

**OPTOMETRIC
GERONTOLOGY—
CURRICULUM
RECOMMENDATIONS**

**Fall 1988
Volume 14, Number 1**

JOURNAL OF OPTOMETRIC EDUCATION



Also in this issue: ASCO'S ANNUAL REPORT

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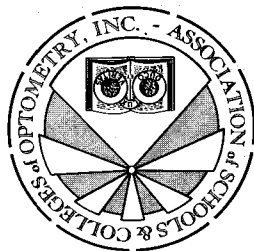
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Educational Research: Fact or Fantasy?

Research. What comes to mind when you hear this term? If presented to members of the faculty of the schools and colleges of optometry, a wide variety of responses may be heard. These may include the identification of a topical area, perhaps contact lens wetting characteristics or mechanisms related to adaptive vergence. Others may think of the trials and tribulations of the research process: grant procurement. But rarely, if ever, is the term education put forth in association with the term research. Educational research. Indeed, the association of these words frequently elicits little more than a quizzical look, with the listener musing over the validity of using these terms in the same sentence.

This reaction not only questions the value of educational research, but its very existence. Given the changes that have occurred within our profession in the immediate past and which promise to continue into the future unabated, our educational planning needs the application of solid research methodologies. We can not rely upon general impressions or instinct to conclude whether a program is working. We must apply rigorous scientific standards to our evaluative process.

This Journal's Fall 1987 issue, "Optometric Education in the Year 2000," which included the publication of the Association of Schools and Colleges of Optometry's twenty-five point strategic plan, defined the educational issues of the future that require our action as educators. With our objectives stated, it is now incumbent upon the faculty of the schools to develop, implement, and evaluate the programs which will allow us to meet the established goals.

The ease with which we accomplish these goals rests largely upon the degree of care with which we develop and evaluate our educational programs. Whether we are talking about a molecular biology experiment or a curriculum change, each may be designed to isolate the variable of interest and evaluate that variable accordingly. Scientific principles applied to our educational programs will allow effective programs to be identified, replication of efforts avoided and the timely implementation of educational change to be facilitated.

Whether or not we attain our goals as educators, both in the individual and collective sense, depends upon both the faculty and the administrations of the

schools and colleges of optometry. Faculty must be given the resources and the time to develop educational programs and must be encouraged to apply valid evaluative measures. Research, no matter what the realm of interest, requires time, support and recognition for its scholarly value. The leaders in optometric education, who have defined our direction, must assist these efforts within their own institutions.

The results of these efforts, as within any field, must be communicated, whether at a professional meeting or in the form of a journal article. The *Journal of Optometric Education* has been the primary means for communicating educational knowledge in the field of optometry. Certainly there exists a group of faculty for whom educational issues are the priority. An increasing number of faculty are getting involved in educational research. The quality of submissions to the *Journal of Optometric Education* is improving and the American Academy of Optometry Section on Optometric Education is evoking greater interest and participation. In spite of these indicators, optometry still lags behind other health professions in addressing educational issues. The routine application of rigorous research standards by other health professions is evidenced in the educational literature and entire meetings are devoted to educational concerns.

If the schools and colleges of optometry are to maintain their ability to respond to the dynamic changes of the profession, we as educators must accept the challenge and take educational research out of the world of fantasy and into the realm of fact.



David A. Heath, O.D.
Editor

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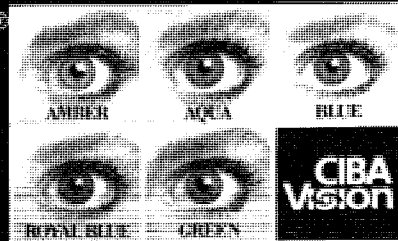


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SUSTAINING MEMBER NEWS

Varilux Introduces "Infinity"

Varilux Corporation has announced a new progressive lens with 12 custom surface designs for each of the most commonly prescribed add powers.

The lens, trademarked Varilux® Infinity™, is described by the company as "revolutionary" and the most significant breakthrough in the category since the original Varilux established the progressive concept in 1959. This new Multi-Design minimizes or eliminates the optical compromises that are inherent in adapting a single, one-size-fits-all design throughout a wide power range.

The effect of having a custom design for each add, according to Varilux, is to maximize visual comfort, increase usable reading and viewing areas, and achieve faster, more certain adaptation by the wearer. The Infinity design concept also enables practitioners to fit progressives more easily and with greater confidence. Lens choice is also simplified as the patients can stay with the Infinity lenses through all stages of presbyopia.

The Varilux Infinity series, in 80mm plastic with base curves of 2.00, 4.00, 6.00 and 8.00, is provided in 0.25D increments from 0.75D to 3.50D. Equivalent glass lenses will be introduced in early 1989.

Varilux Infinity is positioned as a premium-value product including standard scratch-resistant coating and a deluxe delivery package. It also employs a new system of very discrete laser engravings to simplify lens identification and re-marking.

The Varilux Plus series, the current leading design in the progressive market, will continue to be marketed normally as the cost/performance single-design lens of choice for many patients. Both Varilux Infinity and Varilux Plus are available only through qualified independent labs appointed by the Varilux Corporation. □

Polymer Technology Sponsors Seminars

A seminar entitled "Fluoro-Silicone/Acrylate Lenses: Clinical Management for Daily and Extended Wear," was recently sponsored by Polymer Technology Corporation in conjunction with local certified labs at sites in Harrisburg, Pennsylvania and Rosemont, Illinois.

The purpose of the seminars was to spread the word about advances in rigid gas permeable contact lenses.

The seminar was offered free of charge and awarded attendees two hours of continuing education credit from the State Board of Optometry.

Robert Grohe, O.D., a full-time practitioner and clinical investigator for advanced contact lens materials, was the seminar speaker. Dr. Grohe maintains three offices in the Chicago suburbs—two optometric practices and a joint optometric-ophthalmological group, all with special emphasis on contact lenses. He is also co-author of the textbook: *Rigid Gas Permeable Contact Lenses*. □

CIBA Supports University of Houston Contact Lens Research

As part of an ongoing effort to support quality optometric research institutions, CIBA Vision Corporation is renewing its sponsorship of the University of Houston's Institute of Contact Lens Research.

"Research is the key to product innovations and refinements, as well as the means of keeping abreast of issues that concern the eye care industry," stated B. J. Shannon, O.D., Executive Director of Professional Services for CIBA Vision Corporation. "The studies generated from the Institute of Contact Lens Research expand the base of scientific knowledge of contact lenses. These studies help us to maintain our high standards of quality products and service."

In December, 1983, CIBA Vision Corporation and eight other contact lens companies funded the University of Houston's Institute of Contact Lens Research, to serve as a resource for vision studies and data.

"CIBA Vision has made an effort in the past to support major educational institutions," concluded Dr. Shannon, "and will continue with this effort in the future." □

Bausch & Lomb Research Symposium Held in Anaheim, California

The fifteenth annual Bausch & Lomb sponsored National Research Council on Contact Lenses was held at the Anaheim Marriott Hotel in Anaheim, California, August 12, 13, and 14. Regis-

tration was free to all registered eye care professionals. Eighteen speakers focused on current concepts in contact lenses, ophthalmic drugs and corneal infections, and new technology in the whole eye-care field.

The presenters were selected by this year's moderators: Perry S. Binder, M.D., Brien A. Holden, Ph.D., and Kenneth A. Polse, O.D. □

New Polymer Booklet for VDT Users

A specially designed series of blinking exercises to relieve eye strain is now available in a new booklet, "VDT Users: Improve Comfort With the Blink of an Eye," developed by Polymer Technology Corporation, the manufacturer of the world's most prescribed rigid gas permeable contact lens materials.

Workers at VDTs are increasingly reporting new office-related health complaints. Independent studies have reported that over half of all VDT workers experience eyestrain or related visual discomfort. Some researchers have even found that up to 94 percent of users report vision-related complaints.

One of the reasons may be surprising. Due to the fixed focus needed when working at VDTs, many operators are blinking less often than they should and experiencing drying of the eyes. Contact lens wearers, even those wearing Boston Equalens® with its high wettability and deposit resistance may experience a drying sensation when regular blinking does not occur. For contact lens wearers, blinking is particularly important because the static electricity of VDT screens attract dust; blinking wipes the lens clean of superficial dust on its front surface.

According to Ernest Loewenstein, O.D., a contact lens specialist in Newton, Massachusetts, and an associate professor at New England College of Optometry, "Ideal blinking frequency is every three seconds."

The booklet, "VDT Users: Improve Comfort With the Blink of an Eye," can be obtained by sending a self-addressed, stamped #10 envelope to: BOSTON EQUALENS BLINK, Polymer Technology Corporation, 100 Research Drive, Wilmington, MA 01887 or by calling the Department of Communications, Polymer Technology Corporation, 1-800-343-1445. □

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Optometric Gerontology: State of the Art in Schools and Colleges of Optometry

Sheree J. Aston, O.D., M.A.
Denise A. DeSylvia, O.D.
Gary L. Mancil, O.D.

Abstract

In 1984, Dr. Alfred Rosenbloom surveyed fifteen schools of optometry regarding academic and clinical coursework on optometric gerontology. A second survey was completed in winter 1986 by the ASCO Optometric Gerontology Curriculum Development Committee. This article will discuss the results of the committee's survey, make comparisons to the Rosenbloom survey and present the committee's recommendations for implementing a comprehensive optometric gerontology curriculum at each of the ASCO member institutions.

Introduction

In 1982, more than 26 million Americans were over the age of 65. This number is projected to be more than 35 million by the year 2000.¹ This group, representing only 11 percent of the U.S. population, consumes one-third of the nation's health care.² The need for responsive and appropriate health care is expected to grow as the elderly population increases in size. In order to successfully meet these needs, health care systems will require practitioners, edu-

cated and trained in caring for older adults.

Organized optometry, using the profession's specialized expertise, has provided vision services to elderly individuals for a long time. However, responding to the increased number of aging Americans, professional optometry has recently recognized the need to strengthen its training to meet the social, psychological and other health needs of the older person. Formal education in the health and vision needs of the elderly is frequently available at association meetings, college continuing education programs and at local, state and national professional meetings.

In 1984, the American Optometric Association applied for and received funding from the Administration on Aging to provide additional training to optometric practitioners serving the elderly. A continuing education program and a manual in optometric gerontology were developed, implemented and disseminated. The Vision Care Section of the American Public Health Association also recognized the need for greater training to provide services to the older adult. In a recent resolution, that organization "encourages multidisciplinary efforts in caring for the elderly's visual impairment so that visual needs are met within the context of the individual's daily activities."³ These steps indicate the profession's increasing involvement in and dedication to the total care of elderly persons. In order to address the unique issues related to aging individuals, eye care professionals need a broad-based education in gerontology.

Providing health professional students

with geriatric patient care experiences significantly impacts the attitudes of such future providers.^{4,5} Dr. John Potter stated in an editorial for the *Journal of Optometric Education* (JOE), "Because there is a positive correlation between knowledge and attitudes, optometric faculty should consider early in their professional school curricula definite educational strategies to impart knowledge about the aging process and about the health care and social problems of the elderly."⁶

Recently, ASCO's Board of Directors reaffirmed optometry's commitment to enhancing the quality of education in optometric gerontology. An Optometric Gerontology Curriculum Development Committee was appointed by ASCO in spring 1986. The Committee's primary directive was to develop, implement and disseminate a comprehensive optometric gerontology curriculum designed to improve the knowledge and skills of future optometrists.

Dr. Alfred Rosenbloom had assessed, in 1984, the number of clinical and academic courses offered at the schools and colleges of optometry.⁷ In fall 1986, the ASCO Optometric Gerontology Curriculum Development Committee designed and distributed a survey to update some findings of the Rosenbloom study and to explore additional areas.

Methods

A questionnaire was developed and distributed to 18 schools and colleges of optometry; 16 responses were received. Information was gathered in the following areas:

Dr. Aston is the chairperson of the Department of External Clinical Programs, coordinator of Programs in Aging and assistant professor at the Pennsylvania College of Optometry.

Dr. DeSylvia is director of clinical services at the Optometric Institute and Clinic of Detroit and assistant professor at Ferris State University College of Optometry.

Dr. Mancil, former assistant professor and geriatrics coordinator at the University of Alabama at Birmingham School of Optometry, is currently practicing optometry in Atlanta, Georgia.

- training of present primary contact faculty in geriatrics,
- number and type of formal optometric gerontology courses,
- types of on- and off-campus clinical activities,
- current vision and aging research projects,
- public education/health promotional activities in vision and aging,
- relevant continuing education programs, and
- optimal modes of optometric gerontology instruction.

Results

Question #1 of the survey asked for the name and educational background of a primary faculty/staff member active in the institution's didactic and/or clinical optometric gerontology program. Table 1 provides a summary of the formal geriatric training of the "primary contact" in each of the 16 responding institutions. Ten faculty members did not have any formal training, one had completed gerontology college coursework, three had rotated through the intensive gerontology courses for health care providers at regional Geriatric Education Centers, one held a gerontology certificate and one had a graduate level degree in social gerontology. Some respondents indicated limited continuing education courses in gerontology and related areas; however, because the content, quality, duration and structure were unknown, this type of training was not considered to be formal.

The next area surveyed concerned the type of didactic instruction on the subject of optometric gerontology (Table 2). Five schools did not have a separate formal course. Eight institutions had required courses, one for four hours per week, two for three hours per week and five for two hours per week. None of the nine courses had a laboratory component. Two colleges of optometry had formalized courses, although elective in nature. Most courses were of 10-12 weeks duration. The remaining school had a required, combined low vision and gerontology course with two hours lecture and two hours lab per week for 14 weeks. Three schools indicated plans to incorporate a required separate course on optometric gerontology into the curriculum by December 1988.

Opportunities for training in clinical geriatrics were surveyed in part three of the questionnaire. We also requested information on the total days of patient contact per student and the clinical year in which the rotations were offered. Table 3 provides a breakdown of re-

quired and elective on- and off-campus clinical rotations. While all of the responding institutions have both required and elective rotations through low vision and primary care clinics serving elderly individuals, only two optometry schools had a geriatric specialty clinic. One school indicated required rotations through an adult clinic (over 40 years of age). Twelve schools have required rotations and three elective rotations, through off-campus sites. Off-campus experiences were at a variety of settings: nursing homes, community centers, Veteran's Administration (VA) clinics, senior centers, family practices, hospitals, vision centers, specialty low vision clinics and in-home programs. Only one institution did not offer an off-campus geriatric clinical program. While the clinical rotations were offered in either the third or fourth professional year, the majority of required clinics were for fourth year students. The number of clinical patient contacts ranged from a minimum of four to a maximum of 50 patients/per student/per year, with the average being 12. Information on geriatric residencies was additionally requested. Thirteen residencies were reported: seven were VA hospital-based residencies, two were VA geriatric residencies, three were residencies in VA rehabilitation optometry, and one was listed as a low vision/gerontology residency.

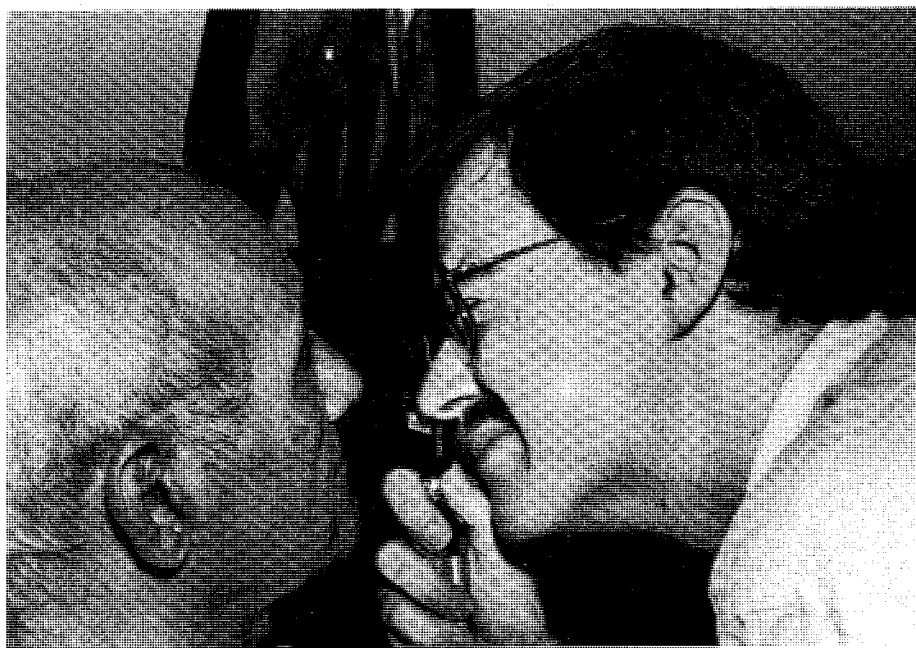
Section four involved active or recently completed projects in or related to vision and aging (Table 4). Only six of the 16 responding schools indicated such research experience. Topics included Type II Diabetes Mellitus Studies, Effects of Ultraviolet Light, Spatial Fre-

quency in Aging, Tear Physiology, Functional Vision with Early Cataracts, Visual Perception with Aging, Maintaining Independence in Institutionalized Older Adults, Long-term Care Curriculum Research, Eccentric Fixation and Senile Maculopathies, and Low Vision Aids Training.

The schools with current or regular continuing education courses on vision and aging are shown in Table 5. Six institutions have programs specific to vision and the elderly. Topics included Vision and Aging, Low Vision and Geriatrics, Age-related Maculopathy and the Management of Various Ocular Problems in Older Adults. The remaining ten schools did not report continuing education courses specific to the aging adult.

Table 6 presents information gathered on public educational activities at each institution. Nine schools indicate active participation in public education/health promotion programs. Specific types of activities and number of schools participating were: education seminars (4), in-service education (2), vision screenings (5), elder hospice (2), public service announcements (2), public relations appearances/interviews (2) and promotional material distribution (2).

The last section of the questionnaire (Table 7) dealt with the optimum method and format of instruction in optometric gerontology. Respondents were asked to prioritize a given list of modes/methodologies. The final rank-ordered instructional methods were: a single, required course (1st); on-campus clinical geriatric training (2nd); age-related content integrated in other coursework (3rd); off-campus clinical experiences



(4th) and a single, elective course (5th).

The final survey data came in response to the question: What are the essential elements and the most appropriate structure of a comprehensive optometric gerontology program? Ten "primary contact" faculty indicated this structure should include, at a minimum, both a separate required course and geriatric clinical experiences. Of these ten, five further specified multidisciplinary elements; one - geriatric specialty clinics; one - an internal geriatric residency program; one - specially trained faculty; one - appropriate labs with coursework; one - in-home eye care and one - public and continuing education programs. Two individuals stressed the importance of multidisciplinary participation and a comprehensive, well-sequenced course. The remaining four respondents did not address this question.

Discussion

While both the Rosenbloom and ASCO survey explored similar topics in optometric gerontology using different questions, some results can be compared. Both surveys requested data on formal optometric gerontology courses offered. The number of schools with formal courses (10) was unchanged as of fall 1986. However, three survey respondents will have implemented separate required courses before winter 1988. Regarding on- and off-campus clinical geriatric rotations, the number of in-house specialty clinics remained the same (3). The Rosenbloom survey gathered data on the types of off-campus clinical activities and did not include information on the frequency of rotations or the number of schools with such programs. In the Rosenbloom survey, off-campus clinical experiences in-

cluded Screenings, Nursing Homes, VA hospitals (residency rotations), Geriatric Day Care Centers, General or County Hospitals, Mobile Clinic Services, Light-house and Vision Centers. Additional sites reported in the ASCO survey included VA Externship Rotations, Specialty Low Vision Clinics and In-Home Eye Care Programs.

At the time of the Rosenbloom survey, there were eight VA residency programs associated with the schools and colleges of optometry. The ASCO survey revealed 13 residencies, an increase of five. The subject of vision and aging research was investigated and revealed that the number engaged in such activity increased from three to six schools and colleges. The number of institutions involved in public educational/health promotional activities also increased from five to seven schools.

TABLE 1
Training of Primary Contact Faculty

# of Faculty	Category of Training/Education
10	No formal training
1	College coursework
3	Geriatric Education Center rotation
1	Certificate
1	Formal degree

TABLE 2
Formal and Separate Optometric Gerontology Coursework

# of Schools	Type of Course
5	No formal course
2	Separate elective course
1	Required course combined with low vision
3	Required, separate course

Note: Three schools indicated the planned implementation of a required separate course by winter 1988.

TABLE 3
Geriatric Clinical Programs

# of Schools	Type of Clinical Activity
	<i>On-Campus</i>
13	No on-campus geriatrics specialty clinic
3	Required on-campus geriatrics specialty clinic rotation
	<i>Off-Campus</i>
1	No off-campus rotations
3	Elective off-campus geriatrics clinical rotations
12	Required off-campus geriatrics clinical rotations

The area which had decreased in emphasis was continuing education. Rosenbloom reported seven schools with programs in various aspects of vision and aging. The ASCO survey found that the number of schools offering continuing education courses on vision and aging topics had dropped to six.

Summary

The ASCO survey on existing practices among the schools and colleges of optometry revealed a number of important trends. Through comparison with the Rosenbloom survey, it is apparent that academic optometry has begun to respond to the growing need for improved educational experience with aging. This is best evidenced by the increasing number of institutions which teach or will teach geriatrics as a required course in the curriculum and the

growing number and type of geriatric clinical training opportunities available.

One notable fact is that the majority of the key individuals in geriatrics at the responding schools have no formal training in gerontology (Table 1). (Note: in scoring responses to this question from the survey, "formal training" was defined loosely. Graduate degrees or certificates in gerontology as well as completion of intensive but short-term training programs at federally funded Geriatric Education Centers were considered "formal training".) Even using this broad definition, very few professors of optometric gerontology had a formal background in the area. This finding most likely reflects the common trend among institutions to combine geriatric training with low vision training. Commonly, geriatric teaching loads and administrative responsibilities are assigned to individuals whose primary interest and ex-

pertise is in vision rehabilitation.

At the time of the recent survey, only half (Table 2) of the ASCO member institutions had an existing, required separate course in optometric gerontology. Of the existing courses, none had a laboratory component. In terms of clinical experiences, few institutions maintained an on-campus specialty clinic in which intensive training in unique patient-care aspects of geriatrics could be addressed. While most schools offer off-campus clinical training opportunities, the variety of settings per school and the number of patient contacts per student per year were minimal. The opportunities and requirements for clinical training in geriatrics varied greatly among the various institutions. There is presently little to no consistency in the emphasis given to geriatrics training across the profession.

Optometric institutions have just

TABLE 4

Current Vision and Aging Related Research

# of Schools	Research Projects
10	No projects reported
6	Ongoing or recently completed projects

TABLE 5

Continuing Education Courses on Vision and Aging

# of Schools	CE Programs
6	Vision and aging specific courses
10	No vision and aging specific courses

TABLE 6

Public Educational Activities in Vision and Aging

# of Schools	Activities
7	No active public education activities
9	Public educational activities (8 with students)

TABLE 7

Optimal Mode of Providing Optometric Gerontology Instruction

Rank Order	Instructional Mode
1	Single, required course
2	On-campus clinical geriatrics rotations
3	Age-related material integrated into curriculum
4	Off-campus clinical experiences
5	Single, elective course

begun to realize the unlimited potential that exists in vision and aging research. While six of the 16 responding institutions indicated activity in vision and aging related projects, the majority were indirectly associated with the aging process or the elderly individual. Much more attention needs to be given to this important area of research.

Schools and colleges of optometry are recognized leaders in optometric continuing education. Faculty members and private practitioners should be able to upgrade their skills and knowledge through programs at these institutions. The results of the survey demonstrate that greater attention is needed in developing and offering continuing education courses on a variety of subjects in "optometric gerontology."

The schools and colleges have given greater attention to public education and health promotion activities related to vision and aging. While the institutions active in this area represented a variety of activity types, only one school reported a comprehensive public education/health promotional program. All schools should consider these programs as viable methods for serving their community, for making the profession of optometry more visible, and for educating their students.

Regarding the best single mode of offering optometric gerontology instruction, a required separate course was ranked the highest (with on-campus clinical rotations a very close second). When responding to an open-ended question on the same topic, the overwhelming majority agreed that a combined required clinical and didactic program specific to gerontology was the preferred approach. While it appears that the leaders in geriatrics at the responding schools recognize and, for the most part, agree on the curricular needs and approaches, much work remains to be accomplished.

The ASCO survey strongly agrees with the Rosenbloom survey in pointing out the inadequacies of current optometric gerontology educational programs and activities. Considering the current population trends and demographics, if the identified deficiencies are not addressed, optometrists will be insufficiently trained to properly meet the demands of an aging society.

Recommendations

Based on the inadequacies identified through the ASCO survey, the Committee recommends the following steps:

1. The improvement of opportunities

for faculty to receive formal training in optometric gerontology.

2. The assignment of a faculty member in each institution whose primary responsibility would be in the area of optometric gerontology.
3. The upgrading of all college curricula to include a separate, required course in optometric gerontology. The course should be competency based, utilize a multidisciplinary approach and include a laboratory component.
4. Increase the number and type of both on-campus and off-campus clinical geriatric rotations for beginning, intermediate and advanced professional years. The majority of schools need to develop on-campus geriatric specialty clinics. Off-campus programs should be expanded to include screenings, hospital care, nursing home and in-home care. All schools should offer specialized fourth year externships and post-graduation residencies in geriatrics.
5. Administration in schools engaged in research should encourage faculty members to apply for extramural funding basic and applied research on vision and aging, especially in the area of clinical methodology. Schools not currently involved in research should consider this area as a first field of study.
6. The development and implementation, on a regular basis, of continuing education lectures and courses in Optometric Gerontology. Courses should be held on-campus through grand rounds and intensive workshops as well as off-campus at state, regional and national association meetings. Material should include concepts of general gerontology as well as topics specific to vision.
7. The implementation of comprehensive public education/health promotion programs in aging at all schools and colleges of optometry. Activities such as screenings, educational seminars, in-service professional education, public relation interviews and announcements, elder hospice and the distribution of promotional materials should be available. Students should be included in these activities.
8. The development of a model "Optometric Gerontology" program, including didactic and clinical components. This program should be implemented in all ASCO member institutions.
9. The increase in the number and type of "Optometric Gerontology" questions on the National Board Examinations.

Epilogue

The results from the ASCO survey on Optometric Gerontology and the earlier Rosenbloom Survey have already served as an impetus to further develop training programs in optometric gerontology. In November 1986, the ASCO Optometric Gerontology Curriculum Development Committee (Dr. Gary Mancil, Chairperson, University of Alabama at Birmingham College of Optometry; Dr. Sheree Aston, Pennsylvania College of Optometry and Dr. Denise DeSylvia, Ferris State College of Optometry) responded to a request for proposals on professional training in geriatrics from the Administration on Aging. This grant, awarded to ASCO in September 1987, provides for the development of a comprehensive, competency-based program and textbook in optometric gerontology. The modular text will contain summary competencies, detailed educational objectives, experiential exercises, audio-visual materials and resources, a model "clinical geriatrics" program and extensive references and reading lists. Three regional workshops will be conducted during fall 1988 to train key individuals at each of the ASCO member institutions in the usage of the comprehensive program and text. The ASCO Optometric Gerontology Curriculum Development Committee expresses its appreciation to all individuals at the responding institutions who assisted the Committee in its work by completing the survey. The Committee also solicits the continued support of the administration and faculty at ASCO member institutions in completing work on this major project. □

References

1. *America in transition: an aging society*. Current Population Reports. Special Studies Series P-23 No. 128. Prepared by the U.S. Department of Commerce. Bureau of the Census. Washington, D.C.: U.S. Printing Office. 1983.
2. *Developments in aging*, Volume 1. Prepared by the U.S. Congress, Senate Special Committee on Aging. Washington, D.C.: U.S. Government Printing Office. 1982.
3. Peters H. The American Medical Association/health policy agenda for the American people. *J Amer Optom Assoc* 1986 Spring; 5(5): 364-368.
4. *Report on Education and Training in Geriatrics*. Prepared by the National Institute on Aging. Bethesda, MD: National Institute on Aging. 1984.
5. Beck J, Ettinger J, Jakobson J. Teaching programs in geriatric dentistry an international comparison. *Geron & Ger Educ* 1983; 4(2): 37-49.
6. Potter J. Optometry and gerontology: a vital link. *Journal of Optom Educ* 1985 Fall; 11(2):4.
7. Rosenbloom A. Teaching programs in geriatric optometry. *Journal of Optom Educ* 1985 Fall; 11(2):15-18.

The Evolvment, Development and Use of an Independent Self-Study DPA Educational Program

Joel S. Waldstreicher, O.D., M.S.Ed.
Vincent Pagano, Ph.D.

Introduction

In February, 1984, after enabling legislation had successfully passed the New York State Legislature and had been signed by the Governor of New York, the N.Y.S. Board of Regents issued changes in the regulations governing the practice of optometry. These regulations would allow the certification of optometrists to use topical diagnostic pharmaceutical agents (DPAs) including mydriatics, miotics and cycloplegics in the practice of optometry.

Original DPA Educational Program

All New York State licensed optometrists who were not eligible for an advanced standing DPA certification examination were required to take an educational program approved and registered with the N.Y.S. Education Department. This program was to be completed prior to being eligible to take the regular DPA certification examination. The approved educational program, which was presented by the State College of Optometry (SUNY), was composed of 42 contact hours of didactic lecture (six lecture hours of physiology

review and 36 lecture hours of general and ocular pharmacology) along with 13 hours of demonstration/laboratory in the clinical use of diagnostic pharmaceutical agents. A two hour DPA certification examination was given after the course was completed. In addition an approved six hour course in CPR was required to be successfully completed prior to establishing full eligibility to be registered for the use of diagnostic pharmaceutical agents in optometric practice.

The complete 55 hour DPA educational program was presented by the State College of Optometry for the first time in the Spring of 1984 at two locations within New York State. This educational program was repeated in the fall and early winter of 1984-85 at five different locations within New York State including the State College of Optometry in New York City.

Faculty members from the State College of Optometry (SUNY) and The New England College of Optometry, along with some adjunct faculty in pharmacology from various professional schools in the Metropolitan New York area, presented the DPA educational program to over 500 optometrists at those seven locations from the spring of 1984 through the winter 1985. Ninety-two percent of the optometrists taking the certification examination for the first time passed the examination. Most of these optometrists were practitioners who had graduated from an optometric school or college more than 15 or 20 years ago. A significant number may not even have taken a formal continuing education course in that time, since

continuing education is not mandatory for relicensure in New York State. More than 450 other optometrists were granted eligibility to take an advanced standing examination. These optometrists were fairly recent graduates (within the last 5-10 years) of optometric schools and colleges where pharmacology and the clinical use of diagnostic pharmaceutical agents were firmly established in their professional studies and clinical experience.

Need for Non-Traditional Educational Program

During the fall of 1985, announcements were again circulated to all licensed optometrists within New York State stating that a DPA educational program would be presented by SUNY at two locations. There was not sufficient registration for this program at either site to allow the State College of Optometry to continue its presentation. It was readily apparent that the DPA educational program would have to be restructured in its type of presentation, but still retain the same didactic and clinical material in physiology, general and ocular pharmacology and the practical use of topical DPAs, without losing any of the qualitative educational standards previously set.

The practical need now was for a DPA certification educational program with the ability to reach small groups of optometrists, spread throughout New York State, who desired to become DPA certified. These optometrists could no longer numerically make up a class, meeting in one location for a lecture program in the traditional manner. There

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were also the future needs of those O.D.'s currently practicing in the armed or public health services who might eventually return to civilian practice in New York State and might want access to an educational program which would allow them to be certified to use DPAs in private practice. Other optometrists from adjoining states or elsewhere also might need a way to become DPA certified, should they wish to become licensed or practice in New York State. The State Education Department and the New York State Board for Optometry requested the State College of Optometry to develop a DPA educational program which meet these current and future needs.

New Independent Self-Study DPA Program

The curriculum which evolved would allow independent study at home within a specific pre-assigned program including hand-outs and text material from the physiology, general pharmacology and ocular pharmacology portions of the original DPA course. Each eligible and participating licensed optometrist received two additional programmed self-instructional texts in basic and general pharmacology. This self-teaching material covered the areas of general pharmacology, drug absorption and administration, drug transport, distribution, metabolism and pharmacokinetics. The programmed self-instructional approach allowed each student to outline the highlights of the material in these areas and have pre- and post-lesson reviews, with tests and answers available to increase the student's basic understanding and retention of important principles and details. A new text covering the general principles of pharmacology was introduced, replacing the text which was originally used in the DPA course because it was found to cover the curriculum in pharmacology in a more organized and understandable manner. Assignments from the text and the self-instructional material covered such areas as CNS depressants, hypnotics, narcotics, analgesics, CNS stimulants, anti-depressants, cardio-vascular function and drugs, histamines and anti-histamines, and their interaction related to the visual system. Specific reading assignments in the texts were given to cover certain subject areas. Self-assessment tests related to the reading assignments were completed by each student and returned to one of the course instructors, who returned them to each student with the correct answers indicated. In addition,

review tests were to be completed and forwarded to an instructor so that regular feedback and monitoring could be established regarding what was being absorbed from each student's independent and self-instructional study with the materials provided. Ten hours of tape-recorded lecture material also were provided each course participant. Each of these tapes was recorded by one of the original course lecturers, and was specially prepared by them to supplement the assigned text reading in ocular pharmacology, the associated hand-outs and the self-assessment and review tests.

A course outline and study schedule which covered approximately a six month period was provided with assignments for each week utilizing the texts, tapes and supplementary material. The dates on which the self-assessment and review quizzes were due to be sent back to each instructor were also noted. A few weeks' cushion was built into the self-study program prior to the clinical review day, the clinical laboratory, and the certification examination, to allow for illness or vacations.

During the beginning of the sixth month of the program a full (seven hour) day of review was scheduled to be held at the State College of Optometry. Attendance was mandatory. The principal instructors were present to overview the entire curriculum, highlight the most important and significant sections, answer questions of any type, and to help clarify misinterpretations or clear up confusion on any topic. From the beginning of the program the instructors made themselves available by phone, mail, or in person to help any of the participants in any way possible.

Within several weeks of the review day, a thirteen hour (two day) clinical laboratory session was scheduled which also was mandatory for all course participants. This demonstration clinical laboratory was exactly the same clinical laboratory experience which had been provided the participants in the original DPA course when it was initially presented in the traditional manner. Several weeks following the clinical laboratory, a two hour DPA certification examination was administered at the State College to the course participants. These examinations were never alike since several hundred model questions were available and alterations were constantly made to change either the wording of the questions or the answer choices. Statistical validity was maintained through the procedure of dropping questions from the scoring if it was apparent from the results that there

were gross misinterpretations of facts or language inconsistencies.

Comparing DPA Certification Test Results and Experiences

A passing score of 75% or higher of the valid scorable items on the sixty question multiple choice examination was necessary for certification. All policies and procedures which were used for test construction, administration and scoring when the DPA program was presented in the traditional manner were carried through for the independent self-study DPA program.

Three independent self-study DPA educational course programs have been completed thus far: one started in August 1985 and was completed in January 1986; another was started in December 1985 and completed in June 1986; and a third course program was initiated in October 1986 and completed in May 1987. Thirty-one out of the total of thirty-four participants in these programs had a passing score or higher on the DPA certification examination, which was comparable to the test results in the original program. Several participants who had illness or personal difficulties occur during the course of the educational program were encouraged to wait until they could rejoin and complete the next schedule sequence. These individuals used the extra time to complete the program at their own pace and also had additional time for review. In the traditional educational DPA program as originally presented, there was always a tremendous amount of anxiety and insecurity which developed when lectures were missed due to illness or personal crisis. Some participants became frustrated quickly under those circumstances and either dropped out of the program or lost motivation to keep up. Anyone who missed more than twenty-five percent of the lectures in the original program was asked to repeat the entire sequence before being eligible to sit for the DPA certification examination.

Many of the independent self-study DPA course participants indicated that they benefited from having audio-taped lectures available. This allowed each individual to listen and review the material as many times as he or she desired. Many individuals in the original program had found that their note taking ability, listening capability, and retentive skills had deteriorated considerably from when they were last used in their professional educational training some fifteen to twenty five years or more ago. In addition, the self-study course partici-

pants appreciated the partial self-instructional programmed approach and the self-assessment material which allowed them to develop an organized outline of important concepts and details concerning the related neuro-physiology, the general and ocular pharmacology, and the clinical use and applications of diagnostic pharmaceutical agents.

Summary and Implications

State boards of optometry and associated regulatory agencies, optometric schools and colleges, and other optometric organizations which currently are involved in meeting challenges in the areas of primary care and therapeutic management of ocular disorders, and maintaining continuing clinical competency and possible optometric specialization, should maintain an openness towards non-traditional educational methods. On a practical level, when an extensive educational program such as

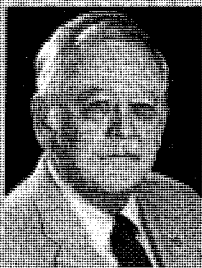
was involved with the DPA certification has been presented over a state or region in one or more locations for a long period of time, there obviously will come a time when it is not feasible or possible to form a class which can meet for lectures in the traditional manner. As additional time passes, small groups of individuals, who for various reasons could not or would not make themselves available when the group educational experience was given, begin to request the right to be educated and to possess the same professional privileges as their licensed colleagues.

Some of these practitioners who may have been out of the state serving professionally in the armed services or in the public health corps when the original program was offered, have an obvious justification for this claim of educational rights. Other practitioners who procrastinated or who didn't originally want to get involved also believe they

have equal rights and needs.

The intelligent use of an independent self-study type educational program involving general knowledge, the scientific basis, and the applied clinical use of diagnostic pharmaceutical agents was found to be both possible and practical. Combining audio-taped lectures, programmed instructional material, and self-assessment and review tests, together with careful monitoring and feedback concerning each course participant's progress by dedicated and involved faculty, can produce an educational experience equivalent to one created under more traditional means. The introduction of video-taping and the possible future use of video disc recordings for educational purposes also can extend and help develop various options for providing quality continuing education experiences to meet future challenges for maintaining and certifying continuing and specialty competency in the optometric profession. □

IN MEMORIAM



ASCO extends its sympathy to the family of Dr. Frank Brazelton who died recently after a long and distinguished career in optometry. At the time of his death, Dr. Brazelton was president of the American

Academy of Optometry. Dr. Brazelton was professor at the Southern California College of Optometry where he served on numerous committees. Through the years he served in several appointments for the Association of Schools and Colleges of Optometry. He was involved in various capacities at all levels of the American Optometric Association including the national association, the state association and two local affiliate societies. Dr. Brazelton was known worldwide for his expertise in low vision care and was the developer and director of the first optometric low vision center on the west coast.

ASCO CALENDAR 1988 - 1989

August 25-28	AOA Fall Meeting Monterey, CA
September 16-18	Tripartite Meeting Key West, FL
October 7-9	ASCO Board Meeting Berkeley, CA
December 8-12	AAO Columbus, OH
January 4-7	AOSA Congress Toronto, Canada
January 6-8	Council on Student Affairs Toronto, Canada
January 6-8	AOA Spring Meeting Florida
March 17-19	ASCO Board Meeting Houston, TX
June 24-26 Tentative	ASCO Annual Meeting New York
June 24-29	AOA Congress New York

The Accelerated O.D. Program: Graduates of the First Ten Years

Depew M. Chauncey, Ph.D., O.D.

Abstract

A survey was taken of the first ten classes to have graduated from the accelerated doctor of optometry program at The New England College of Optometry. Graduates were questioned regarding current career modes, experience with the National Board of Examiners in Optometry (NBEO), state licensure examinations, and experience with the New England program relative to its strengths and weaknesses. A response rate greater than 90% was achieved.

Introduction

The first class of the accelerated program enrolled in the summer of 1972. The event was the culmination of many hours of effort by Drs. William R. Baldwin and John H. Carter at The New England College of Optometry (NEWENCO). In the early years, the program was guided and developed under the supervision of Dr. Norman E. Wallis, the first director of the program. Since the first class, a new group of students has assembled each year at NEWENCO to begin the program.

The primary goal of the accelerated program is to provide a pathway into optometry and optometric education for people who have credentials in scientific research and education. A secondary, but important effect, is to bring into the profession individuals who have very diverse areas of interest and expertise beyond the field of optometry.

Background

Admission to the program requires a Ph.D. or equivalent degree in one of the sciences. Selection and admission of applicants is the responsibility of the accelerated program committee which is composed of six faculty members and is chaired by the program director. Each applicant must provide OAT scores, complete transcripts, letters of recommendation and a current curriculum vitae. Upon completion of the application, the candidate is invited to the college for an extensive personal interview. Following the interview, the final decision regarding admission is made by the committee.

Applicants to the program are a diverse group. Most have several years of professional experience. The average age is thirty-seven, but the ages range from twenty-five to fifty-four years old. The majority of the graduates are male, but a larger number of women have been enrolling in the last three to five years. The students come to optometry from a variety of disciplines, the most common being physics, biology, psychology, and biochemistry, but a few graduates have been dentists, veterinarians, and physicians. Over seventy-five percent of the applications have come from individuals involved in education and/or basic research.

The most common reasons applicants give for deciding to redirect their career toward optometry are:

- the frustrations experienced in obtaining adequate research support and/or an appropriate tenure track teaching position within their field; and/or

- the desire to have more self-determination and geographical flexibility.

The Program

The program runs for twenty-four consecutive months on the quarter system. There are only two significant vacations during each year: a two-week break in early July and a seven-to-ten-day break around Christmas time. The accelerated program is eight quarters duration compared to twelve quarters for the four-year program.

Students in the accelerated and four-year programs receive very similar didactic and clinical schedules.¹ Each group is evaluated in the same manner: the didactic courses by the traditional letter grade system, and the clinical courses by an honors, pass, fail system.

The didactic program is presented in approximately five and one-half quarters. By taking advantage of the group's prior experience in self-study and by condensing a portion of the didactic material, the students in the accelerated program receive almost the same didactic program as those in the four-year program. The only omissions are a few public health and pediatrics courses.

The clinical programs also are very similar. The clinical experience begins in the fall quarter of the first year at the same clinic attended by the second and third year students in the four-year program.

In the fall and spring of the second year (sixth and seventh quarters), the students are assigned to full-time eye care, as are the fourth year students. During their last quarter of residence, students in the accelerated program

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have a split assignment: one-half clinic and one-half classroom assignments. At this point, the two programs diverge. In the final quarter, the students in the four-year program are assigned to full-time clinic activities. This present dissimilarity is recent; it began in Academic Year 1986-87 when the college initiated the all-clinical fourth year for students in the four-year program. Prior to this curriculum change, the clinical experiences were essentially identical. The new Program provides more clinical experience for students in each program; however, the increase in clinical experience for the four-year program is greater than that for the accelerated program.

Method

A mail survey was conducted of the members of the first ten graduating classes (1972-1982) of the accelerated program. Questionnaires were mailed to the seventy-seven graduates and fifty-five responses (71%) were received. Of the non-respondents, an additional twenty graduates were contacted by telephone. The final direct contact level was 97%. Information regarding the remaining 3% was obtained from indirect sources.

The data in Tables 2 and 3 was taken from the information received in the returned questionnaires. Data reported in Tables 1, 4, and 5 was gathered from all the available sources, both direct and indirect.

Results

Eighty-five students enrolled in the first ten classes; of these, seventy-seven (91%) graduated. Of those students who failed to complete the program, the majority dropped out for personal reasons.¹ Rarely have students been forced out of the program for academic reasons.

Of the respondents, all are currently in a career related to optometry except two who returned to their original career fields. The majority are involved in patient care. A small number are employed in full-time vision research, and over 22% of the graduates are optometric educators (Table 1).

Historically, the graduates of the accelerated program have performed well on the NBEO examination. Eighty percent of the respondents successfully completed the examination prior to graduation and 8% following graduation.

Of the respondents who did not pass the examination, one never took the examination and currently practices in a state where it was not required; two

never completed the examination (Table 2).

When asked to describe the strengths and weaknesses of the program, the responses were surprising in that they were almost unanimous. The areas viewed as the strongest were ocular health assessment and general examination procedures, while the areas of greatest weakness were practice management and binocular vision.

The respondents have performed well on state licensure examinations. Li-

censes have been granted in thirty states, including Puerto Rico (Table 3).

There are only two states where individuals have taken the examination, but have not been successful in obtaining a license (Connecticut and Kentucky). The State of Tennessee has refused one graduate the privilege of obtaining a license because the program is not of four years duration. The most popular states for respondents to take license examinations are Massachusetts (60%), California (25%), and New York (13%).

TABLE 1
Careers: Post-Graduation

	Number	%
Optometric Patient Care		
Solo Practice	31	40
Group	11	14
HMO	2	3
Corporate	7	9
Optometric Education	17	22
Research (Full-time)	3	4
Ophthalmology	1	1
Osteopathy	1	1
Veterans Administration	1	1
Contact Lens Manufacturing	1	1
Profession Unrelated to Optometry	2	3
	77	99
Total Number of Graduates	77	

TABLE 2
NBEO Results

Passed Prior to Graduation	68%
Passed Post Graduation	8%
Did Not Complete Examination	3%
Did Not Take Examination	1%
Total	100%

TABLE 3
State Licenses Issued

Alabama	Michigan	Oregon
Arizona	Minnesota	Pennsylvania
California	Nebraska	Puerto Rico
Colorado	Nevada	Rhode Island
Florida	New Hampshire	South Carolina
Illinois	New Jersey	Texas
Iowa	New Mexico	Vermont
Kansas	New York	Virginia
Maine	Ohio	Washington
Massachusetts	Oklahoma	Wisconsin

In reviewing the data, there is little indication that the graduates tend to return to the area where they were located prior to matriculation into the optometry program. The most popular geographic locations are New England and the West Coast (Table 4).

Discussion

The motive for conducting this study was the belief that the value and effectiveness of an educational program should be judged by the success of its graduates. The primary goal of the program was to provide a source for the schools and colleges of optometry of educators with advanced expertise in scientific research. By these standards, the program should be considered a success. Experience at this institution and communications with faculty and administrators of other optometry schools confirm the original premise that graduates of this program will become valuable additions to the faculties.

They arrive as experts in their fields of graduate study such as anatomy, visual science, pharmacology, vision science, pathology, or optics. Many have had teaching experience at the college level prior to receipt of the optometry degree, and therefore begin their careers in optometric education as experienced educators and/or administrators. With this experience comes a maturity often not found in persons completing a standard four-year program or a residency/fellowship. Graduates of this program also are important contributors to the institutional research programs. Faculty trained at the doctoral level are essential to a research program that is strong in the areas of basic science. Experience at this level is crucial if the research program is to make meaningful contributions of new knowledge. Without faculty with credentials of this type, it is very difficult for institutions to obtain major research grants such as those provided by the National Institute of

Health, the National Science Foundation, or the military.

Graduates of the program are represented throughout the profession, several in areas that have a considerable impact on optometry as a profession (Table 5). Alumni of the program are working at several centers of optometric education: one is chief of optometric services at the Veterans Administration, Washington, D.C.; one is the head of the school of optometry, University of Benin, Benin City, Nigeria; two are engaged in full-time research at Harvard Medical School; one is a faculty member of a school of osteopathic medicine; and one is a top level manager in a national contact lens manufacturing company. As the results indicate, the graduates of the accelerated doctor of optometry program are assuming responsible positions within the profession. They will continue to exert considerable influence on the future of optometry, for within the confines of optometric education they will increasingly influence the attitudes, knowledge and skills of graduating clinicians throughout the country.

Current plans at the college do not anticipate major changes in the program. The class size is expected to remain at the current level of six to ten students. The total curriculum is under constant evaluation and studies are underway to expand the clinical experience to equal that of the four-year program and to strengthen the indicated weak areas within the program.

When questioned, respondents to the survey reported overwhelmingly that the program has provided them with the knowledge and skills to practice their chosen profession. Likewise, there was a strong feeling expressed that the respondents were satisfied with the decision to redirect their careers and they would recommend the Accelerated Program and optometry to a colleague or friend interested in a career change.

As the founders of the program envisioned, many of the graduates are entering the fields of optometric education and research. Therefore, the original goal is being satisfied. The graduates voice strong support for the program and the optometric profession. The New England College of Optometry is pleased with all aspects of the program and has provided strong support. In this context, it is difficult to conclude other than that the program is a success. □

TABLE 4

Geographical Distribution

By State		By Area	
Massachusetts	24%	New England	27%
California	11%	East	17%
New York	9%	South	13%
Illinois	8%	Midwest	6%
Texas	5%	West	15%
Virginia	5%	Pacific Coast	21%
Pennsylvania	4%	Canada, P.R.	1%
Canada	4%		100%
Florida	2%		
Oregon	2%		
Miscellaneous*	24%		
Total	100%		

*States with a single graduate.

TABLE 5

Faculty Members*

The New England College of Optometry	8
Northeastern State University	3
Southern California College of Optometry	2
University of Houston	1
Illinois College of Optometry	1
Pennsylvania College of Optometry	1
Pacific University	1
University of Benin, Benin City, Nigeria	1
Inter-American University	1

*Schools and Colleges of Optometry

References

1. Pease PL. The accelerated O.D. program: the two-year program after ten years. *Journal of Optometric Educ* 1983 Spring; 8(4):15-19.

Deans in the Health Professions: A Comparison of Degrees

Jack E. Terry, O.D., M.S.

Introduction

As the chief administrative officer of a health professional school or college, the dean must be qualified by education and experience to provide leadership in scientific, academic and research activities and in the care of patients.¹ The functioning of the dean will then relate directly and indirectly to the goals of the academic institution. Although the obligations and activities of the schools of the health professions (e.g. optometry, medicine, osteopathy, dentistry, and podiatry) obviously are diverse, their principal charge is uniformly to provide their students with the opportunities and resources to acquire a solid, complete education in the clinical practice of their particular health specialty. The other inherent responsibilities of the schools only serve to reinforce this primary focus. In addition, the building blocks to develop lifelong habits of scholarly reasoning and competent patient care must be promoted by the dean and the faculty. This is imperative in all of the health professions because their respective students are preparing to enter a marketplace that is rapidly changing due to the ever-increasing roles of high technology, heightened competition and rising health care costs.

The many deans of the health professions schools strive to meet the common educational goals in a dynamic, energetic manner. The purpose of this

survey is to compare and contrast the professional and graduate level degrees of the deans of the health professions. This comparison may reveal whether there exist any trends which may lend insight into each of the professions' educational systems and their perceptions of their primary educational goals.

Method

A survey of all of the major academic health care institutions was undertaken. To contain the scope of the survey, it was decided to include only schools in the United States. A list of all of the current deans of the schools and colleges of each discipline was requested from the appropriate sources. In an effort to maintain the same level of comparison, both inter- and intraprofessionally, the survey included only the highest-ranking dean of each institution (e.g. dean of academic affairs), but not the presidents of the private schools. The review was relatively simple for the smaller health professions (podiatry, osteopathy, and optometry) and more difficult for medicine and dentistry.

The American Podiatric Medical Association forwarded the necessary survey information for each of its seven podiatric institutions.² At the time of the request for the data, care was taken to emphasize the importance of an accurate delineation of the degree or degrees that the dean had earned (e.g. D.P.M., M.S., Ph.D., M.P.H., etc.). This written documentation was then confirmed by a telephone call to the dean's office of each institution.

The Council on Optometric Education of the American Optometric Association provided a current listing of accredited, professional, optometric

degree programs.³ Since this list contained the name of the dean at the state-supported institutions and the president of the private schools, personal communication with this latter group accurately verified current deans and degrees.

The 1986 Annual Statistical Report of the American Association of Colleges of Osteopathic Medicine provided both the names and telephone numbers of the schools and colleges of osteopathy.⁴ In addition, a recently revised listing of the "Presidents and Deans — Colleges of Osteopathic Medicine" was provided by the same organization.⁵ This written information again was verified by personal communication with each institution.

Several sources were used to verify the degrees of the deans of the dental schools. The American Dental Association's Council on Dental Education, in cooperation with The American Association of Dental Schools, supplied a copy of its 1986-87 Annual Report.⁶ Table 4 listed the dental schools and their deans. However, instead of listing the deans by degree(s), they all had the title "Dr." placed before their name. Mr. Czarnecki of the CDE kindly supplied their degrees. This information was further corroborated by an individual at the West Virginia School of Dentistry, who provided a list which included each dean and his/her degree(s) for each school.⁷ In five cases, the degree(s) had to be finally documented by telephoning the dental institution.

Even though the number of deans of schools and colleges of medicine is significantly higher, the degrees were somewhat easier to establish. A special edition of the *Journal of the American*

Dr. Terry is chief of optometric specialties and director of hospital based optometric residencies at the Huntington, West Virginia, Veterans Administration Medical Center. He is also clinical assistant professor at the Indiana University School of Optometry and adjunct assistant professor at the Pennsylvania School of Optometry.

Medical Association (JAMA) is published each September in which the current dean at each school is listed.⁸ In addition, the Association of American Medical Colleges (AAMC) publishes a listing of the medical schools and their deans.⁹ The information was further verified by the current "Dean, Medical School" mailing list that the Marshall University School of Medicine supplied, which lists each dean's degrees. The final check of the medical school deans was provided by the office of Undergraduate Medical Education of the American Medical Association. This office was able to provide the most recent changes in deans across the country.

Results

The results of this survey on the degrees of the deans of the various health professional schools are presented in Table 1. This prevalence comparison table was divided into the various health care professions (i.e. osteopathy, medicine, dentistry, podiatry, and optometry). Each of these professions was divided into categories by the broad

type of degrees that their deans possessed (sole professional degree, sole Ph.D., combined master's, combined Ph.D., and others). Figure 1 depicts a portion of this data. For each profession, the solid bar represents the percentage of deans that possesses sole professional degrees (e.g. O.D.), while the lighter bar reveals the percentage that has both the professional degree and a Ph.D. (Combined Ph.D.).

All of the professional schools of osteopathy are headed by deans possessing only the D.O. degree. None had earned a M.S. or Ph.D.

The survey of medical school deans included a total of 125. There were two colleges (University of Illinois and University of Kansas) that had branch campuses with associate deans. In these instances, only the principal dean of the main campus was included in the survey. In medicine, 113 of the 125 deans had only professional degrees (90.4%), two (1.6%) had a Ph.D. degree without a professional degree, nine of the 125 (7.2%) possessed a combined M.D./Ph.D., and there was one dean (0.8%) whose degrees (M.B., B.S.) were classi-

fied in the "Others" category.

The academic leadership of dentistry revealed that 15 of the 59 deans (25.4%) had only professional degrees while one (1.7%) had a Ph.D. without a professional degree in dentistry. Ten of the 59 (16.9%) dental school deans had both D.D.S. and Ph.D. degrees, while the majority (30 of 59, or 50.9%) had combined dental and master's degrees. It is relevant to note that the vast majority of dental school deans with master's degrees were in a clinical science specialty such as endodontics, oral pathology, oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics, and dental public health. Three of the deans had degrees categorized as "Others." These included a B.D.S./Ph.D., as well as an F.E., and an F.E./Ph.D.

The survey of optometry school deans showed that one of the fifteen (6.7%) in the study had only the O.D. degree, while there was also only one (6.7%) with a Ph.D. but without the professional degree. Five of fifteen deans (33%) had combined O.D. and master's level degrees (M.S., M.P.H., or M.P.A.). The largest group of deans in optometry was found to have combined O.D. and Ph.D. degrees (7 of 15, or 46.7%). There was only one dean characterized in the "Others" category (O.D., M.D.).

Four of the seven podiatry deans were found to have sole professional degrees of D.P.M., while two of the seven (28.6%) had sole Ph.D. degrees without the professional degree. One dean (14.3%) of a college of podiatry had combined professional/master's degrees (i.e. D.P.M., M.P.H.).

Table 2 further divides the deans into two categories. The first column includes the percentage of deans of each profession who possessed a sole professional degree or a professional degree and a master's level degree. The second column includes the percentage of deans who had either a sole Ph.D. or who had attained a combined professional degree and Ph.D. This data is diagrammed in Figure 2.

Discussion

As diverse as the health professional deans were by nature of their educational background, interests and goals, a number of similarities existed.

Individuals sporting only a Ph.D., without an accompanying professional degree, were very infrequently chosen as dean. Overall, only six of 221 professional school deans (2.7%) had just a Ph.D. This finding is not unexpected

TABLE 1

Prevalence Comparison of U.S. Professional School Deans

	Sole Professional Degree	Sole Ph.D.	Combined Masters	Combined Ph.D.	Others
Osteopathy	100.0%				
Medicine	90.4%	1.6%		7.2%	0.8%
Dentistry	25.4%	1.7%	50.9%	16.9%	5.1%
Podiatry	57.1%	28.6%	14.3%		
Optometry	6.7%	6.7%	33.3%	46.7%	6.7%
OVERALL	67.0%	2.7%	16.3%	11.8%	1.8%

TABLE 2

Prevalence Comparison of U.S. Professional School Deans

	Sole Professional/ Combined Masters	Sole Ph.D./ Combined Ph.D.
Osteopathy	100.0%	
Medicine	90.4%	8.8%
Dentistry	76.3%	18.6%
Podiatry	71.4%	28.6%
Optometry	40.0%	53.4%
OVERALL	63.3%	13.6%

when one considers the type of clinical background, experience and expertise that a dean should possess in order to bring the necessary excellence to a health professions education. Obviously, the number of individuals who can offer this type of leadership to a professional school without a corresponding professional background must be relatively small. Therefore, the most populated category of deans in this study included those who had attained simply a professional degree (67.0%). Medicine and osteopathy were headed by the highest percentages (90.4 and 100%, respectively) of sole professional degree deans, while optometry had the fewest (6.7%).

The second largest category (16.3%) of professional school deans possessed both a professional degree and master's level degree. This phenomenon was particularly noteworthy in dentistry, where 50.9% had both a D.D.S. and M.S. As was discussed earlier in this report, these degrees were largely earned in post-graduate clinical science education. Optometry had the second-largest percentage of combined master's level deans (33.3%). Podiatry had 14.3% of combined master's level deans while medicine and osteopathy had none.

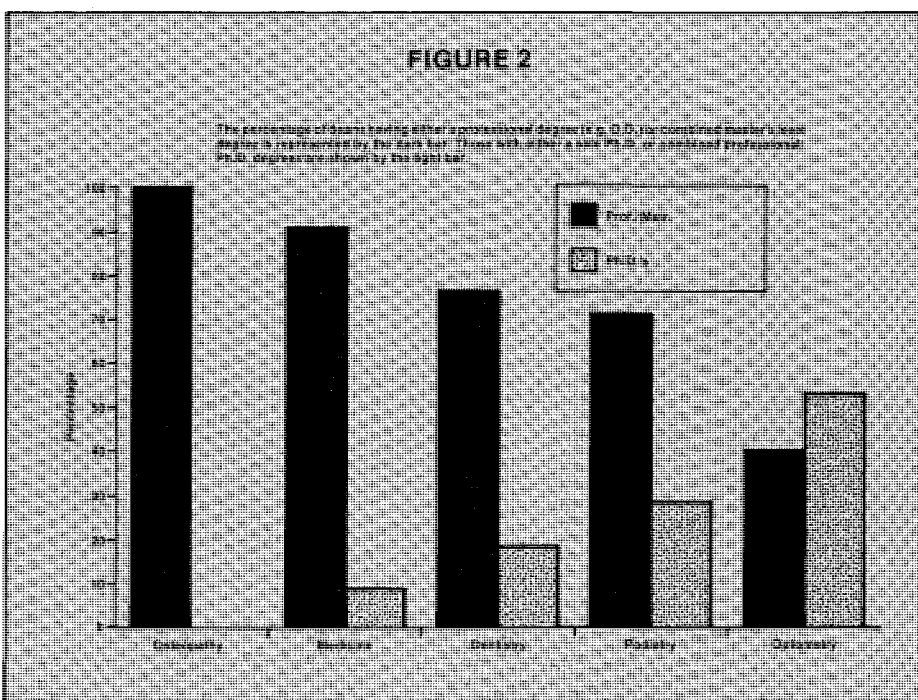
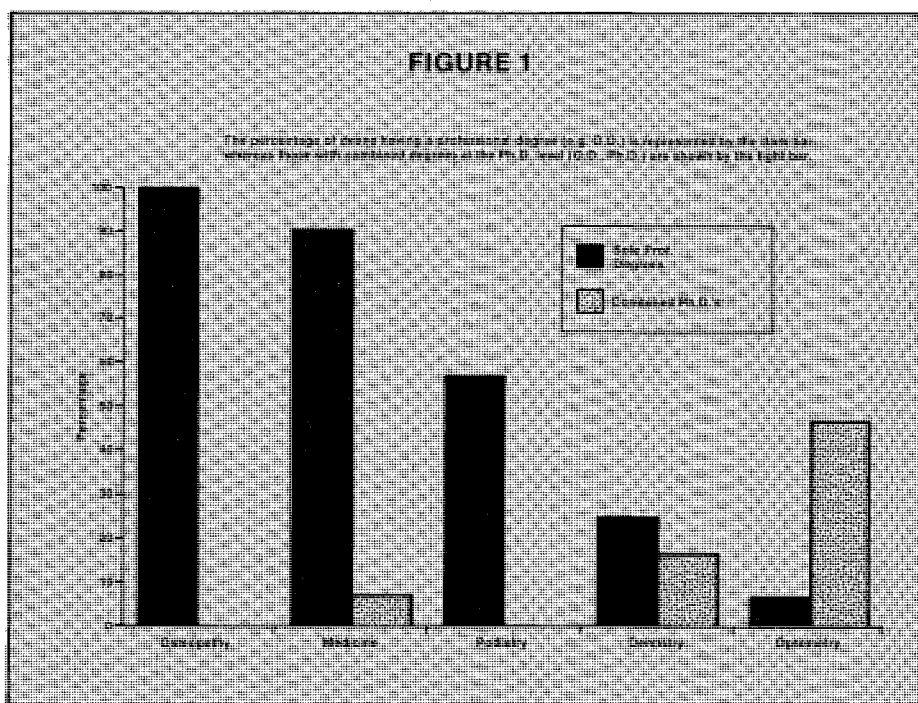
One of the most striking differences among the professions was found in the category of the deans who possessed both a professional degree and a Ph.D. Overall, only 11.8% of all professional school deans have both a professional degree and Ph.D. In medicine and dentistry, the percentage is relatively low (7.2 and 16.9%, respectively), whereas the results of the survey found 46.7% of optometry school deans possessing both degrees.

Conclusion

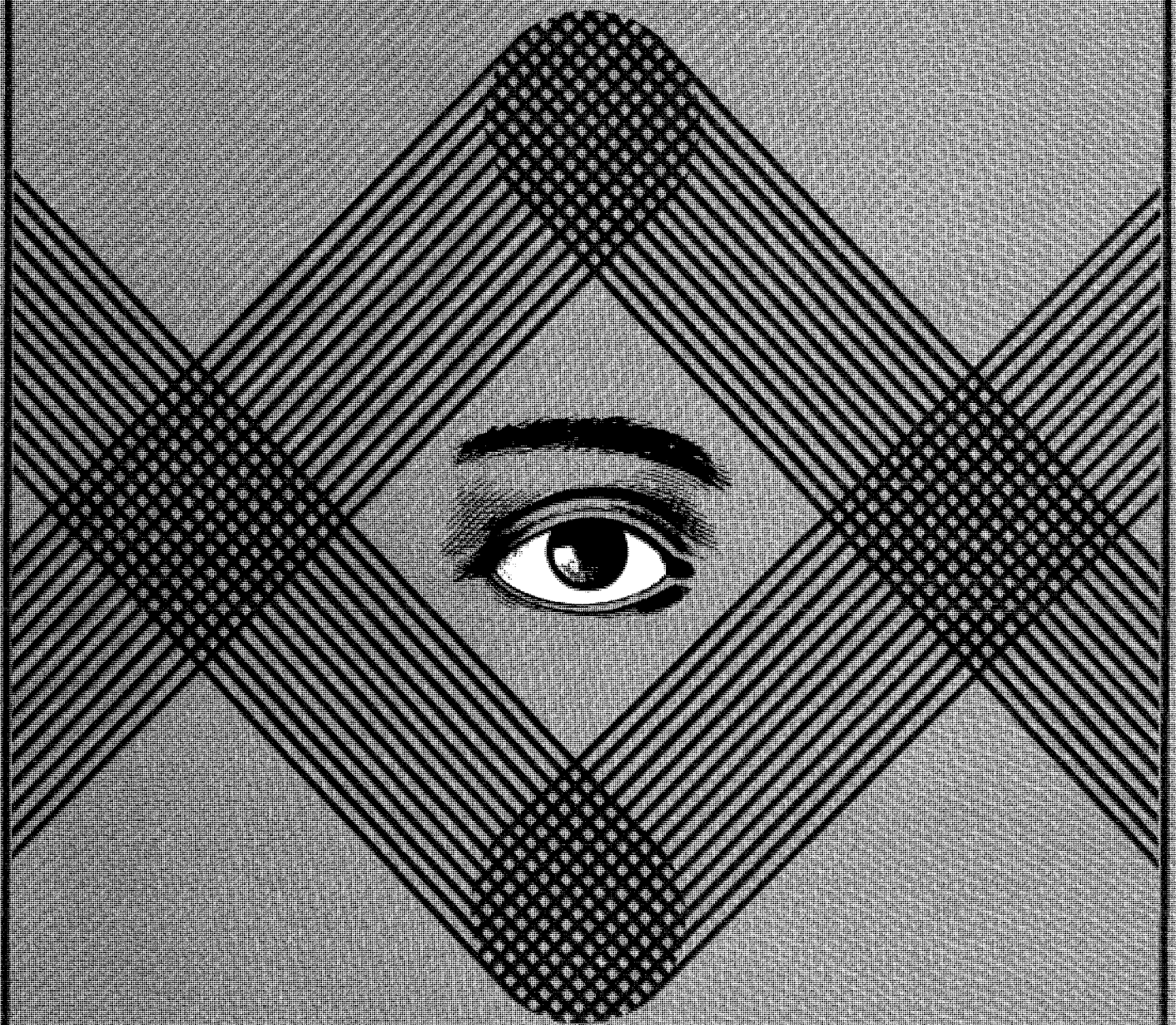
Overall, the vast majority of professional school deans possessed either a single professional degree (67.0%) or combined professional/master's level degrees (83.3%). Only 2.7% had just a Ph.D. while 11.8% possessed both a combined professional degree and Ph.D. Optometry had the largest percentage of combined Ph.D.'s (46.7%) and the lowest percent of single professional degree (6.7%) deans compared to the professions surveyed. Osteopathy had the highest percent (100%) of single professional degree deans, and with podiatry, had the lowest percent (0.0%) of combined Ph.D. degree deans. □

References

1. Egan RL. Functions and structure of a medical school. *J. Am Medical Assoc* 1985; 254(12): 1560.
2. Council on Podiatric Medical Education—Sixty-Seventh Annual Report, 1986. *J Am Pod Med Assoc* 1987; 77(1):51-54.
3. American Optometric Association Council on Optometric Education List of Accredited Professional Optometric Degree Programs August 1986.
4. Zobel DC. Annual Statistical Report 1986; Am Assoc Colleges Osteo Med. Rockville, Md.
5. Presidents and Deans Colleges of Osteopathic Medicine, Rev 1/87. Am Assoc Colleges Osteo Med. Rockville, Md.
6. Annual Report on Dental Education, 1986/87. Published by the Division of Educational Measurement, Am Dental Assoc in cooperation with Am Assoc Dental Schools. Chicago: Am Dental Assoc.
7. McCutcheon, WR. Dean's List. West Virginia University School of Dentistry. Morgantown, 1987.
8. Medical Schools in the United States, Appendix II. *J Am Med Assoc* 1986; 256(12):1621-1629.
9. Association of American Medical Colleges (AAMC), Manual of Schools and Colleges 1986-87; Washington.



ASCO's ANNUAL REPORT



1987-88

Report of the President

**Annual Meeting
June 25-27, 1988
Chicago, Illinois**



This past year can best be described as a year of transition for ASCO. It was marked by the leadership and direction of new personnel in the positions of executive director, president, and JOE editor; appointment of a Standing Committee on Academic Affairs; and the implementation of programming priorities identified by our strategic planning process primarily in the area of student affairs.

Executive Director

Mr. Robert Boerner was hired as ASCO's new executive director as the result of a national search which produced many outstanding candidates. Mr. Boerner has done an outstanding job during his first year and is developing into a very positive force in ASCO programming and relations with outside agencies, organizations, and publics. The significant assistance of Executive Director Emeritus Lee Smith during the early transition and throughout the year should be noted and is appreciated.

Strategic Plan

The first year of programming identified by the significant strategic planning process conducted under Dr. Ed Johnston's leadership is progressing and is involving people from all institutions. By design, major activity has been conducted by the Council on Student Affairs under the able chairmanship of Dr. David Corliss. Activity was initiated during the year to reestablish the priority initiatives identified in the strategic plan and address priority projects in other areas. This led to a decision to appoint a Standing Committee on Academic Affairs.

Liaison Activities

A very important function of ASCO is the maintenance of liaison, contact, and dialogue with other organizations and groups within optometry, education, the other health professions, and other publics. Thanks to the participation of many within ASCO this activity continues at an increasing pace. This activity included meetings and dialogue with the AOA, IAB, NBEO, AOSA, COVD, AOF, the Auxiliary to the AOA, FASHP, numerous state boards, and various governmental agencies.

Journal of Optometric Education

The JOE continues to grow in stature and quality under the able direction of Editor David Heath and Managing Editor Pat O'Rourke. Significant appreciation goes to David, Pat, and all the contributors for making JOE a significant and visible organ for optometry and optometric education.

Grants and Contracts

Activity continues on two very significant grants awarded to ASCO. The Migrant Health Grant continues to grow and the results have been well received by the granting agency. The Administration on Aging Grant to develop a geriatric curriculum model and train faculty in this area continues and is making progress with three training seminars scheduled in the near future.

Miscellaneous

Other activity has included an ASCO-appointed task force to study the basic science portion of the National Board Exam, work with the VA on the residency stipend issue, completion of a study of student indebtedness for the Health Resources and Services Administration, and the publication of a curriculum model for practice management in cooperation with the AOA.

Budget/Financial

Of significant note is that the combination of the phased-in dues increase approved two years ago and the sound fiscal management of the central office has allowed us to expand our programming activities as described while at the same time embarking on a conservative plan to enhance our reserves and maintain a healthy fiscal status.

Summary

It has been my pleasure and privilege to serve as your president during this exciting and challenging year of transition, and I look forward to seeing continuing activity and much progress during the coming year.

Respectfully submitted,
Jack W. Bennett, O.D.
President

National Activities

Legislation and Appropriations

Titles VII and VIII of the Public Health Service Act of 1985, P.L. 99-129, are in the process of being renewed. Title VII includes the student financial aid and Health Careers Opportunity Programs. Through the Federation of Associations of Schools of the Health Professions (FASHP), ASCO is seeking improved provisions and increased funding levels for these programs. Senator Edward Kennedy (D-MA) has introduced S. 2229 which is the most favorable piece of renewal legislation. The companion House bill is H.R. 4983. At this writing both bills are in the committee markup process. Neither has been considered by the full Senate or House. Should the renewal not pass for any reason, we would operate on a continuing resolution until next year when the renewal process would begin again.

The deferment of repayment of guaranteed student loans during residency is an issue that continues to concern the schools and FASHP. With the aid of Senator Claiborne Pell, chairman of the Senate Subcommittee on Education, Arts and Humanities, H.R. 4639 was signed into law on July 18, 1988. This bill eliminates the restriction on GSL deferments to loans made on or after July 1, 1987. Thus, GSL's are eligible to be deferred regardless of when they were made, but of course are subject to the

other requirements to qualify for deferment.

The disparity between Annual Veterans Administration (VA) optometry residency stipends of \$12,700 and schools' stipends which average \$16,700 including benefits remains a problem. At last year's Annual Meeting in Orlando, a motion was passed that the VA stipend levels should be raised to correspond with those paid by the schools and that optometry should be moved from the Division of Nursing and Associated Health to the Division of Dentistry and Medicine. In February 1988, ASCO's executive director met with Dr. John Gronvall, director of medical services for the VA. Dr. Gronvall promised an internal review of the stipend levels, indicating that comparable school stipends were one criteria for the determination of VA stipends. Current indications are that the VA is considering an increase in the stipend level to \$16,774, to be accompanied by a reduction of 12 VA residency positions in optometry (from 53 to 41). In a subsequent meeting with Dr. Gronvall, Dr. Norman Haffner presented the ASCO resolution on VA residencies passed in Chicago and made the following points: VA optometry residencies should be increased to meet rising demands for care, optometry residents should be paid what dental residents are paid within the VA with identical fringe benefits, and optometry residencies should be administered as dental residents are administered within the VA.

Migrant Worker Vision Care

The six migrant health vision demonstration projects for 1987-1988 have either concluded or are on schedule. ASCO has had programs functioning during the year at:

Site: Traverse City, Michigan
School Sponsor: Ferris State University
Director: Dr. J. Randall Vance

Site: Cidra, Puerto Rico
School Sponsor: Inter-American University

Director: Dr. Osazuwa Okundaye

Site: Patillas, Puerto Rico
School Sponsor: Inter-American University

Director: Dr. Osazuwa Okundaye

Site: Fort Lupton, Colorado
School Sponsor: Pacific University
Director: Dr. John R. Roggenkamp

Site: Laredo, Texas
School Sponsor: University of Houston
Director: Dr. Harris Nussenblatt

Site: Hammonton, New Jersey
School Sponsor: Pennsylvania College of Optometry

Director: Dr. Satya Verma

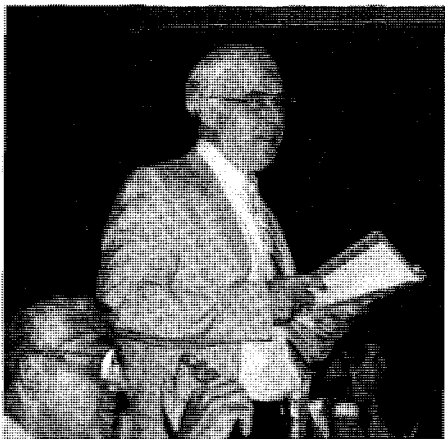
A manual summarizing ASCO's experience with 19 such projects to date is in final draft form. It will provide the basis for a meeting in the fall of 1988 to determine how to institutionalize vision care at the migrant health centers. Another manual intended to describe to the regular personnel at the migrant health centers the process of conducting a vision screening has been completed at Pacific University. Application has been made for six new vision demonstration projects in 1988-1989.

ASCO Student Endowment Fund

The ASCO Student Endowment fund provided over \$12,000 to the 16 U.S. optometry schools for aid to students who need financial assistance. Most of these funds are used for individual scholarships or emergency loans.

Student Indebtedness

A study of indebtedness of optometry students was recently completed by Dr. Lawrence McClure of the Pennsylvania College of Optometry on behalf of the Council on Student Affairs under a \$11,658 contract from the Health Resources and Services Administration. Average indebtedness upon graduation of students with debts (86 percent of the class) was \$32,118 for the class of 1986 and \$33,563 for the class of 1987. Much additional information from this study should soon be made available.



ASCO secretary-treasurer Dr. Bradford W. Wild presents his report at ASCO's annual meeting.

National Activities

Sustaining Member Section

The number of sustaining members has increased by one making the total twenty-three. This year the sustaining members were surveyed to determine which of the ASCO membership privileges were most important to them. They were also for the first time offered the opportunity attend Board of Directors meetings to explain new developments at their respective companies. Two sustaining member companies spoke to ASCO's Board at the meeting in Chicago. Other companies are scheduled for future meetings.

Faculty Development

The revision of the Annual Survey is in process. The task forces appointed to review the sections on finances, students and faculty and the new section on curriculum finished their reports in May. The Association of Vision Science Librarians provided their recommendations on the library section in January. The reports are to be reviewed by our consultant, Dr. Meredith Gonyea, President of the Center for Studies in Health Policies, Inc. and a draft revised annual survey sent to the deans and presidents for final review. Final approval of the revised annual survey should occur at the October 1988 ASCO Board of Directors Meeting.

Board Meetings

In addition to the Annual meeting in Orlando, Florida, Board of Director's meetings were held this year at The Ohio State University in Columbus, Ohio, in October 1987 and at Indiana University in Bloomington, Indiana, in March 1988. ASCO is grateful to Drs. Hebbard and Heath for the excellent

arrangements for the board meetings and entertainment at Ohio and Indiana respectively.

The list of affiliate members this year was expanded to include the University

of Benin, Benin, Nigeria. Other affiliate members are the Elite School, Madras, India; the La Salle School, Bogota, Columbia; and the Lozzodi Codose, Verona, Italy.



Getting acquainted are ASCO president Jack W. Bennett, ASCO executive director Robert J. Boerner and luncheon speaker Dr. Nancy Newton.



Chatting at a meeting break are Dr. Melvin D. Wolfberg, president of the Pennsylvania College of Optometry; Dr. Denise DeSylvia, Ferris State University; Dr. Douglas Poorman, Southern College of Optometry; Dr. Barry Barresi and Dr. Leonard Werner, State University of New York State College of Optometry.

National Activities

Administration on Aging Grant

The activities related to the grant received by ASCO from the Administration on Aging in September 1987 are proceeding on schedule. A seven member Advisory Committee has been appointed and has held two meetings. The comprehensive bibliography of books, periodicals and other printed materials has been completed. Three workshops for faculty have been scheduled in 1988 to introduce the newly developed gerontology materials: at SCCO September 30 to October 2, at PCO October 21 to 23 and at UAB November 11 to 13. Grant activities will conclude January 31, 1989. Appreciation is due to Drs. Gary Mancil (UAB), Denise DeSylvia (FSU), and Sheree Aston (PCO) for their contributions to this grant activity.



Above: Dr. Nancy Newton addresses ASCO's annual meeting luncheon guests. Upper right: ASCO president Dr. Jack W. Bennett presents award to Dr. Fred W. Hebbard, retiring as dean at The Ohio State University College of Optometry. Right: Dr. Gordon Heath, retiring as dean at Indiana University School of Optometry.

Indexing of Vision Literature

Expansion of the indexing of vision literature at the National Library of Medicine (NLM) was discussed at a meeting at the NLM in February 1988 which included Mr. Sheldon Kotzin, Chief of Bibliographic Services Division of NLM, Mrs. Margaret Lewis of SUNY, Ms. Marita Krivda of PCO, and Mr. Robert Boerner of ASCO. At a subsequent meeting at NLM in May 1988 Mr. Kotzin indicated that all the recommendations made by Mrs. Lewis and Ms. Krivda had been accepted. Technical advice and support were provided by the Association of Visual Science Librarians to Mr. Boerner at their meeting in December 1987.



Interprofessional Activities

NAAHP Meetings

Two national meetings of the National Association of Advisors for the Health Professions (NAAHP) in July 1987 in Charleston, South Carolina, and in April 1988 in Washington, D.C., were attended by ASCO representatives. The NAAHP Board of Directors was informed of ASCO's expectations regarding the exposure of optometry on the official program of their next national meeting in San Diego, California, in 1990 and at their intervening regional meetings.

Tripartite, AOA Meetings

The annual tripartite meeting of ASCO, the International Association of Boards of Examiners in Optometry (IAB) and the National Board of Examiners in Optometry (NBEO) was hosted by NBEO in Hilton Head, South Carolina, in September 1987. ASCO also met with officers and staff of the American Optometric Association in Denver, Colorado, in December 1987.

IOOL

Dr. Wid Bleything, dean of the Pacific University School of Optometry, represented ASCO at the 61st annual meeting of the International Optometric Optical League. The meeting was held this year in two centers—in Sydney, Australia, from April 27 until April 30 and in Christchurch, New Zealand, from May 2 until May 5. Dr. Bleything reported that the meeting was an excellent opportunity for ASCO to renew international contacts and specifically, to create stronger links with optometrists in the Asian Pacific region.

Council Activities

Council on Student Affairs

The Council on Student Affairs continued its emphasis on recruitment in order to provide an adequate number of applicants and to ensure the continued high quality of optometry students. In addition, a recruitment video is in production and a new brochure and poster will be produced. Optometry was represented at two annual meetings of the National Association of Advisors for the Health Professions.

The new Optometry Admission Test was administered to approximately 2000 students. A liaison was developed with the AOA Educational Services Committee and a survey of minority recruitment and retention programs was conducted.

Miscellaneous Activities

The Secretary's Award for Health Promotion and Disease Prevention stimulated three papers from optometry students. Unlike last years honorable mention, none of the entries this year was selected for the final screening.

The update of the ASCO policy manual is underway and should be com-

pleted by the time of this meeting. The update involves the years 1985, 1986, and 1987.

The applicant status report developed by Dr. Davidson at the University of Missouri-St. Louis has been transferred to the ASCO national office. This year for the first time our new IBM computer capability will permit us to collect this data and generate the report.

The 1987 Directory of Residence/Graduate Programs was completed again this fall. We thank the schools for providing accurate, current information for this publication.

Efforts to officially register the ASCO color, seafoam green, with the American Council on Education (ACE) are continuing. We are in the process of supplying ACE with swatches of this color, PMS 354 c, from three different companies.

Many thanks are due to Mrs. Pat O'Rourke and Ms. Mary Auman without whose most competent and cheerful expertise the national office could not adequately function. Our gratitude goes also to Mrs. Jackie Doyle, project manager for the geriatric grant, whose excellent work is essential to this project.

1988 Annual Meeting

The ASCO annual meeting was held June 25-27, 1988, at the Hyatt Regency Hotel, Chicago, Illinois. There were 34 representatives of the 16 United States schools in attendance as well as two associate members from the College of Optometry in Verona, Italy. At the meeting, recognition by resolution was accorded to Dr. Gordon Heath who is retiring as dean of the School of Optometry at Indiana University and to Dr. Frederick Hebbard who is retiring as dean of the School of Optometry of The Ohio State University College of Optometry. Special recognition was extended to Ms. Maria D'Ablemont who is retiring as librarian/archivist at the International Library, Archives and Museum of Optometry. Dr. Richard L. Hopping was also honored by ASCO's Board upon his recognition by the AOA as "Optometrist of the Year."

In other meeting activities, ASCO sustaining members met with member school deans, presidents and faculty at both an evening reception and a luncheon preceding the symposium. This meeting also initiated an opportunity for sustaining members to speak before ASCO's Board. Two sustaining members—Dr. William Boyts of Allergan Hydron and Dr. Rod Tahrán of Varilux—spoke with the Board on matters of mutual concern in the profession. Other sustaining members will appear before the board at meetings throughout the year.

Luncheon Symposium

A highlight of ASCO's meeting was the annual luncheon program. The luncheon speaker was Dr. Nancy Newton, associate dean and director of clinical training at the Chicago School of Professional Psychology. Dr. Newton spoke on the psycho-social aspects of aging and the role of optometry. Dr. Newton stressed the importance of fostering knowledge, attitudes and skills that would help to eliminate the stereotypes of aging often found among health professions students.



Taking notes at the meeting is Dr. Richard L. Hopping, president of the Southern California College of Optometry.

Journal of Optometric Education Report

A new editor of the Journal of Optometric Education, David A. Heath, O.D., was appointed by ASCO's Board of Directors in June 1987 to direct the editorial policy of JOE for the following three years. Dr. Heath is associate professor of optometry and director of general vision services at the New England College of Optometry. Dr. Heath worked with Patricia Coe O'Rourke, managing editor.

Editorial

Four issues were produced during 1987-88 containing a total of twenty-four papers and reports.

A highlight of the year was the publication of "The Scope of Optometric Education in the Year 2000," a collection of papers written by the deans and presidents of the schools and colleges of optometry. In addition, papers were published from the American Academy of Optometry Symposium on Clinical Skills Evaluation Systems: Assessing Students in Patient Care. American Journal of Optometry and Physiological Optics editor, William M. Lyle's cooperation in the publication of this symposium is gratefully acknowledged.

Also published were papers dealing with a number of other topics: the characteristics of optometry students at SCCO, the SUNY summer internship,

improving lectures, AIDS in the curriculum, new directions in practice management, interpersonal skills training, optometric grand rounds and a simulation of amblyopia. An index for Volume 13 was provided as well as an interview with outgoing executive director Lee W. Smith by managing editor Patricia Coe O'Rourke.

A special feature this year was the publication of a curriculum model for oculomotor, binocular and visual perception dysfunctions prepared by a committee appointed by ASCO under a grant from the College of Optometrists in Vision Development.

Editorials published were: "First Impressions," by Robert J. Boerner, ASCO's executive director; "Optometric Education in the Year 2000," by Edward R. Johnston, O.D., M.P.A.; "Optometry Can Help in the War Against Aids," by HHS Secretary Otis R. Brown, M.D.; and "Clinical Skills Evaluation — The Role of Behavioral Objectives," by Felix M. Barker, II, O.D., M.S.

Publication dates for JOE are being changed in order to conform more closely to the academic year. The new publication dates are: Fall — September 1, Winter — December 1, Spring — March 1 and Summer — June 1. Each volume will begin with the fall issue

rather than the summer, but all subscribers will receive four issues with each year's subscription.

Distribution and Subscriptions

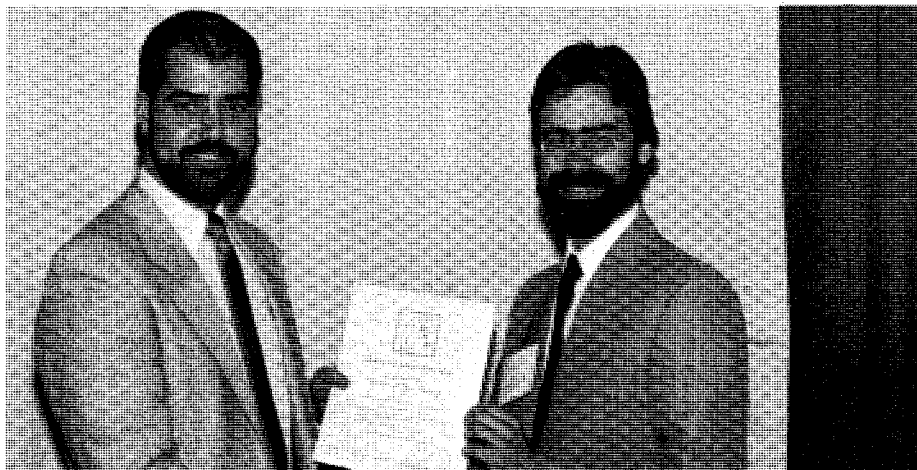
The total distribution of each issue is about 2800 copies with all senior optometry students receiving JOE directly in their mailboxes as a result of the support of ASCO's sustaining members.

Production and Advertising

The special introductory year of discounted advertising for sustaining members has resulted in a number of new advertisers. Sustaining Members who advertised this year were Varilux Corporation, Starline Optical, Ciba Vision Care, Reichert Ophthalmic Instruments and Paragon Optical. Special thanks to these sustaining members for their support. New efforts for advertising will be directed at those sustaining members who have not yet taken advantage of the special offer.

OEA Awards

The Journal again has been honored with several awards in the Optometric Editors Association's annual journalism awards contest for the published year 1987. The Journal again won the first place award for "Best Journal-National." The Journal also was awarded first place in the "Best Editorial-National" category for the editorial, "Optometric Education in the Year 2000," by Edward R. Johnston, O.D., M.P.A. First place in the "Best Non-Technical Article-National" category was won by the Journal for "The Minority Recruitment Program at the Pennsylvania College of Optometry" by Karen Cohen, M.A. A Certificate of Honorable Mention also was received in this category for "Scenario A: The Need to Increase or Maintain Enrollment at Current Levels," by David W. Davidson, O.D., M.S. A Certificate of Honorable Mention in the "Best Technical Article-National" category also was presented to Barry J. Barresi, O.D. for "Technological and Delivery Issues."



Optometric Editors Association president Dr. Jeff Kraskin presents the award for "Best Journal-National" to Journal of Optometric Education editor Dr. David Heath.

Dr. Hopping Named Optometrist of the Year



Dr. Richard L. Hopping, president of the Southern California College of Optometry, received the 1988 national Optometrist of the Year award from AOA President John D. Tumblin, O.D. The award was presented during the opening ceremonies of the AOA Annual Meeting in Chicago.

The award recognizes Dr. Hopping's outstanding service to the visual welfare of others and to the profession of optometry.

A resident of Fullerton, California, Dr. Hopping is described as a "philosopher, writer, teacher, clinician, administrator, politician and community and professional leader" by the California Optometric Association which nominated him as its 1988 Optometrist of the Year. He also was named Ohio Optometrist of the Year in 1982.

Dr. Hopping was president of the Association of Schools and Colleges of Optometry from 1983-1985.

A past AOA president, Dr. Hopping's contributions to the profession of optometry are many. He has helped develop a Curriculum Model for Practice Management for use in optometry schools, has been a fellow of the American Academy of Optometry since 1954, has served as president of both the Ohio and California optometric associations and is currently chairman of the AOA Professional Enhancement Committee.

Dr. Hopping is the second youngest person ever elected to the AOA presidency and is only one of two people to have served as president of both the AOA and the Association of Schools and Colleges of Optometry.

Politically, Dr. Hopping has been involved in public service for more than 31 years. He has been a member and chair of numerous campaigns for tax initiatives, bond issues and school and community developments.

He has also served on the boards of directors of museums, college foundations, PTAs and as a consultant to a number of higher education regional commissions and accrediting agencies. In addition, he has contributed time and effort to several charitable and service groups, including the National Society for the Prevention of Blindness, United Cerebral Palsy, Boy Scouts of America and Retinitis Pigmentosa International. He presently serves on the advisory board of St. Jude Hospital, one of the major hospitals in Orange County, California.

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Stereoscopic Atlas of Macular Diseases - Diagnosis and Treatment, J. Donald Gass, M.D., C.V. Mosby Co., St. Louis, Mo., 1987, 900 pp. hard-bound, b. & w., illus, 133 color stereo slides, \$225.

This third edition of *Stereoscopic Atlas of Macular Diseases - Diagnosis and Treatment*, is an updated version of a classic work which first appeared in 1970. For those readers not familiar with the stereoscopic atlas concept several atlases on ocular disease were first published in the mid 1960s. These books included a folding viewer and cardboard reels of stereoscopic fundus photographs showing the clinical appearance of various ocular diseases or ocular manifestations of systemic disease. This is the only stereoscopic atlas still being published of those originally introduced by Mosby. This recent addition does not provide a slide viewer with the purchase of the book. (A GAF Viewmaster viewer may be purchased at most children's toy stores.) For students, residents and practitioners the stereoscopic atlas is an excellent method, short of actual patient examination, to study the intricacies of macular anatomy and the diseases which affect this most important area of the retina.

The third edition of this atlas varies from earlier editions in that it has been expanded in scope and this expansion has necessitated dividing the text into two volumes. Volume one includes six chapters. These chapters in chronological order are: Normal macula, Pathophysiologic and histopathologic bases for interpretation of fluorescein angiography, Diseases causing choroidal exudative and hemorrhagic localized (disciform) detachment of the retina and pigment epithelium, Folds of the choroid and retina, Heredodystrophic disorders affecting the pigment epithelium and retina, and Macular dysfunction caused by retinal vascular disorders. Chapter two on fluorescein angiography is new to this edition. This chapter is of particular value for those wishing to understand the mechanisms and alterations of structure involved in the various disease processes which affect the macula. The fluorescein angiographic characteristics of a particular disorder often aid

in the diagnosis of clinically viewed entities.

Volume two contains seven chapters which by order of appearance are: Inflammatory diseases of the retina and choroid, Traumatic retinopathy, Toxic diseases affecting the pigment epithelium and retina, Retinal and pigment epithelium hamartomas, Neoplastic diseases of the retina and optic disc, Macular dysfunction caused by vitreous and vitreoretinal interface abnormalities, Optic nerve diseases that may masquerade as optic nerve diseases, and Photocoagulation of macular diseases.

In volume one there are twelve reels containing seven stereoscopic (paired) photographs in each reel. The photographs are primarily stereoscopic color photographs of diseases involving the macula. In reel one, one black and white photograph illustrates the appearance of the normal fundus with a fluorescein angiogram. In volume two, seven more reels are included for illustration of diseases in the chapters of this volume. These 19 reels comprise 133 color stereoscopic views which are keyed to specific black and white photographs in the book.

The text of these volumes is presented on 801 pages with 2,410 black and white illustrations. Throughout both volumes text and figure legends are presented on the left side page and the accompanying fundus, photomicrographs and other photographs, as well as drawings and fluorescein angiograms illustrating the conditions discussed, are presented on the right side page. This closely relating text and photographs of the same condition results in some white or empty space on many pages of the book but does not significantly detract from its appearance. The discussion is succinct and by comparison to some books on the subject may appear too abbreviated. Nevertheless, it is quite complete for practitioners involved in the delivery of primary eye care.

For the first time this edition includes specific references for each condition discussed rather than suggested readings at the end of each chapter as presented in the previous editions. The references are grouped according to a subheading presented within the reference section at the end of each chapter.

The references are cited chronologically in the text.

In this reviewer's opinion this book remains the best reference book for the clinician seriously interested in learning the pathophysiologic and histopathologic correlation to the clinical appearance of diseases affecting the macula. It is highly recommended for the library of every optometry student, resident or practitioner. Although other books on the macula are available and other books cover macular diseases from the vantage point of a specific pathophysiology, i.e., heredity, this book's strength lies in its being a stereoscopic atlas. For the practitioner attempting to identify a specific macular lesion, a stereoscopic color fundus photograph may be worth a thousand words.

Guest Reviewer:

John F. Amos, O.D.

Professor

The University of Alabama at

Birmingham

School of Optometry

Atlas of Clinical Ophthalmology, D. J. Spalton, R. A. Hitchings, & P. A. Hunter. J. B. Lippincott Co., Philadelphia, 1984. 435 pp. all color illus. & photos, hardbound, \$115.00. Also available as an 1175 slide series, \$1000.00.

Many times patients present with clinical signs that require reference to the literature for instructional purposes or to aid in the diagnosis. All too frequently the references we turn to are very complex in their presentation or are limited in their graphic illustration of the clinical entities we are seeking.

The *Atlas of Clinical Ophthalmology* is a text specifically designed for rapid clinical reference. It has an abundance of color photos and color diagrams to clearly illustrate the disease under consideration. Each page contains from two to four different diseases so that discussions are very brief and are usually limited to a paragraph or two next to the photos.

The chapters cover each anatomical eye component individually and there are specific chapters for glaucoma, strabismus infections, inflammations, allergies, and neuro-ophthalmology. Color photos are usually accompanied by iden-

tical line drawings that are labeled to eliminate confusion as to what is being discussed in the text about the photo. The photos and illustrations are beautiful and the discussions are very easy to read and understand.

It is important to point out that this text is designed as a companion text in the area of eye disease and will not suffice as a course text by itself. Although fairly thorough, it is not a comprehensive text on the topic of disease. Rather the citations in this *Atlas* are "unreferenced" discussions of "clinical wisdom" from the author's and contributor's clinical experience.

In spite of these provisos, this *Atlas* is an excellent clinical reference for both teaching programs and primary care practices. It is highly recommended.

Contact Lens Optics, W. A. Douthwaite, Butterworths, London, 1987, 219 pages, \$39.95.

Much effort is spent by optometry students studying the optics of the eye as it applies to spectacle lenses. Comparatively little time is dedicated to the optics of the contact lens. This book offers a very complete collection of optical principles, formulas, and explanations pertaining to contact lenses and instruments used to measure the cornea and contact lens.

The first chapter reviews basic but important principles of optics including vergence, accommodation, magnification, convergence, and anisometropia. The next chapters systematically cover the important contact lens-related optical topics including the fluid lens, vertex power, toric lenses, aspheric lenses, prism lenses, and bifocal lenses. Also included is a discussion of various optical instruments including the keratometer, photokeratoscope, and pachometer. Miscellaneous topics including the special problems of aphakic contact lenses, low vision telescopic aids, and underwater lenses add to the completeness of this book. The final chapter provides the listing of a computer program for performing various contact lens-related calculations.

The author enhances the interest and readability of the book by the use of concise diagrams illustrating the important optical principles. Optical calculations are shown in an easy-to-follow format with comments explaining each step. Practical examples are used to

illustrate many of the optical principles and problems. A complete summary of the main topics is reviewed at the end of each chapter.

I would recommend this book for students, teachers and practitioners looking for an interesting and informative coverage of optical principles under one cover.

Guest Reviewer:

Gary Andrasko, O.D., M.S.
The Ohio State University
College of Optometry

Low Vision—Principles & Application, George Woo, O.D., Ph.D., ed., Springer-Verlag, New York, 1987, 577 pages, 145 illustrations (b&w), hard cover, \$59.95.

Low Vision—Principles and Application is a compilation of papers presented at the First International Symposium on Low Vision. This conference was held at the University of Waterloo, June 25-27, 1986. Dr. George Woo served as the chairman of the conference and in this capacity he brought together an excellent group of clinicians and researchers who presented on a wide range of topics related to low vision. The book presents these papers in a concise and well organized manner by the Editor, Dr. George Woo.

The goal of the conference was to bring together researchers, clinicians and administrators so they could share ideas and common goals. This book reflects that objective. I was particularly pleased with the section on "Reading in Low Vision." The authors presented updated research with an ongoing dialogue of the clinical significance of the research data. The section on "Contrast Sensitivity" was also a most informative section relating today's research to clinical case/management of patients. The book also contains sections on measurement of vision loss, prescribing low vision aids, low vision care and some issues in rehabilitation in low vision.

The forty-four papers deal with issues related to the older patient, the visually impaired child, the diagnostic evaluation and the delivery of services. It is an excellent update of this specialty area of optometric care. The book will be of limited value to the novice low vision practitioner as the format and presentation of papers assumes a good understanding of the field. However, it is a

mandatory publication for the library of the more experienced clinician, researcher or administrator. I share Dr. Woo's feelings—I can't wait until we see the Second International Symposium on Low Vision.

Guest Reviewer:

Randall T. Jose, O.D.
University of Houston
College of Optometry

Vision and Sports, An Introduction, James R. Gregg, Butterworths, Stoneham, MA, 1987, 256 pages, \$29.95.

Vision and Sports, an Introduction is a recently published, comprehensive overview of the fast growing field of sports vision. This is a very readable textbook that would be of value for the optometry student as well as the established practitioner new to this field. It opens with the very beginnings of sports vision care and progresses to today's advanced enhancement techniques.

The first half of the book deals with the history of sports vision, past and current research, background on starting a sports vision practice, and vision screening of athletes. The middle chapters discuss contact lenses and sports, protective eye wear, sports vision consulting, and problems with prescribing for the sports vision patient. The final chapter outlines vision enhancement for participation in sports.

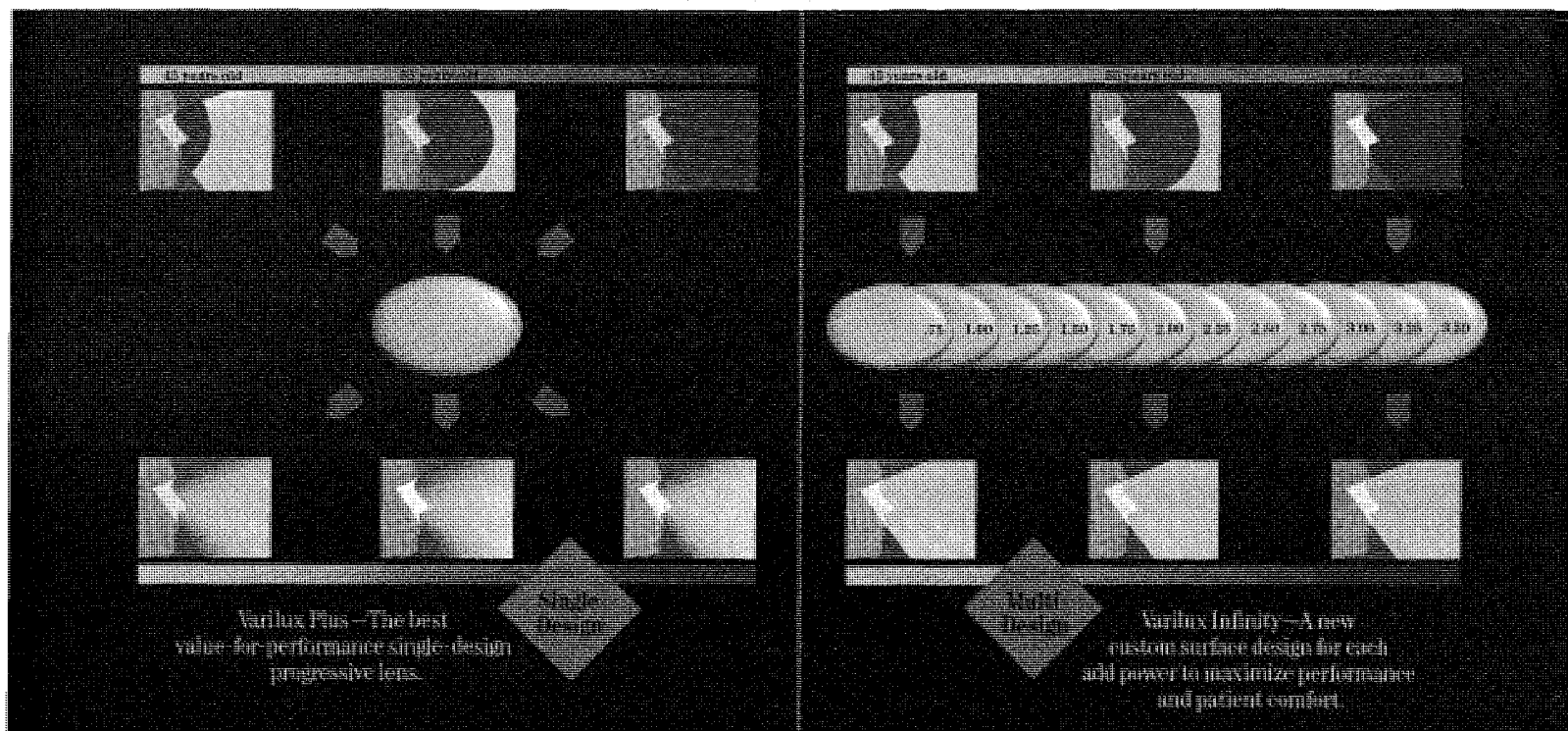
It is a thorough yet very readable overview of the subject, but its true value lies in the format of the text and the writing style. Each chapter covers a particular subject which is immediately followed by a list of notes, references, and a bibliography. This allows the reader to fully understand the meaning of the subject as well as providing a ready source of additional reference materials. Each chapter is very comprehensive in content, yet the organized style of writing keeps the reader from becoming overwhelmed with information.

These features make this both an excellent academic course text and clinical reference source for the practitioner. The book also may be useful to coaches, trainers, and athletes. *Vision and Sports* is classified by this reviewer as a welcome addition to the exciting field of Sports Vision.

Guest Reviewer:

Steven A. Hitzeman, O.D.
Indiana University School of Optometry

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