Location: First floor of the American Optometric Association Headquarters, 243 North Lindbergh Blvd., St. Louis, MO 63141.

Library Hours: The library is open from 8:00 AM to 5:00 PM, Monday-Friday, closed weekends and holidays. A telephone answering system permits access to the library 24 hours a day, including weekends and holidays.

Overdues: Although overdue notices will be sent, borrowers are responsible for returning and renewing materials on time whether or not overdue notices reach them. If a book has not been returned after a reasonable length of time, a bill for the cost of the book/package will be sent to the borrower.

Photocopies: Photocopying of library materials, in compliance with the copyright law, is permitted at 10¢ per copy, with 10 copies free to AOA members.

Friends of ILAMO: The Friends of ILAMO program was launched at the 1983 AOA Congress. So far only 54 have joined. For those long-standing friends a letter or a telephone call for help would have been enough, sparing costs of expensive pledge cards, other promotional items and activities. We were surprised by the success of the Friends of ILAMO program in attracting new library users in contrast to its evident failure to recruit contributing Friends, to help AOA maintain the institution. The possibility of a reluctance to become a Friend when services are free, eluded everyone.

Friends of ILAMO
Another Component of Optometric Education

Henry W. Hofstetter, Secretary
Friends of ILAMO Committee

The minutes of the ASCO annual meeting of June 17, 1956, include what may have been the first report of its newly established library committee, chaired by Grace Weimer. Her committee reported that all of the librarians of the ASCO member institutions were willing to cooperate in receiving and preserving serial optometric publications originating in the to-be-assigned geographic areas, providing ASCO approved.

Within hours the ASCO assembly passed a motion assigning “to the library of each member institution the states, provinces, territories, and other areas with the understanding that they will make every effort to collect and keep complete sets of serial publications in the areas assigned to them.” The assigned regions were included in the minutes as appendix XVI.

The point of the early assignment is to remind ourselves that optometric educators and librarians have long felt the need for a mutually workable system for developing and maintaining adequate library and archival resources cooperatively. No single academic institution had the capabilities to do this by itself.

The originally assigned responsibilities represented a voluntary attempt to prevent the wholesale evaporation of early and contemporary optometric literature. Such literature provides the recorded evidences of optometric involvement, contributions, and issues. Almost none of it had been preserved in public libraries or even included in scientific and technical indices. For such reasons, many visual science authors had been reluctant to submit their best manuscripts to optometric journals even though they recognized optometrists as their potentially widest readership.

ILAMO has been a key factor in bringing about a change. Though initially evolved to serve the immediate organizational and membership needs of the American Optometric Association, in its present corporate status, it has become a truly international repository and reference source for optometric culture, science, and technology.

Fully cooperative with every visual science library accessible by mail or telephone, it means to every ASCO member institution that none of its students or faculty members is denied opportunity to
Newsmakers: Contrasts and similarities between ILAMO and two other libraries that are also receiving proportionate amounts of public attention, may well have influenced the title of this article. I refer to the New York Public Library and the new library of the Mercer University School of Medicine, Macon, Georgia. Theirs is a success story.

Nostalgia, civic pride, emotional attachment was the driving force to raise $45,000,000 to restore the splendor of the old New York library. The other was built in response to a long-felt need to improve services and facilities up to the standards of their medical counterparts. If those two libraries were able to seek and receive assistance largely as a response to intangible and tangible motives, then it is possible that the day to say HURRAH for ILAMO is not too far away.

Optometrists of my generation find this so incredible as to dampen for many of them even the momentary wishing-on-a-star notion to test its actuality. But it is true, and we of academic responsibility must put forth every effort to indoctrinate our colleagues and students to acquire the habit of utilizing this expansive facility routinely.

To further this mission, the Friends of ILAMO program is pursuing two objectives. One, as already implied above, is to nurture as rapidly as possible the broader utilization of ILAMO’s facilities so that optometric science, technology, and culture may keep pace with other phases of human endeavor. The other is to enlist all possible supplementary support from patrons, benefactors, benefactors, organizations, institutions, endowments, foundations, and others where including even those who do not recognize the role that ILAMO is playing.

The first objective is clearly being met. Evidence can be seen from the geometric progress in utilization statistics in recent months. The second objective had a dramatic send-off among those present at the 1983 AOA Congress, but the full-scale follow-up has been slow. This will be corrected in as short a time as possible. But meanwhile the readers of this journal can help by persistently relating the whole story in the classroom, at continuing education seminars, and in every discussion where academic and professional progress is the issue in question.

In short, each school and college of optometry should give the same attention to the continuing and expanding success of ILAMO as it does to its own clinical programs, recruitment of quality students, laboratory maintenance, curriculum design, faculty acquisition, classroom aids, and research activities. It is a vital and integral component of optometric higher education.
CooperVision Markets New Contact Lens

CooperVision, Inc., after receiving marketing clearance from the U.S. Food and Drug Administration for its PERMAFLEX (surfilcon A) contact lens, immediately began national marketing. The company described PERMAFLEX as its “third generation extended-wear lens.” PERMAFLEX is the newest member of the PERMALENS family of extended-wear contact lenses. It is being marketed as the premier “flexible wearing cycle” contact lens to be worn by consumers from one to 30 days. It differs from the original PERMALENS (surfilcon A) extended-wear lens in that it is designed to withstand more frequent removal and handling by the wearer.

The new PERMAFLEX lens is fabricated from surfilcon A, a material which has a water content of 74 percent, slightly higher than that of PERMALENS. Its increased lens strength results from strategic placement of the cross-linking agent throughout the plastic. "Without sacrificing the known advantages of high water content in extended-wear lenses—high oxygen transmissibility and enhanced wearer comfort—in PERMAFLEX the practitioner captures the added strength advantage that mid- and low water contact lenses offer," according to John H. Williford, President of CooperVision, Inc.

Multi-Optics Introduces New Demonstration Unit

Multi-Optics Corporation recently released the Multifocal Demonstration Set allowing presbyopic patients to experience first hand the common lens corrections for presbyopia—bifocals, trifocals and progressive add power lenses.

The unit, which premiered at Optifair East, is designed to neatly store three frames and several lenses (three add powers each for bifocals and progressives; one add power for trifocals). A reading chart inside the cover can be used for static as well as dynamic demonstrations. Adjustable frames are also included for use with anamorphic presbyopes as well as the corrected presbyopic ametropes.

Guide Reviews Varilux Studies

Extensive clinical research has been conducted nationwide on progressive addition lenses. To organize research results and applications, a concise reference guide, Compendium of Varilux Clinical Studies has been compiled and released by Multi-Optics Corporation.

The Compendium, a synopsis of research projects applicable to the office routine, provides a better understanding of how Varilux lenses are utilized for the presbyopic patient population by presenting abstracts and results by patient type, the presbyope, the emerging presbyope, reading RX, the previous bifocal wearer, the previous trifocal wearer, and overcorrection for aphakia.

Grant Announced for US, UK Optometrist Exchange

CooperVision, Inc. has announced a $25,000 grant to the John DeCarle Visiting Professorship program, an exchange of optometric educators between the United States and the United Kingdom.

"CooperVision has always been committed to professional education," said John H. Williford, CooperVision president. "We initiated and funded the program because we felt it was important to encourage practitioners from both countries to share their knowledge and ideas.

"CooperVision's involvement in this exchange is particularly appropriate," Williford added. "Not only do we do business on both sides of the Atlantic, but our Permalens extended-wear soft contact lens was first developed in the United Kingdom by John DeCarle, the optometrist for whom this program is named.

Since our first agreement with DeCarle, our relationship with the United Kingdom has grown tremendously. We have located our newest manufacturing facility, Permalens House, in Southampton, and many of our contact lenses are now made in England. We hope this visiting professorship program will enhance the synergy we already enjoy with the United Kingdom," Williford concluded.

Participating from the United States are Michael G. Harris, O.D., M.S. of the University of California at Berkeley, and Lester Caplan, O.D. of the University of Alabama in Birmingham. They will spend about a month learning about optometric practice and education in the United Kingdom, visiting universities and colleges, and lecturing to optometric students.
Annual Board Meeting
June 15-17, 1984
Honolulu, Hawaii

The activities of the ASCO officers, the three council chairpersons, the members of the councils, the various board committees and our Executive Director and Charlotte Ahrendts have been superb this past year. ASCO and myself are truly indebted to each of you for having given so much on behalf of ASCO and optometric education. All of you have brought about the progress that has been made.

To each member of the ASCO Board I would express my sincere appreciation for your sustained interest, dedication, cooperation, guidance and actual volunteer efforts that you have given to ASCO and myself. In almost every instance each person has accepted and/or offered assistance when needed. Please be assured that I truly am grateful and most appreciative. Optometric education and ASCO have been the benefactors of the continued generosity.

Special thanks go to Jack and Alice Bennett and Chet and Kathy Pheiffer for their kind invitations and gracious hospitality in holding our Fall and Spring board meetings on their respective campuses. Taking our meetings to the Ferris and Northeast campuses proved to be successful, popular, beneficial and productive.

It was my hope that greater fellowship and camaraderie within ASCO would develop. It is my belief that this has already occurred and a higher degree of mutual respect, trust and productivity has resulted. It is my hope that this spirit will carry on as we continue to hold our meetings on the various campuses. Our Fall 1984 meeting will be held at UMSL and our Spring 1985 meeting will be at SUNY. My thanks to Jerry and Ed for their kind invitations and planning.

It is my belief that the ASCO function statements and committee structure have been effective this past year. While variations in productivity have existed, I am pleased that progress has been made in nearly every committee area. I look forward to reading and hearing the various committee reports at our annual meeting. The momentum already generated by having time at our meetings for committee meetings should become more significant during this coming year.

While the three councils carry a large part of the workload of ASCO, I owe a debt of gratitude to the three council chairpersons who have given so very generously of their time and leadership this past year. Without them, our progress would have been significantly less.

Special recognition is due to James Noe, who will end his service as Chairman of the Council of Student Affairs at this annual meeting. Jim’s continuing efforts and excellent leadership as chairman of the council (CSA) for many years have been outstanding. Through his leadership and untiring efforts, the CSA has been a most productive council and quite beneficial to ASCO. Dr. David Davidson has been appointed to serve as the CSA chairperson for this next year.

Dr. Jack Bennett has been nominated to serve another year on the AOF Board. Dr. Henry Peters has been nominated for a five-year term as ASCO’s representative on the NBEO Board. Both nominations are expected to be confirmed at the respective annual meetings.

ASCO and myself will sorely miss the creativity, charm, fellowship and leadership of Dr. Spurgeon Eure, who will retire from optometric education in June. ASCO and optometric education have been the better for his political savvy and his many contributions to the profession.

NBEO Content

Much study and activity has been occurring on our campuses regarding the proposed NBEO content. Most institutions have indicated they will meet the May 31 deadline. Since few will know what the various institutional responses are, it is believed that we should have a discussion on this topic at our annual meeting. To assume a leadership role for ASCO and assist in pulling together the various entities, our annual ASCO symposium has been entitled “Entry Level Credentialing in Optometry.” Short papers will be presented by ASCO, NBEO and IAB.

While this topic does not directly address the proposed NBEO content, it is believed that the fundamental role and premise of each of the three entities should be sufficiently delineated in our symposium to enable all parties to participate in what should turn out to be a lively and healthy discussion. The ASCO Board will meet with the NBEO Board immediately following the symposium regarding some of our concerns. It would be helpful if every institution could be prepared to give a succinct statement of their impression of the proposed NBEO changes.

Members of the Board may be aware that ophthalmology filed a series of complaints about optometry regarding “false advertising” on such matters as optometric diagnostic abilities, optometric physicians, etc. AOA asked if ASCO wished to respond. The Executive Committee held a conference call and discussed the charges made to the FTC by ophthalmology. Many of their charges and conclusions were based on data and old (if not antiquated) case law. The Executive Committee felt it would be inappropriate for ASCO to enter into this matter. It was felt that the regulation of advertising is an individual state matter and not one of optometric education.
Fiscal Planning

ASCO must give serious discussion and take significant strides to address the realities of budgeting. The expansion of our sustaining membership has been good; however, it has not been sufficient to enable us to adopt a balanced budget. Our Executive Director has done quite well managing our investments and grant activities, but the fact remains that our need for revenue is rather critical.

I am truly concerned about the need for ASCO to remain viable and to regularly have a balanced budget. We cannot continue to deplete our reserves. We are sensitive to the fiscal problems of every institution and the cost/benefit/ratios of services provided by ASCO and we need every institution to belong. ASCO, however, has the lowest dues structure compared to any of the health professions’ associations. Each Board member is asked to give careful study to the materials provided by Dow and Lee. Your thoughts are to be directed to the good of ASCO and not a particular institution.

Planning for the Future

Related to our fiscal planning is the need for strategic planning on the part of the association. Dr. Johnston and his committee have a speaker on the topic for our annual meeting. I am encouraged and believe that this will set the tone and enable a plan to be developed within the next year.

This past year ASCO and optometric education have generated increased visibility through press releases, interviews, articles, resolutions, etc.; however, I believe we must increase our efforts and accomplishments in this area if we are to significantly influence the attitude of the profession on matters relating to optometric education. It is my belief that significant efforts must be expended in the very near future if ASCO is to provide meaningful leadership within the profession.

The entire area of patient management and practice administration must be aggressively pursued. The Committee on Patient Management and Practice Administration and the Committee on Continuing Education must aggressively pursue their charges if ASCO is to be timely and of benefit to the profession. A new look must be taken in the very near future as most segments of the profession are becoming active in this.

The need to develop a curriculum model in the therapeutic aspects of pharmacology must take place. Although I have raised the question in my reports several times this past year, not much comment was received until the ASCO Board passed a resolution recommending that NBEO develop a separate exam under the heading of therapeutic pharmaceutical agents.

I am requesting that the Council on Academic Affairs develop a curriculum model in the area of therapeutic agents, anterior segment disease diagnosis, treatment and management. The increased pursuit by the profession for therapeutics and the passage of the Oklahoma law requires immediate action on our part.

It appears to me that it is timely for ASCO to assign a committee the task of studying the COE survey to develop a more meaningful survey instrument for all concerned. Your thoughts and comments on this topic would be most welcome.

I would refer to the Council on Student Affairs a request for an update on the delinquency/default rate of HPSL of our institutions and a report on the average student indebtedness by institution. If data can be obtained for male vs. female as well as minorities, it would be very helpful. It might be revealing to know the indebtedness of those students entering our residencies and graduate programs.

All institutions are encouraged to look at the funding opportunities in the migrant health optometric vision care demonstration projects as something worthy of pursuit.

I look forward to reading and/or hearing the reports and seeing each of you at our annual meeting. My thanks again go to Lee Smith and to all who have brought about the progress of ASCO this past year.

Respectfully submitted,

Richard L. Hopping, O.D.
President
The Association of Schools and Colleges of Optometry (ASCO) has had a productive year during 1984. Representing optometric education to the public and the health community, ASCO has continued to monitor national and legislative affairs, provide counsel and comment to the Congress and federal agencies, serve as a central repository for information for optometric education, and conduct a number of projects to further the priorities and purposes of the association.

**Health Award and Study of Graduates**

In the fall of 1983 the association completed a two-volume report to the Bureau of Health Professions Health Resources and Services Administration concerning graduates of 1979-1981. This study, which originated through a contract in 1982, collected data on the practice patterns of the recent graduates, with special emphasis on their experience with the licensing process including the National Board examination and state licensing requirements. The two-volume report represents the final report to the government and the appendices of original data. The highlights were summarized in an article appearing in AOA News. A more extensive article is planned in an upcoming issue of the *Journal of Optometric Education*.

Dr. Robert Bleimann, who was project manager on this contract, has been employed by the American Optometric Association and we are pleased that his experience and expertise have been retained by the profession.

Dr. F. Dow Smith, ASCO Secretary-Treasurer, presents his report.

The Department of Health and Human Services announced the Secretary's Award for Innovations in Health Promotion and Disease Prevention 1984. ASCO cooperated with the Secretary's office in announcing and administering this awards program for the optometric profession. Three papers received from optometric students were considered, two of which were submitted for further consideration. We are pleased to report that one paper, "Providing Occupational Health Protection and Preventive Services for Visual Display Terminal Operators," by Mary C. Sovell, a student at the University of Indiana School of Optometry, received Honorable Mention from the Secretary.

**Sustaining Member Section**

Recruitment continued during the year. We are encouraged in having received three additional members into this section for a total of nine, and also to have received the outstanding support of the sustaining member companies. One of our sustaining members, Multi-Optics Corporation of California, sponsored a workshop for faculty development regarding computer assisted education. Through the support of these sustaining members, the association has been fortunate in being able to carry out a number of programs and activities which would otherwise not have been possible. We extend our sincere appreciation for their contributions to the advancement of optometric education.

**Student Endowment Fund**

Established in 1981, this fund again realized profits from its investments, and was in a position to distribute nearly $13,000 to its member institutions for student aid. Under this program the funds have been utilized either in direct scholarships, emergency loans, or work-study activities. While not actively pursuing additions to the endowment fund, the association has publicized its existence and encourages additional contributions to increase the association's support of students' needs.
National Activities

Residencies Symposium

At the 1983 annual meeting, the sustaining member section supported the annual symposium, "Residencies in the Health Professions." The symposium had speakers from medicine, dentistry, podiatry and optometry discussing residency requirements, admissions, training, and certification. A "proceedings" of this program has been published.

There is a planned program for the 1984 annual convention in Honolulu which will have a discussion of entry-level credentialing in optometry, featuring speakers from education, the national board and state board regarding their premise and perspective. These programs are made possible in part by the support of the association's sustaining members.

Migrant Worker Vision Care

During the summer of 1983 the association worked closely with the Migrant Health Program of the Health Resources and Services Administration in developing proposals for the provision of optometric vision care to migrant workers and their families. Two demonstration projects were ultimately approved and undertaken in the fall of 1983. One of the programs, at Coachella, California, is being carried out by the Southern California College of Optometry; the other, at Cornelius, Oregon, is sponsored by Pacific University College of Optometry.

Preliminary data which has been received as a part of periodic reports to the Migrant Health Program indicate a high level of need and considerable demand for vision care services. While the association's proposals had estimated a 35% failure during screening, that level has been far exceeded and in some groupings has been as high as 55-60%. Considerable success has been achieved in obtaining community support for the provision of lenses and frames to those referred for primary and secondary services.

Two additional project proposals were submitted in the spring of 1984 and have been approved for implementation. One is at the Franklin Fellers Clinic in Charleston, South Carolina and will be sponsored by the Southern College of Optometry. The project is expected to review over 1,000 patients during the screening process with provision of primary services to follow.

The fourth project under these demonstrations will be conducted by the Pennsylvania College of Optometry at the Tri-County Community Health Center in Newton Grove, North Carolina. We are pleased to report that the California and Oregon migrant centers will now offer full optometric services. These services will be carried out by faculty and students from the respective optometry schools.

Financing of Optometric Education

The association received a small contract during the year which will be conducted and reported on during 1984. The contract is a request for reported data on the financing of optometric education, separating that which is obtained from student tuitions versus other sources of income and the sources of funding for students.

Priorities and Purposes

In 1976 ASCO developed and published a statement of seven priorities and purposes of the association. With only minor revision these were reaffirmed in 1978. This year in review, the association announced a major new emphasis in fostering research and development to be added to the existing priorities.

Board Meetings

Carrying out an objective of the association to have a closer liaison with faculty and students, the association held its regular board meetings at its member schools. One meeting was hosted by Ferris State College, College of Optometry in Big Rapids, Michigan, and the spring meeting was held at the Northeastern State University College of Optometry in Tahlequah, Oklahoma. The association's board was well received by the host institutions, and had opportunities to meet and discuss common issues with the faculty and students. It is expected that this approach will be continued in the coming year.

Long-Range Study

The association continues to be supportive of the proposed long-range study of optometry and optometric education. Its members and staff, with the American Optometric Association, have continued over the past year in an effort to finalize a revised approach and to pursue continued private funding of this effort. In addition, members of the committee and staff have met with the National Science Foundation, National Academy of Sciences concerning inclusion of optometry as one of the professions in a major study of health professions education proposed by that body. No definitive information on this effort is available as of this date.
Legislation and Appropriations

Health Professions Educational Assistance Legislation

With the expiration of the Health Professions Educational Assistance Act in 1984, a major effort was undertaken during the past year in the development of legislative specifications for extension/reauthorization of that legislation. The Association of Schools and Colleges of Optometry, in cooperation with the Federation of Associations of Schools of the Health Professions (FASHP), met during the year with staff and members of both the House and the Senate subcommittees and committees on health legislation. The outcome of these discussions and meetings was a draft legislative proposal which was submitted to these committees for consideration.

Our main efforts in legislation have been directed toward our highest level of priority, which is student assistance. We have been concerned that the capitalization of the health professions student loan program be continued, particularly for our newer schools which do not yet have a revolving fund as a result of repayment by earlier borrowers. Continued efforts for support in the area of special projects, facilities renovation and equipment replacement have also been of high priority.

While both the House and the Senate committees have held hearings on the legislation, neither committee report is available as of this date. Considering the limited time available during the summer, and the national political conventions, it is deemed somewhat unlikely that final action by the Congress will be taken. The association is hopeful that it has at least laid the groundwork for early consideration of revised legislation during the next session of the Congress.

In the legislative area, the association has also been active in reviewing the status of the Health Education Assistance Loan Program. This program, as reported, could potentially be in financial difficulty due to excessive demands on the insurance fund established as a result of the legislation. ASCO and other health professions education groups have appointed an advisor to the HEAL program management group to identify means by which we can avoid defaults and potential bankruptcy of the insurance fund.

In conjunction with its membership in the Federation of Associations of Schools of the Health Professions, representatives participated in the annual meeting of the Association of Academic Health Centers and the Federation's presentations on future perspectives in the health professions. Additionally, ASCO representatives participated in the annual IOOL meeting in London, England, serving effectively on the Education Committee of that body.

Various members of ASCO have represented the association at the AOA NOW conference, AOA planning sessions, and as a part of the AOA keyperson effort in Washington, D.C.

Clockwise from top left: Drs. Richman, Enoch and Ajanador enjoy a story as Dr. Carter joins the group; ASCO President Richard L. Hopping, O.D., chairs the ASCO annual meeting; Drs. Baldwin, Smith and Peters discuss issues during a session break; Dr. Anthony Adams representing the NBEO makes luncheon program presentation.
Volume 10, Number 1 / Summer 1984

Council Activities

Council on Academic Affairs

The three standing councils of the association have carried out their project plans successfully. The Council on Academic Affairs, under the chairmanship of Dr. Douglas Poorman of the Southern California College of Optometry, has moved forward effectively. In continuation of a project previously undertaken, the council published an updated residency and graduate program directory. The directory describes the various programs conducted by the schools and colleges of optometry in both graduate degree work and residency programs.

The project on faculty development needs also was completed by the year's end. This survey was conducted in the member institutions, representing the opinions of both faculty and administrators. The faculty development needs have been prioritized for further consideration in the development of faculty workshops.

In response to a request for some level of consistency in the admission of applicants for residencies, all institutions which sponsor residencies were surveyed regarding their time frame for decision-making in the selection process of the residents. The survey indicated that the problem was a variety of notification dates. In the spring of 1984, a recommendation was made by the council to establish a consistent date, which received approval by the Board of Directors. The date of March 1 was selected.

As a result of the support of the Multi-Optics Corporation, a one-day faculty development workshop was held December 14, 1983 in Houston, Texas, as a follow-up to the meeting of the American Academy of Optometry. Topics included an introduction to computers, examples of computer-assisted instruction, and the use of computers in student evaluation. Demonstrations of the actual programs utilized by member schools augmented the presentation. Forty-three faculty members and administrators representing eleven member institutions attended the program.

As a result of the intent of the National Board of Examiners in Optometry to develop new content outline for the examination, the association's Council on Academic Affairs was requested to undertake a curriculum study to determine the common elements of optometric education.

Seven of the member institutions utilized the computer model developed at Pacific University College of Optometry. A computer program has been applied to the curriculum data collected from these seven institutions looking at both the quantitative and qualitative measure of the various subject content of the courses. In addition to being utilized by the National Board of Examiners in Optometry in the development of its new content outline, it has been useful to the individual institutions in evaluating their curriculum and its content, particularly relating to the previously published ASCO curriculum model.

Over the year, a considerable amount of effort has been expended by the council in the development of an ASCO position paper on credentialing in optometry. This project was undertaken in order to attempt to articulate in concise form the roles of the various organizational elements in the overall credentialing process in the profession, including educational accreditation, examination, licensure, and certification. It is expected that this paper will have its final review and be ready for publication distribution at the fall meeting of the association in 1984.

Council on Institutional Affairs

The ASCO Council on Institutional Affairs, ably directed by its chairman, Dr. Larry Clausen, of the New England College of Optometry, has continued in its efforts in the establishment of a student clinical data base. This project, undertaken in 1983-84, has been continued with a number of the member institutions submitting the required data sheets concerning student-patient encounters and the various required elements of that aspect of the education of our students.

In addition to providing better data for the individual schools, it is expected that this project, when completed, will have the potential of considerably more accurate data on the total clinical encounter experience of our students, and at the same time provide an epidemiologic base of the population groups seen in the clinics of the schools and colleges of optometry.

Planning by this council has also been undertaken to possibly include workshops for administrators and faculty. These are intended to offer intensive practical training and experience in four- to eight-hour formats. A survey has been completed on possible subjects for inclusion in these workshops based on administrative educational needs of the member institutions.

Council on Student Affairs

The Council on Student Affairs, under the chairmanship of Mr. James Noe of the Ohio State University College of Optometry, has had a busy year. The council has coordinated major projects in recruitment. The first contact information brochure, "Career Opportunities in Optometry," published by ASCO, has been reprinted and additional distribution planned. Additionally, the recruitment poster has
served its purpose, and arrange­ments have been made for a new poster. The Nikon Corporation has offered to provide us with the services of their graphics arts department to assist in the design of a new poster. It is expected that this poster will be ready for distribution in summer 1984.

The council’s task force on re­cruitment has met with the AOA national student recruitment task force and has worked out coopera­tive arrangements for the distribu­tion, follow-up and evaluation of our present career information. The use of our career brochure and recruitment poster has been includ­ed in annual mailings of materials to more than one thousand ad­visors in the health professions.

All inquiries regarding careers in optometry are being compiled, catalogued and forwarded by the American Optometric Association to the schools for reply and follow-up. We are pleased to report that for the second year there has been an increase, while slight, in the total number of applicants for schools’ and colleges’ consideration.

Again this spring, the association, under the direction of the Council on Student Affairs, has been able to establish a data base for all appli­cants to the schools and colleges, and provide the applicant status check mechanism for cross-refer­encing analysis of the applicant pool as of May 1. The cooperation of the admissions staffs has assured maximum accuracy and effective­ness of this important activity.

The Council on Student Affairs continued its close liaison with the American Optometric Student Association and attended their January board meeting in Ana­heim, California. The cooperation between the AOSA and the CSA has been rewarding, particularly in AOSA’s support of CSA’s efforts to establish an enhanced graduate placement program. The CSA has organized a task force on placement, working to effectively address the problem and coordinate consti­tuent groups concerned with this issue. A close liaison has continued with placement effort of the AOA.

A major effort of the CSA has been that of liaison to the National Association of Advisors for the Health Professions (NAAHP). ASCO has been involved in co­sponsoring the national meeting of the NAAHP and its northeastern association arm in Philadelphia in June. Some 300-350 health profes­sions advisors from major universi­ties across the country will attend this meeting. The CSA will have a meeting in conjunction with that session, and on the afternoon of June 29 ASCO will host a session on optometry and optometric education at The Eye Institute of the Pennsylvania College of Optometry with representatives from most of the schools attending.

In addition to an opportunity to tour The Eye Institute, there will be various stations demonstrating some of the educational activities of our students, and an opportunity for the president of ASCO, Dr. Richard L. Hopping, and for Dr. Melvin D. Wolfberg, President of PCO, to address the group. This is considered a rare opportunity for optometry to expose the advisors to career opportunities in the optometric pro­fession.

In order to address a number of issues facing optometric education, the association’s president under­took the appointment of a number of committees. In addition to com­mittees on the internal audit, resolu­tions, and the constitution and bylaws, the following were ap­pointed: (1) Committee on State Educational Requirements to study and advise on the educational requirements in optometric laws and to design a model educational element; (2) NBEO Committee to deal with issues arising from the development and administration of the NBEO examination; (3) Veterans Administration Committee to study and deal with issues arising in student rotations and residencies related to VA hospitals; (4) Continuing Education Committee to develop a proposed national continuing education program in optometry; (5) Curriculum Development Committee to study and design curriculum in practice enhancement and patient administra­tion/management; (6) Strategic Planning Committee to examine the long-term direction of optometry and optometric education.
Journal of Optometric Education

The journal continues to be well received and highly regarded by the optometric community. During the year, four issues were published, one of these representing a major effort of indexing the first nine volumes of the publication.

OEA Awards

The Journal has been honored again with several awards in the Optometric Editors Association annual Journalism Awards Contest. First place in the “Best Editorial” award was presented to “Health Care: A Profession or a Business?” by the Rev. Kevin D. O’Rourke, O.P. The Journal of Optometric Education also received first place in the “Best Journal 1983” category.

New Management

Harriet Long, managing editor of the journal for the past six years, left the association in February 1984. Patricia Coe O’Rourke, M.A., joined ASCO in May as managing editor of the journal. She also will be responsible for legislation and other association project activities. Ms. O’Rourke was formerly managing editor of Trends, a monthly newsletter at the American Society of Allied Health Professions, and assistant to the executive director. She has also held editing positions with social service and housing associations in Washington, D.C.

1984 Annual Meeting

The ASCO annual meeting was held June 15-16, 1984 at the Hilton Hawaiian Village, Honolulu, Hawaii. There were 45 representatives of the 16 United States schools in attendance. At the meeting recognition by resolution was accorded to Mr. James Noe of The Ohio State University College of Optometry, who completed three years as the chairman of ASCO’s Council on Student Affairs; to Dr. Spurgeon B. Eure on the occasion of his retirement as president of Southern College of Optometry; and to Dr. Rogers Reading of Illinois who completed his term on the National Board of Examiners in Optometry.

Two optometry students, Ms. Mary Sovell of Indiana University School of Optometry and Mr. Thomas J. Haviland of the University of Missouri-St. Louis School of Optometry, also were recognized for submitting papers for the Department of Health and Human Services Secretary’s Award for Innovations in Health Promotions and Disease Prevention.

A presentation by Ms. Wendy Craytor, assistant dean of the School of Public Health, University of Hawaii, on the principles and process of strategic planning was sponsored by the ASCO Committee on Strategic Planning. Dr. Edward Johnston, president of the State University of New York State College of Optometry, chairs this committee.
Newly appointed as chairman of the Council on Student Affairs is Dr. David Davidson of the University of Missouri-St. Louis School of Optometry. The following committees of the association were continued:

**Resolutions**
- Dr. Jack Bennett, Chairman

**Space Standards**
- Dr. Frederick Hebbard, Chairman

**Constitution and Bylaws**
- Dr. Chester Pheiffer, Chairman

**State Educational Requirements**
- Dr. F. Dow Smith, Chairman

**Continuing Education**
- Dr. William Baldwin, Chairman

**Veterans Administration**
- Dr. John Cromer, Chairman

**NBEO**
- Dr. Edward Johnston, Chairman

**Strategic Planning**
- Dr. Edward Johnston, Chairman

**Patient Management and Practice Management Curriculum**
- Dr. Boyd Banwell, Chairman

The association continued its program of a symposium presentation at its annual meeting with a discussion on "Entry Level Credentialed in Optometry." Speakers representing education, national board and state board organizations presented perspectives and premises of their roles in the credentialing process. Speaking for education was Dr. Edward Johnston, president-elect of ASCO; for the National Board, Dr. Anthony Adams, vice president, NBEO; and Dr. Frank Day, president of IAB, represented the state boards. Some 70 attendees actively participated in the discussion.

Significant budget debate occurred this year in view of ASCO's limited funds. Major program activities approved for the ASCO councils for the coming year include a student recruitment program, development of practice placement efforts for graduates, update of the residency and graduate program directory, development of administrator workshops, and the publication of the revised edition of the handbook for teachers.

Additionally, the association will continue its interprofessional activities and those related to health professions education legislation and its work with the AOA on a long-range study of the profession. Dr. Hopping, serving the second year of his term as president of ASCO, looks forward to major achievements of the appointed committees.

As a member of the Optometric Editors Association, ASCO participated in their meeting in Hawaii. The *Journal of Optometric Education* competed in a number of categories of the awards program and won first place in the category of "Best Journal 1983" and first place in the category of "Best Editorial." The association continues to be proud of this publication. In addition, Mr. Lee Smith, executive director of ASCO, was elected vice president of the Optometric Editors Association for 1984.
Optical Parameters of Thin Prisms
An Introductory Laboratory Experiment
Laxman G. Phadke, Ph.D.

Introduction
Thin prisms are an indispensable tool in ophthalmic work for the measurement, relief and therapy for muscular defects of the eye. When a prism is placed in front of the eye, the eye pivots about its center of rotation to follow the displaced images. The “prism power” is stated in terms of the angular deviation of light rays produced by prisms. A prism diopter ($\Delta$) is defined as the angle corresponding to an apparent displacement of 1 cm. of a point at 1 meter distance. The prism power depends only upon the refractive index and the apex angle of the prism and does not change significantly with the angle of incidence of light rays on the first refracting surface.

To a beginning student, the word diopter appears in two contexts, namely one associated with vergence of rays or power of thin lenses and the other associated with the prism power. The connection between the two becomes apparent only after he studies the prismatic effects of lenses. Yet, even some good students approach the homework exercises with some sense of mystery.

In our Geometric Optics laboratory, we designed an experiment which helped students gain confidence in the concept of prism diopters. It evolved out of one of the “end of the chapter” exercises (1). The use of the He-Ne laser with its intense, parallel beam allows one to solve such exercises with excellent accuracy and ease. We feel that it will be of interest to readers.

Theory
The angular deviation “$v$” produced by a thin prism of apex angle $a$ and refractive index is given by

$$ v = (n - 1) a $$  \hspace{1cm} (1) $$

Where both angles can be measured in degrees or in radians. The prism power $e (\Delta)$ is easily seen to be

$$ e (\Delta) = v \text{ (radians)} \times 100 $$  \hspace{1cm} (2) $$

![FIGURE 1](image-url)

The experimental setup:
- L: Laser (1/2 mW, Helium Neon)
- S: A screen with a 2mm. diameter aperture in the center
- P: Prism holder and a thin prism
- S: Second screen with a horizontal mm. scale

Volume 10, Number 1 / Summer 1984
A beam of laser light striking such a thin prism is split essentially in three beams. One is reflected back by the first surface, second is reflected back by the second surface which is refracted to the laser and the third that appears away from the laser, after two refractions. Further reflections and refractions are almost invisible. The small angle $\theta$ between the two "back" reflected rays is

$$\theta = 2na$$  \hspace{1cm} (3)

Solving eq. 1 and 3, we get,

$$n = \frac{\theta}{2a}$$  \hspace{1cm} (4)

$$a = \frac{\theta}{2 - V}$$

The student measures angles $\theta$ and $V$ in the experiment, calculates the prism power, the refractive index and the apex angle involved and learns the direct connection between these quantities.

The Apparatus

The apparatus consists of 3 Pasco Scientific optical benches (one small), a laser, two screens (one with a hole in it), the lens frame, and ophthalmic prisms. It is assembled as shown in Figure 1. The laser light beam passes through the hole in screen $S_1$, through the center of the prism holder and strikes the center of the screen $S_2$ (with a horizontal mm. scale). The 1 meter lengths of the optical benches serve two purposes. One, they conform with the definitions of the prism diopters. Second, in passing a distance of 2 meters, the laser beam diameter does not increase appreciably to reduce the accuracy of student measurements. The student uses the following instructions.

Operating Instructions

1. Let your instructor check the alignment of the apparatus. Do not look directly into the laser beam.
2. Center the laser beam on the screen $S_2$.
3. Place a given prism in the holder, base to the right. The laser spot on $S_2$ should displace to the right. Measure the displacement $X$ ($S_2$).
4. Note two laser spots on screen $S_1$. Draw the ray diagram in your lab notebook (see Figure 2 caption) to understand which spot is produced by reflection alone. Move the prism holder gently so that this spot strikes the hole in the screen. This should assure you of the normal incidence of the laser beam on the first prism surface, as indicated in Figure 2. Measure the displacement $X$ ($S_1$) of the second laser spot from the hole.
5. Rotate the prism in the holder $180^\circ$ so that it rests base to the left. The laser spots should be displaced towards the base on both screens. (The return spot should not be displaced.) Measure the two displacements $X$ ($S_1$) and $X$ ($S_2$).
6. Repeat the procedure for two more prisms.
7. Prepare a table of observations, enter the data. Use the average values of $X(S_1)$ and $X(S_2)$, for each prism and the formulae 4 and 5 to calculate the required parameters of the ophthalmic prisms.

**Discussion**

It is a very simple experiment for students to see the differences between radians, prism diopters and degrees; or between vergences or prism diopters. So far the experiment has been performed by 4 batches of 12 students each.

The tables 1, 2 and 3 summarize the measurements made by ten groups during the past semester, for three of the prisms used (0.5, 1.0, 2.0 diopters). (The low accuracy-large standard deviation is due to trunkation errors and reading errors made by the students.)

**References**


---

**TABLE 1**

Data for the 0.5 Diopter Prism

<table>
<thead>
<tr>
<th>Units</th>
<th>Student No.</th>
<th>$\alpha$ (Diopters)</th>
<th>$\alpha$ (Radians)</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0.5</td>
<td>0.012</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.5</td>
<td>0.0125</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.5</td>
<td>0.012</td>
<td>1.417</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.5</td>
<td>0.012</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.5</td>
<td>0.0095</td>
<td>1.6316</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.5</td>
<td>0.0115</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0.5</td>
<td>0.0125</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.5</td>
<td>0.0115</td>
<td>1.435</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>0.5</td>
<td>0.0115</td>
<td>1.435</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0.5</td>
<td>0.01145</td>
<td>1.436</td>
</tr>
</tbody>
</table>

**TABLE 2**

Data for the 1.0 Diopter Prism

<table>
<thead>
<tr>
<th>Units</th>
<th>Student No.</th>
<th>$\alpha$ (Diopters)</th>
<th>$\alpha$ (Radians)</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2.0</td>
<td>0.012</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.0</td>
<td>0.01995</td>
<td>1.501</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.0</td>
<td>0.0215</td>
<td>1.465</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.3</td>
<td>0.0185</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.1</td>
<td>0.0200</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1.0</td>
<td>0.021</td>
<td>1.476</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1.0</td>
<td>0.0215</td>
<td>1.465</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>1.05</td>
<td>0.0245</td>
<td>1.408</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>1.00</td>
<td>0.0215</td>
<td>1.465</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>1.0</td>
<td>0.0225</td>
<td>1.44</td>
</tr>
</tbody>
</table>

**TABLE 3**

Data for the Two Diopter Prism

<table>
<thead>
<tr>
<th>Units</th>
<th>Student No.</th>
<th>$\alpha$ (Diopters)</th>
<th>$\alpha$ (Radians)</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2.0</td>
<td>0.04</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.0</td>
<td>0.0395</td>
<td>1.506</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2.00</td>
<td>0.0425</td>
<td>1.471</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2.3</td>
<td>0.0395</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2.05</td>
<td>0.0425</td>
<td>1.482</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2.00</td>
<td>0.041</td>
<td>1.488</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2.0</td>
<td>0.04</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2.07</td>
<td>0.0453</td>
<td>1.457</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>2.00</td>
<td>0.0425</td>
<td>1.471</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>2.00</td>
<td>0.0415</td>
<td>1.48</td>
</tr>
</tbody>
</table>

Tables 1, 2 and 3 present the data collected by 10 groups of students. The experiment involved measuring the distances $X(S_1)$ and $X(S_2)$ after a proper alignment of the apparatus. The relatively large standard deviation is a result of errors of measurement and early trunkation.
Measurement and Evaluation
Leon J. Gross, Ph.D.

The main purpose of instruction, as well as that of most educational programs, is to change a student's behavior in desirable directions. Specifically, in optometry we want to develop optometric knowledge and skills. In doing that, measurement is the quantitative description of the extent to which the behaviors are achieved; that is, how much achievement has taken place.

Usually the initial measurement is in the form of a numeric score. Evaluation is the subsequent value judgment that gets attached to this specific score (e.g., whether it is adequate). The ultimate evaluative concern in education is typically: "How much is enough?" An example of this is whether the individual passed, or whether the letter grade was an A or B?

It would be instructive at this point to consider the distinction between measurement and evaluation using an example in a non-educational setting. In this example, consider the fact that a particular runner in track and field runs the 100 yard dash in 10.2 seconds. This is a measurement statement, since it is simply a quantitative description of the person's behavior; that is, his speed for 100 yards is 10.2 seconds.

The conclusion or value judgment of that person's speed represents the evaluation. Typically, this evaluation would include the measurement noted above in the context of other variables such as the person's age and objective. The ultimate evaluation of labeling that person's time as "fast" or "slow" would differ significantly for a 13-year-old disinterested athlete and an 18-year-old Olympic aspirant. Clearly, measurement and evaluation are related but distinct, with the former serving as a prerequisite for the latter.

There are several important implications of this relationship between measurement and evaluation. First, measurement is uninteresting when conducted without an evaluation perspective. Virtually every entity worth measuring has either an absolute or relative value judgment associated with it, even if the empirical conclusion is that the person's measured trait is merely "average."

Second, although measurement can be viewed as a means to an end (i.e., evaluation) that often has legal implications, one should not dismiss the measurement aspect as just technical. Valid decision-making is dependent on reliable and valid measurement; the latter is not likely to be attained without adequate planning and execution. Reliable and valid measurement can make the evaluator's task relatively easy.

The manner in which tests are used for measurement and evaluation in health professions education is summarized in the table presented below. This table categorizes tests with respect to the nature of measurement, educational use, measurement perspective and interpretive methodology, type of evaluation, and evaluation purpose. Examples for each category are also included.

While there is inadequate space to discuss the numerous aspects of this table, a scanning of the contents quickly reveals that tests are constructed, interpreted, and used for many different purposes. In optometry, these distinctions may be easily seen in comparing NBEO, OCAT, and instructor-made examinations.

For example, the NBEO and OCAT are standardized, fixed response tests; instructor-made tests are typically non-standardized and have both fixed and free response formats. The OCAT is used for selection, NBEO for credentialing, and instructor-made exams have diagnostic and summative evaluation uses. Finally, the OCAT (or any admissions test) is administered in a fixed quota context, since only a limited number of individuals may be deemed "acceptable," while the NBEO and instructor-made exams have a free quota perspective in that there are no inherent limits on the number of individuals who may be deemed acceptable.

From this free vs. fixed quota vantage point, it is natural for the OCAT to yield norm-referenced interpretations while it is similarly natural for the NBEO (or any credentialing test) and instructor-made tests to yield criterion-referenced interpretations.

Given this perspective, it is encouraging to note that the national boards in podiatry and nursing expect to implement criterion-referenced standard setting as NBEO did last year. Unfortunately, many instructors in these professions still embrace predetermined failure rates.

This discussion has attempted to explain that measurement and evaluation are directly related but distinct aspects of testing, and that the type and purpose of evaluation determines the manner in which measurement is conducted. To the extent that this distinction can be seen, the measurement and evaluation of academic achievement in optometry will be enhanced.
# Measurement and Evaluation in Health Professions Education

<table>
<thead>
<tr>
<th>Measurement Commonality</th>
<th>Type of Evaluation</th>
<th>Purpose of Evaluation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum performance</td>
<td>Determine what a person can do when performing at his/her best</td>
<td>Achievement tests (cognitive)</td>
<td></td>
</tr>
<tr>
<td>Typical performance</td>
<td>Determine what a person will do under natural conditions</td>
<td>Performance tests (e.g., laboratory and examination skills)</td>
<td></td>
</tr>
<tr>
<td>Standardized</td>
<td>Determine core knowledge to conform to uniform standards</td>
<td>Admissions and credentialing tests (e.g., OCAT, NBEO)</td>
<td></td>
</tr>
<tr>
<td>Non-Standardized</td>
<td>Determine specific course-related achievement for assigning grades</td>
<td>Instructor developed and administered tests</td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>Determine psychomotor, affective, or communication skill</td>
<td>Some oral and practical examinations (e.g., short answer and essay)</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>Determine cognitive skill</td>
<td>Fixed response tests (e.g., multiple-choice, true-false, matching)</td>
<td></td>
</tr>
<tr>
<td>Qualitative</td>
<td>Assign letter grades or pass-fail</td>
<td>Instructor developed and administered tests; credentialing tests</td>
<td></td>
</tr>
<tr>
<td>Quantitative</td>
<td>Assign numeric scores</td>
<td>Admissions tests</td>
<td></td>
</tr>
<tr>
<td>Selection</td>
<td>Determine possession of prerequisite entry-level skills for successful performance within our curriculum</td>
<td>Admissions tests</td>
<td></td>
</tr>
<tr>
<td>Placement</td>
<td>Determine possession of advanced skills for placement beyond the entry-level</td>
<td>Standardized or institutional tests; qualitative assessment of prior education and experience</td>
<td></td>
</tr>
<tr>
<td>Diagnostic</td>
<td>Monitor individual and aggregate progress through specific course-work, with an emphasis on corrective feedback and refinements in the teaching-learning process</td>
<td>Instructor developed and administered tests</td>
<td></td>
</tr>
<tr>
<td>Summative</td>
<td>Determine course grades and/or student promotion</td>
<td>Final and/or comprehensive tests</td>
<td></td>
</tr>
<tr>
<td>Credentialing</td>
<td>Determine level of entry-level skills for competent (i.e., safe) professional performance</td>
<td>Certification and licensure examinations</td>
<td></td>
</tr>
<tr>
<td>Free Quota</td>
<td>Select all individuals who attain an acceptable level of performance</td>
<td>Certification and licensure examinations</td>
<td></td>
</tr>
<tr>
<td>Fixed Quota</td>
<td>Select only a limited number of individuals regardless of their level of performance</td>
<td>Admissions tests</td>
<td></td>
</tr>
<tr>
<td>Criterion-referenced</td>
<td>Describe student performance with regard to a rational predetermined absolute standard of acceptable performance</td>
<td>Analysis of difficulty and criticality of test items</td>
<td></td>
</tr>
<tr>
<td>Norm-referenced</td>
<td>Describe student performance in terms of relative position within a rank ordered test score distribution</td>
<td>Percentile equivalents; standard scores</td>
<td></td>
</tr>
</tbody>
</table>

saw how deprived some people are of basic health and vision care. Some of the things we take for granted they've never heard of," said Tim Arbet. "The experience of putting glasses on someone who hasn't seen a printed word clearly for 30 years and watching the expression on their face is an experience not easily forgotten."

Trips this year included Ecuador, Haiti, Mexico, Columbia, Honduras, and the Philippines.

Better Vision Institute Cited for Service

The Better Vision Institute, Inc. (BVI), of New York City, was presented the 1984 Public Service Award by the Pennsylvania College of Optometry during the school's recent Alumni Reunion.

Lawrence O. Aasen, Executive Secretary of BVI, accepted the award, which honored BVI for its outstanding contributions in promoting better vision care for the American public during the past 55 years.

Among its many accomplishments, BVI has created public service announcements for the eye care profession. Comedian Bob Hope donated his time as spokesperson for these announcements. BVI also distributes four-color pamphlets that remind people to consider vision care as a primary health care need; gives special eye care information kits to schools; and promotes articles on vision care in newspapers and magazines and programs on radio and television.

Keeping Up with People...

As part of Illinois College of Optometry's objective to diversify its clinical training program and curriculum, six additional adjunct faculty, including four optometrists and two ophthalmologists, have been appointed to the faculty. Robert A. Koetting, O.D., of St. Louis, MO, who conducts one of the largest contact lens practices in the Midwest, was appointed adjunct clinical associate professor. George E. Rich, O.D., a private practitioner in Highland Park, IL, was appointed adjunct clinical associate professor.

Four of the new adjunct faculty currently are stationed at the U.S. Naval Hospital in Great Lakes, IL, where ICO interns now gain clinical expertise in an affiliated clinic there. K. Shantinath, M.D., chief of ophthalmology at the Navy Hospital, was appointed adjunct clinical associate professor. James H. Bardenwerper, O.D., a 1981 graduate of ICO, was appointed adjunct clinical assistant professor. James Alan Beil, O.D., chief optometrist and adjunct clinical associate professor, is a graduate of Indiana University School of Optometry. G. Geoffrey Miller, O.D., M.D., a staff ophthalmologist and adjunct clinical associate professor, holds an O.D. degree from Pennsylvania College of Optometry and his M.D. degree from Jefferson Medical College.

The National Eye Institute (NEI) has announced the appointment of Robert B. Nussenblatt, M.D., to the position of Deputy Clinical Director. He will participate in the formulation of broad goals and policies for the NEI Clinical Branch and coordinate day-to-day operations of the 50 inpatient, outpatient, and laboratory research projects of this program.

"Dr. Nussenblatt is an excellent clinical researcher, at home in the labora-
tory, who will make maximal use of all resources available to him in directing a high quality vision research program," said Jin Kinoshita, Ph.D., NEI scientific director.

Dr. Nussenblatt will also continue to serve as chief of the NEI's Clinical Ophthalmic Immunology Section, which he has directed since its establishment in 1981. He joined the NEI Clinical Branch in 1977, following residencies in medicine and ophthalmology at New York University Medical Center.

David A. Greenberg

David A. Greenberg, O.D., M.P.H., joined the Illinois College of Optometry July 1 as the executive director of institutional planning, Office of the President. Dr. Greenberg will serve as an in-house resource to ICO administrators and faculty. He was an associate professor at Southern California College of Optometry and director of the Optometric Center of Los Angeles.

Dr. Robert N. Kleinlein

Dr. Robert N. Kleinlein, chairman of the Department of Optometry, the School of Optometry, University of Alabama in Birmingham, has been promoted to the rank of professor.

Dr. Kleinlein earned the O.D. degree, the M.P.H. degree, and the Ph.D. degree in Physiological Optics from the University of California, Berkeley. He has held an American Optometric Foundation Fellowship and a National Institute of Health Traineeship. He was the recipient of a National Eye Institute Academic Investigator Award and research grant. In 1980, he was selected as a Kellogg National Fellow.

Prof. Jacob G. Sivak has been appointed director of the University of Waterloo's school of optometry for a three year period, effective July 1. He succeeds Dr. Walwyn Long whose term expired June 30. Dr. Sivak has been a member of faculty at UW since 1972.

He came to Waterloo as an assistant professor and became a full professor in 1980.

Dr. Sivak foresees continued development of the school's clinic program, which is already providing students with broad clinical exposure. He is particularly interested in applying new developments in science and technology to the clinic.

William M. Dell, O.D., M.P.H., has been appointed Coordinator for the combined Internal Clinical Educational Programs Tract and Optometry Tract at the Pennsylvania College of Optometry. As Tract Coordinator, Dr. Dell is responsible for administering educational programs, research and faculty development within the tract.

Dr. Dell had been an Associate Professor of Optometry and Public Health at the New England College of Optometry in Boston.

Volume 10, Number 1 / Summer 1984
A successful optometrist needs two things. The Army offers both.

Experience: your future in optometry depends on the experience you can accumulate. And you'll get more experience in your first term in the Army than some optometrists do in a lifetime. You'll see and treat all kinds of eye problems to gain the skills and proficiency that build a rich and rewarding career.

Independence: you can also avoid the heavy start-up costs of space and equipment for a civilian practice. Instead of debts, the Army will give you officer's pay, plus special pay as a Doctor of Optometry, plus housing allowances, family health care, 30 days paid annual vacation.

And you'll wind up with the means to finance a future of your own choosing.

If this practice sounds inviting, get all the details. Write: Army Medical Opportunities, P.O. Box 7711, Burbank, CA 91510.

Army Optometry. It deserves a closer look.