

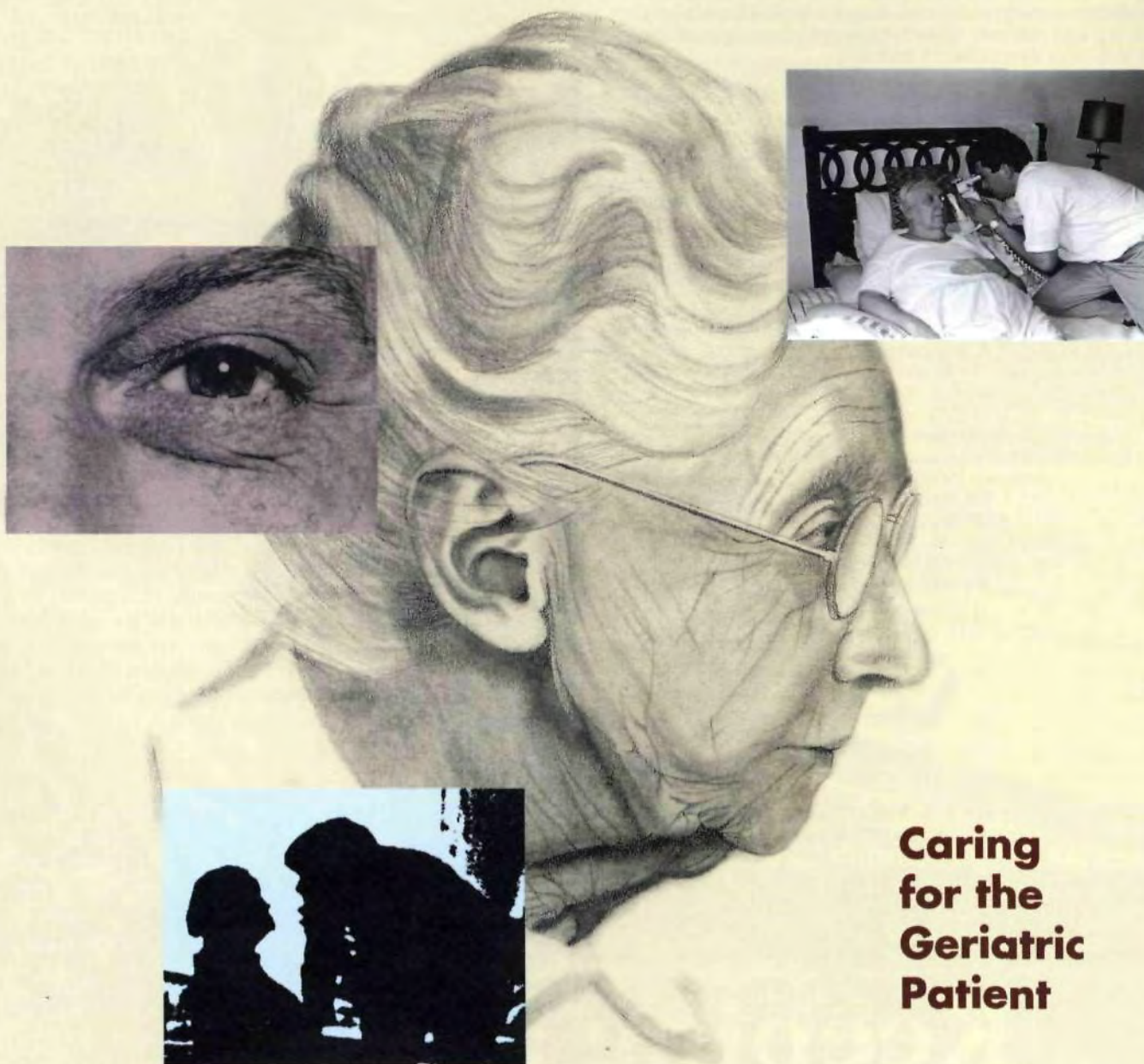
The Journal of the Association of Schools and Colleges of Optometry

OPTOMETRIC EDUCATION

Volume 21, Number 1



Fall 1995



**Caring
for the
Geriatric
Patient**

Looking Toward the Future...

VA Optometry

With over 260 optometrists working in 153 medical facilities serving our Nation's 26 million veterans, VA offers more opportunities than any other health care system. Because of VA's affiliations with many schools and colleges of optometry, teaching and research opportunities are currently available in addition to direct patient care.

VA offers an outstanding opportunity for recent optometry graduates in our residency training program, that includes areas such as hospital-based, rehabilitative, geriatric, and primary care optometry. After one year, a VA residency-trained optometrist enters the workforce confident, capable, and qualified to fulfill virtually any professional opportunity. Residency programs run for one year from July 1 to June 30.

As valuable members of the VA health care team, our staff optometrists enjoy a broad range of clinical privileges and challenging interdisciplinary practices at VA medical centers, outpatient clinics, and blind rehabilitation centers. They are also well published in the ophthalmic literature. We invite you to join our team and work with the best. Where The Best Care.

For further information, please contact us at
Director, Optometry Service (112A)
Veterans Health Administration
VA Medical Center
9600 North Point Road
Fort Howard, Maryland 21052
410-687-8375 (telephone)
410-687-8548 (fax)

The Best
Care



*Keeping the Promise
to Those Who Served*

Department of Veterans Affairs
An Equal Opportunity Employer

Keeping an Eye On Our Past.

**VOL. 21
NO. 1**

CONTENTS

**FALL
1995**

The Journal of the Association of Schools and Colleges of Optometry

COMMUNICATIONS

Nashville Notes 10

Focus on the President 14
An interview with ASCO's new president, Larry R. Clausen, O.D., Ed.D.

Including Optometric Services for the Homebound Elderly in the Curriculum 24
Benjamin Freed, O.D. and Mark Kirstein, O.D.
A mobile primary eyecare service for the homebound elderly sensitizes fourth year students at the SUNY College of Optometry to the needs of geriatric patients.

Meeting Future Demands for Educators in Geriatric Optometry 26
Nina Tumosa, Ph.D., Timothy A. Wingert, O.D. and W. Howard McAlister, O.D., M.A., M.P.H.
A program that combines a residency in geriatric optometry with a Master of Science in Gerontology provides multidisciplinary training in the treatment of the geriatric patient.

ARTICLES

Faculty Preparedness in Geriatric Optometry Education 17
Gary L. Mancil, O.D., Rosalie Gilford, Ph.D., Sheree J. Aston, O.D., Ph.D. and Tanya L. Carter, O.D.
The authors examine the current status of geriatric optometry education and propose models for faculty training.

DEPARTMENTS

Guest Editorial: Faculty Training in Geriatric Optometry 6
Gary L. Mancil, O.D.

Letters to the Editor 9

Industry News 12

Resources in Review 30
D. Leonard Werner, O.D.

Photo credit, cover, homebound patient: Dr. Benjamin Freed;
page 16: the National Council on Aging.

OPTOMETRIC EDUCATION is published by the Association of Schools and Colleges of Optometry (ASCO). Managing Editor: Patricia Coe O'Rourke. Editorial Assistant: Rebecca M. Defibaugh. Art Director: Dan Hildt. Graphics in General. Business and editorial offices are located at 6110 Executive Boulevard, Suite 600, Rockville, MD 20852 (301) 231-5944. Subscriptions: JOE is published quarterly and distributed at no charge to dues-paying members of ASCO. Individual subscriptions are available at \$20.00 per year, \$25.00 per year to foreign subscribers. Postage paid for a non-profit, tax-exempt organization at Rockville, MD. Copyright © 1995 by The Association of Schools and Colleges of Optometry. Advertising rates are available upon request. OPTOMETRIC EDUCATION disclaims responsibility for opinions expressed by the authors. Article copies, 16mm microfilm, 35mm microfilm and 105mm microfiche are available through University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Association of Schools and Colleges of Optometry

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

President

Dr. Larry K. Clausen, President
New England College of Optometry
Boston, Massachusetts 02115

President-Elect

Dr. Thomas L. Lewis, President
Pennsylvania College of Optometry
Philadelphia, Pennsylvania 19141

Vice-President

Dr. Jonaid W. Strickland, Dean
College of Optometry
University of Houston
Houston, Texas 77204-0052

Secretary-Treasurer

Alan L. Lewis, Dean
Ferris State University
College of Optometry
Big Rapids, Michigan 49307

Immediate Past President

*Dr. Lesley L. Walls, Dean
Pacific University
College of Optometry
Forest Grove, Oregon 97116

Executive Director

Martin A. Wall, CAE

*Dr. Jack W. Bennett, Dean

Indiana University
School of Optometry
Bloomington, Indiana 47401

*Dr. William E. Cochran, President

Southern College of Optometry
Memphis, TN 38104

Dr. Anthony J. Adams, Dean

University of California-Berkeley
School of Optometry
Berkeley, California 94720-2020

*Dr. Alden N. Hartner, President

State College of Optometry
State University of New York
New York, New York 10010

*Dr. Arthur J. Afanador, Dean

Inter American University
of Puerto Rico
School of Optometry
San Juan, Puerto Rico 00919

*Dr. Richard L. Hopping, President

Southern California College
of Optometry
Fullerton, California 92631

Dr. Boyd B. Barnwell, President

Illinois College of Optometry
Chicago, Illinois 60616

Dr. Richard M. Hill, Dean

The Ohio State University
College of Optometry
Columbus, Ohio 43210

Dr. Ralph Garcia, Acting Dean

University of Missouri-St. Louis
School of Optometry
St. Louis, Missouri 63121

Dr. Stewart Abel, Dean

Nova Southeastern University
Health Professions Division
College of Optometry
North Miami Beach, Florida 33162

Dr. William A. Monaco, Dean

Northeastern State University
College of Optometry
Tahlequah, Oklahoma 74464

Dr. Arel R. Augburger, Dean

University of Alabama at Birmingham
School of Optometry
Birmingham, AL 35294

Affiliate Members

Dr. Jacob Sivak, Director

University of Waterloo Optometry
Waterloo, Ontario, Canada N2L 3G1

Dr. John V. Lovasik, Director

University of Montreal Optometry
Montreal, Quebec, Canada H3T 1P1

Dr. Carlos Hernandez Mendez, Dean

Facultad de Optometria
Universidad de La Salle
Bogota, Colombia

Dr. Charles F. Mullen

Director, Optometric Service
Department of Veterans Affairs
Washington, D.C. 20420

Dr. K. Ravishankar

Elite School of Optometry
Madras, India

*Past Presidents

Sustaining Members

Fiscal Year 1995-96

Sponsors

CIBA Vision Corporation
Vistakon, Inc.

Patrons

None

Benefactors

Varilux Corporation

Members

Alcon Laboratories, Inc.
Allergan, Inc.
Bausch & Lomb, Inc.
Corning Incorporated
HPSC, Inc.
Humphrey Instruments, Inc.
Luxottica Group
Marchon/Marcolin Eyewear, Inc.
Polymer Technology Corporation
Reichert Ophthalmic Instruments
Silor Optical
Sola Optical USA, Inc.
Storz Ophthalmic
Sunsoft Corporation
Transitions Optical, Inc.
Volk Optical, Inc.
Wesley Jensen

As of August, 1995

Editorial Review Board

Editor: Felix M. Barker II, O.D., M.S.

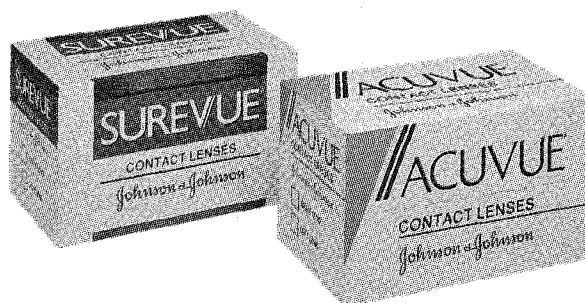
William Bobier, O.D., Ph.D.
Roger L. Boltz, O.D., Ph.D.
Nancy B. Carlson, O.D.
Linda Casser, O.D.
David W. Davidson, O.D., M.S.
William M. Dell, O.D., M.P.H.
Ellen Richter Ettinger, O.D., M.S.
Richard D. Hazlett, O.D., Ph.D.
Lester E. Janoff, O.D., M.S.Ed.
Nada J. Lingel, O.D., M.S.
William A. Monaco, O.D., M.S.Ed., Ph.D.
James E. Paramore, O.D.
Hector Santiago, Ph.D., O.D.
Paulette P. Schmidt, O.D., M.S.
Julie A. Schornack, O.D., M.Ed.
Leo P. Semes, O.D.
Dennis W. Siemsen, O.D.
Pierre Simonet, O.D., M.Sc., Ph.D.
Thomas M. Wiley, O.D., M.S.

One Day,

INTRODUCING
1-DAY ACUVUE



Two Weeks Or Less,



Three Healthy Options.

It's a fact: the more frequently contact lenses are replaced, the healthier it is for your patients. That's why Vistakon offers three contact lenses designed to be worn for two weeks or less.

1-DAY ACUVUE provides your patients with the ultimate in health and convenience, because it's the first true daily wear disposable contact lens. Your patients just wear them a day, then throw them away.

ACUVUE, the contact lens doctors wear and prescribe most, is the only contact lens to recommend for patients who want to sleep in

their lenses, even occasionally. And SUREVUE is the daily wear contact lens that provides patients with the benefits of disposability and the affordability of two-week replacement.*

Whether you prescribe 1-DAY ACUVUE, ACUVUE or SUREVUE, you can be sure your patients are getting what they deserve: convenience, satisfaction and, most important, a healthier way to wear contact lenses. When you consider the facts, why would you recommend anything else?

VISTAKON™
Johnson & Johnson Vision Products, Inc.

*Recommended wear schedule.

EDITORIAL

Faculty Training in Geriatric Optometry

Gary L. Mancil, O.D.

The demographics of our aging society are known to us all...or are they? How many optometric faculty have an accurate and up-to-date knowledge of the principles of geriatric optometry? How many practicing optometrists are adequately trained in this area? Better stated, how many of us can truly fathom the implications of the aging society in which we practice for our future responsibilities?

In a related article in this issue of *Optometric Education*,¹ an ASCO geriatric project team examined this topic. This was actually the third time ASCO convened a project team to examine the state of the profession in geriatric optometry education, and the third occasion during which ASCO received federal funding to do so.

In 1986, ASCO established an Optometric Gerontology Curriculum Development Committee. As its primary goal, the committee sought funding to support the development of a comprehensive, competency-based curriculum model and training manual in optometric gerontology. Building on earlier work by such distinguished leaders as Rosenbloom,² an updated survey of member institutions was conducted which documented the need for faculty development.³ A proposal prepared by the project team with support from ASCO staff was funded by the Administration on Aging (AoA) in 1987 and resulted in development of the modular textbook, *Optometric Gerontology: A Resource Manual for Educators*,⁴ and the convening of four national workshops during which the materials were field-tested and

optometric faculty were trained in their concepts and use. The training manual, revised with input from the workshop participants and a distinguished advisory committee, was widely disseminated and remains the primary resource for faculty who are developing courses in geriatric optometry.

A second ASCO geriatric project was funded by the AoA in 1990 to add a new module on minority and low-income elderly to the original training manual. This project resulted in development of the new module and two additional training conferences targeting optometric faculty and, additionally, clinical preceptors. The original manual with the new module on minority and low-income elderly was again widely disseminated, including mailing the update to those trained in the original project.

In 1994, an ASCO project team conducted a survey on faculty training in geriatric optometry under contract from the Department of Health and Human Services (DHHS), Bureau of Health Professions, Geriatric Initiative Branch (Note: This project is described in the companion article in this issue of JOE.) Unlike the previous two federally funded ASCO projects, which resulted from the efforts of the geriatrics project team members, the impetus for this contract was Congressional action.

In 1991, the American Optometric Association (AOA) had identified an opportunity to expand federal funding for geriatric optometry education, and ASCO joined in support of an effort to include optometry among the disciplines (medicine and den-

tistry) already supported by specific legislation. At that time, Congress was in the process of debating legislation to reauthorize the Health Professions Education Act. As a result of this effort, the Health Professions Education Extension Amendments of 1992 (Public Law 102-408) legislation was passed, with \$400,000 per each fiscal year 1993-1995 authorized for expanded optometry faculty training in geriatrics.

However, authorization of funds by Congress must be accompanied by equivalent appropriation of funds. While Public Law 102-408 and the appropriation law for DHHS were completed, the agency has discretionary authority over some budgeted items; in this instance, the geriatric education funding. Funds were never committed. Efforts have continued by AOA staff (Mr. Dave Danielson, in particular), ASCO Executive Director Martin Wall and others to encourage appropriation of funds. As recently as June 1994, both the House and Senate Appropriations Committees adopted language in their Reports specifically addressing the lack of appropriations in support of optometry faculty development in geriatrics. However, in an era of deficit reduction, competition for federal funding for geriatric faculty training programs for all disciplines has intensified. Even after ASCO's completion of the DHHS' own Bureau of Health Professions contract — whose result would have been expected to support optometry's case — no new appropriations

(Continued on page 9)

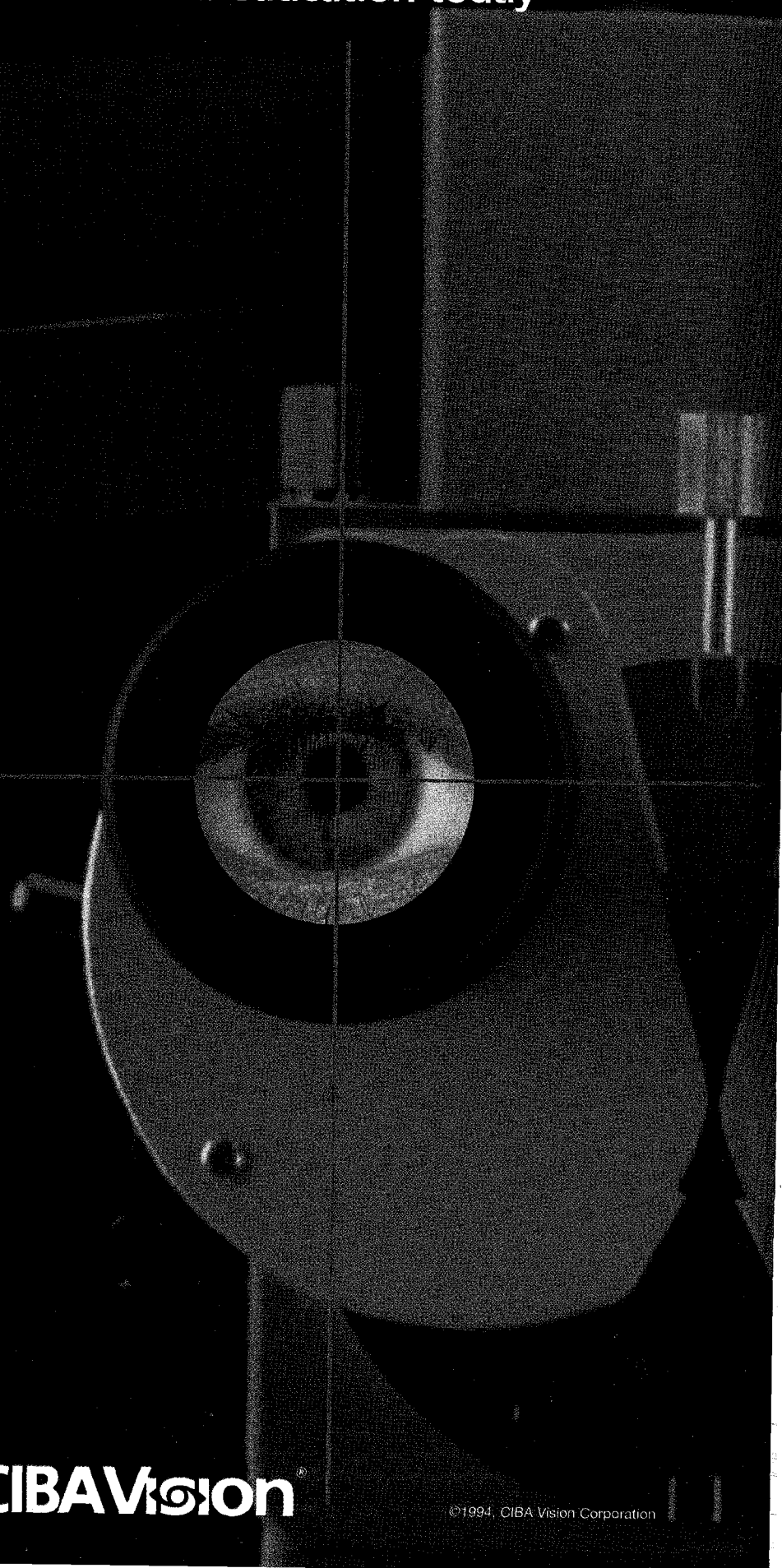
Alcon

THE OPTI-FREE® SYSTEM



**Everything Your
Patients Need For
Comfortable
Contacts**

**A vision for tomorrow
through innovation and education today**



CIBA Vision®

©1994, CIBA Vision Corporation

Editorial (continued from page 6)

were committed to allow for implementation of the recommendations which resulted from that project. Consequently, the Congressional mandate for improved optometry faculty training in geriatrics and gerontology found in this legislation will not be fulfilled. Congress has no plans to renew this authority or similar authorities for the other health professions.

However, federal support for optometry faculty training in geriatrics can be found through two programs. The Bureau of Health Professions (Department of Health and Human Services) has shown support for optometry faculty development in geriatrics. Through encouraging its Geriatric Education Centers (GECs) to target optometry as an important discipline for its interdisciplinary training, the Bureau has made it possible for numerous faculty to complete GEC-sponsored short term training programs. There are indications that optometric involvement in GECs has been given greater emphasis in recent rounds of funding. This certainly falls far short of the level of faculty development which would be possible had the optometry provisions of the Health Professions Education Act been funded.

The Administration on Aging also recognized the need for and provid-

ed funding for training optometrists, beginning with an American Optometric Association project providing continuing education to optometrists in the early 1980s. Furthermore, as reported previously, ASCO project teams have secured funding from this agency on two occasions in the past, and at present another ASCO project team proposal is under review there.

The current proposal would revise ASCO's curriculum model in geriatric optometry using an outcomes-based approach; update and expand instructional materials, with an emphasis on emerging special populations such as older women, low income and minority older adults and disabled older persons; conduct workshops; and disseminate updated materials using technologically-advanced approaches.

Given the current circumstances, organized optometry must use its internal resources more efficiently to ensure faculty preparedness in geriatric optometry. Each member institution must recognize the importance of this topic and emphasize it in developing its curriculum. Identifying one or more faculty members at each institution whose primary assignment is geriatric optometry and supporting their development in the area could facilitate faculty preparedness.

Furthermore, in the process of long range planning for the profession — through conferences such as the recent Summit on Optometric Education and development of ASCO's outcome-based curriculum model — greater emphasis on geriatric optometry topics is needed.

Note: ASCO geriatric project teams have been chaired by Dr. Mancil and have included Dr. Sheree Aston, Dr. Tanya Carter, Dr. Denise DeSylvia-Valenti, Dr. Rosalie Gilford and Dr. Greg Good.

References:

1. Mancil GL, Gilford R, Aston SJ, Carter T. Geriatric optometry faculty preparedness in the schools and colleges of optometry. *Optometric Education* 1995;21(1): 17-21.
2. Rosenbloom AA. Optometry and gerontology: a vital link. *Optometric Education* 1986; 11(2):15-18.
3. Aston SJ, DeSylvia DA, Mancil GL. Optometric gerontology: state of the art in schools and colleges of optometry. *Optometric Education* 1988;14(1):8-12.
4. Aston SJ, DeSylvia DA, Mancil GL. Optometric gerontology: a resource manual for educators. Administration on Aging and the Association of Schools and Colleges of Optometry, 1989.

Dr. Mancil is staff optometrist and research health scientist at the Department of Veterans Medical Center, Salisbury, North Carolina. He has a graduate certificate in gerontology and is residency trained in low vision rehabilitation.

Letters to the Editor

I enjoyed reading your informative summer 1995 article, "Requirements for Hepatitis B Vaccinations Among Optometry Students." I strongly agree with the recommendation that all optometry students, and indeed all optometrists, should be vaccinated for Hepatitis B.

I am also pleased to relate a change in one point of information presented in the article. It is stated that at the University of Waterloo School of Optometry, Hepatitis B vaccination of its students is not mandatory. In 1994, following many years of recommending the vaccine to its students, the UW School of Optometry began requiring all of its students to provide proof of Hepatitis B vaccination by the time they begin their clinical rotations in the third professional year.

Craig Millar
Student
University of Waterloo

I recently read the summer 1995 issue of *Optometric Education* and need to correct information contained in the article "Requirements for Hepatitis B Vaccinations

Among Optometry Students" by Bowyer et al. The University of California, Berkeley, School of Optometry began requiring the Hepatitis B series of vaccinations for the students who entered our program in August 1994. The cost of the series is carried by the students and some students may be covered by their health insurance.

In addition, Table 2: Hepatitis B Vaccination Requirements of Optometry Students (p. 116) implies that students at Berkeley have no contact with patients during their schooling. In the second column "First Patient Contact (which training year)" the answer [printed] for Berkeley is "No." Our students actually have their contact with patients in their second year of school.

We agree with the authors that the HBV vaccine should be required and feel that if the various schools were to be resurveyed that the current results might be currently quite different than those published.

Sandy Jaeger
Student Affairs Officer
University of California, Berkeley

Editor: A computer coding problem caused Table 2 to print "no" for the University of California, Berkeley, and for the University of Montreal under the year

for the first patient contact. The "no" should have been printed in "Mandatory Hepatitis" column.

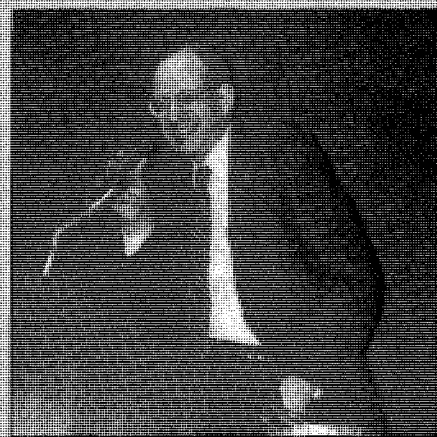
Dr. Bowyer: I would like to acknowledge Sandy Jaeger of the University of Berkeley, California, School of Optometry, and Craig Millar of the University of Waterloo for their careful reading of the article, "Requirements for Hepatitis B Vaccinations among Optometry Students." The data for this article was collected in late 1993 and early 1994. This was prior to August 1994 when the University of California-Berkeley began requiring the Hepatitis B series of vaccinations of students entering the UC-B program. Additionally, this research was submitted for publication prior to the University of Waterloo School of Optometry's requiring in 1994 that all its students provide proof of Hepatitis B vaccination by the time they began their clinical rotation in the third professional year.

It is obvious that this is an area where policies are being quickly revised. It may be time to contact each school again for an update. The authors will contact the schools and the current information will be published in the winter 1996 issue of *Optometric Education*.

Nashville Notes

Presidents and deans, faculty members, ASCO sustaining members and invited guests met June 22-23, 1995, in Nashville, Tennessee at ASCO's 54th Annual Meeting. At the ASCO Annual Luncheon, four companies received plaques recognizing their support as 10-year sustaining members. Pictured at the meeting are: 1. Dr. Richard Hill is honored as he retires as dean of The Ohio State University College of Optometry; 2. Ms. Dianne Ventura and Dr. Rod Tahrán accept an award for Varilux Corporation from Dr. Les Walls, ASCO's 1994-95 president; 3. Dr.

Tom Lewis, ASCO's new president-elect, looks on as 1995-96 president, Dr. Larry Clausen and 1994-95 president, Dr. Les Walls, confer; 4. Mr. Ray Sabatino accepts an award for Humphrey Instruments; 5. Dr. Charles F. Mullen, director of the optometry service at the Veterans Health Administration (VHA), receives the ASCO Award for Outstanding Leadership and Support of Optometric Education; and 6. Mr. Tom McClure accepts an award for Marchon/Marcolin/Eyewear (also receiving an award, but unable to be present was The Luxottica Group).

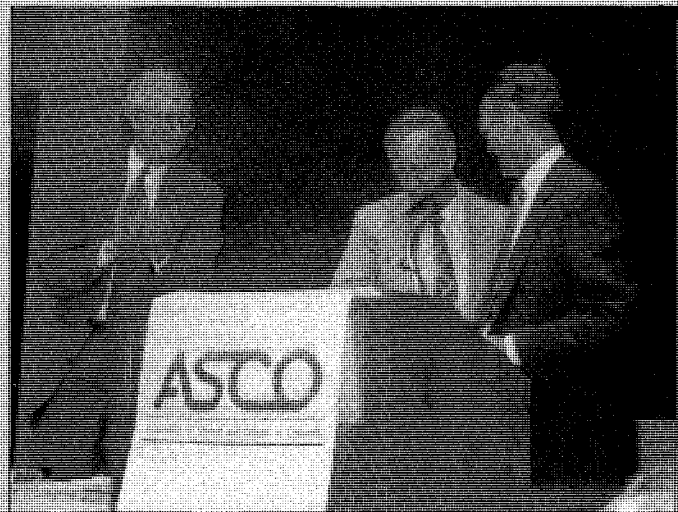


1

Photo credit: Lisa Wright-Solomon, ASCO Staff



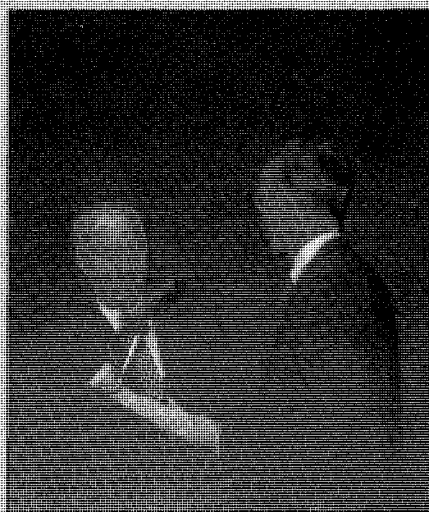
2



3



4

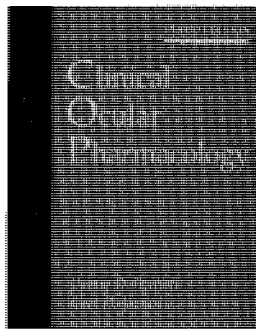


5



6

You've been watching for these —



Clinical Ocular Pharmacology Third Edition

Jimmy D. Bartlett, O.D., and Siret D. Jaanus, Ph.D.

From a review of the previous edition:

*"Those who passed up the first edition of Bartlett and Jaanus won't want to repeat that mistake-- the second edition is excellent... In short, the second edition of **Clinical Ocular Pharmacology** should be a required text for the ocular pharmacology courses of every school and college of optometry."*

— *Journal of Optometric Education*

New to this edition:

- Features a revised format — more user-friendly and clinical
- The section on *Pharmacology of Ocular Drugs* is now organized by therapeutic rather than pharmacologic drug classifications
- 16 new chapters including: Pharmaceutical and Regulatory Aspects of Ocular Drug Administration, Analgesics for Treatment of Acute Ocular Pain, Antiallergy Drugs and Decongestants, and Antiglaucoma Drugs
- Expanded coverage of: oral medications used in primary eye care, neuro-ophthalmic disorders, allergic eye disease, postoperative care of the cataract patient, drug interactions, and life-threatening emergencies

Due September 1995, 0-7506-9448-3, 944 pp. est., Hardbound, \$95.00 est.

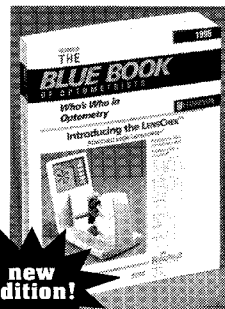
Special pre-publication price —

1996 Blue Book of Optometrists

For over 70 years the *Blue Book* has served the optometric community. The best comprehensive directory like this in existence, it provides alphabetical and geographic listings of over 30,000 licensed optometrists in the United States, as well as numerous other references and features—including a MS-DOS *Disk of Optical Suppliers* FREE with each copy of the book!

1996 Blue Book of Optometrists (with FREE *Disk of Optical Suppliers*): Due September 1995, 0-7506-9682-6, 454 pp. est., Paperbound, special pre-publication price only \$45.00 offer expires Nov. 1, 1995! After Nov. 1, 1995 — \$65.00

MS-DOS *Disk of Optical Suppliers* only: Due September 1995, 0-7506-9723-7, \$15.00



new edition!

Other new titles from Butterworth-Heinemann —

Clinical Ophthalmology Third Edition

Jack J. Kanski
1994, 0-7506-1886-8, 528 pp.,
Hardbound, \$125.00



Clinical Ophthalmology A Test-Yourself Atlas

Jack J. Kanski
Ken K. Nischal
Due September 1995, 0-7506-2189-3,
128 pp. est., Paperbound, \$30.00 est.

Ordering information —

BUTTERWORTH
HEINEMANN
A member of the Reed Elsevier plc group

Fulfillment Center
225 Wildwood Avenue
Woburn, MA 01801

Phone: 800-366-2665
FAX: 800-446-6520
E-Mail: orders@bh.com

MS 14

INDUSTRY NEWS

Companies appearing on these pages are members of ASCO's Sustaining Member Program. Sustaining Members are listed on the inside front cover of each issue. Membership is open to manufacturers and distributors of ophthalmic equipment and supplies and pharmaceutical companies.

Paul Harvey Encourages Use of Varilux Lenses

One lucky consumer and his or her independent eyecare professional will each win an all-expenses paid trip to Chicago to attend one of Paul Harvey's exclusive broadcast sessions.

Paul Harvey, the most listened-to radio personality in the country, promotes the Varilux Comfort lens semi-weekly in his "News & Comment" segments on over 1,300 ABC-affiliate radio stations. His skillful blend of news and views has attracted over 23 million loyal listeners, many of whom trust his opinion and listen to his endorsements. His experience with Varilux Comfort lenses has already generated over 80,000 referrals.

"It is always exciting to meet celebrities, and Paul Harvey is no exception," said Scott Schlarb, manager, marketing communications. "Many of his dedicated fans would jump at the chance to meet him in person."

Paul Harvey encourages his listeners to call the Varilux toll-free referral line (800-VARILUX) that identifies independent eyecare professionals in their area who carry Varilux Comfort lenses. Consumers are then mailed product information as well as an entry form for the sweepstakes.

In order to enter, consumers must see one of the referred practitioners for a free demonstration of the lens. Following the demonstration, the practitioner completes the entry form and mails it to Varilux.

The winners and their guest will receive round-trip airfare, two nights in Chicago, transportation expenses and \$500 spending cash. The highlight of the trip is the opportunity to watch "the voice of

Varilux" in action as he broadcasts his show.

"Few people have the opportunity to meet a legendary figure," Schlarb said. "It is our hope that the excitement generated by this sweepstakes will not only educate consumers about the benefits of the Varilux Comfort lens but also help our loyal independent practitioners grow through our nationwide referral program."

CIBA Vision Launches Overseas Initiative

CIBA Vision recently announced two significant developments in the company's drive to seize the number one position in the vision care industry worldwide.

In Shanghai, CIBA Vision chief executive officer, Dr. C. Glen Bradley, recently participated in the opening of a new contact lens production facility. The \$4 million, 30,000 square foot plant will support the Shanghai CIBA Vision Contact Lens Co., Ltd., which recorded its first sales in the Peoples Republic of China during 1994.

Initial plans call for production of both conventional and planned replacement lenses in Shanghai. CIBA Vision, which expects to see production in Shanghai rise as its business in China grows, also has plans to construct a lens care production facility in China within the next few years. CIBA Vision, which currently ranks number one in total soft contact lens patient fits in the United States, is committed to providing quality products and excellent service to customers in the United States and abroad, according to Nancy Duden, account supervisor.

"Our objective in China will be the same as it is worldwide — to become the market leader in vision care," said Dr. Bradley at the recent opening of the Shanghai plant. "China's open door, market driven economic policy has given us the opportunity to achieve that objective and at the same time contribute to the prosperity of this nation."

Wesley-Jessen Changes Hands, Plans Programs

Practitioners soon will witness Wesley-Jessen launch some aggressive new marketing campaigns designed to create patient interest in its lenses, according to the firm's new parent company.

Bain Capital, Inc., of Boston, an investment firm, purchased W-J in late June from its corporate parent, Schering-Plough Corp., Madison, NJ.

Bain has appointed industry veteran Kevin Ryan as chief executive officer of W-J. Ryan, formerly president of Barnes Hind, succeeds Charles M. Stroupe.

"Bain Capital plans to increase spending immediately on consumer advertising and promotion of W-J's FreshLook disposable lenses," said Ryan. "Wesley-Jessen will increase demand for contact lenses through media advertising that causes patients to ask their eye care practitioner about our products."

A new blitz of consumer media advertising is planned for this fall. Said Ryan, "Practitioners won't notice changes in our day-to-day operations, but this fall, they can expect to take notice of some major new investments in marketing programs focusing on our FreshLook disposables."

Corning Receives Standard for Quality

John Van Zanten, marketing manager of optical products announced that Corning Incorporated has received the ISO-9002 registration for its ophthalmic lens blank manufacturing facility at Harrodsburg, KY.

This world-recognized standard for quality adds a new level of convenience and confidence for all of Corning's customers in the optical industry.

ISO-9000 is a series of quality standards which was originally designed to address the need for uniform standards in Europe. It is becoming a requirement today to compete in global markets.

The ISO-9002 standard sets quality system thresholds for the manufacture of products. Corning's goal is to add value above and beyond the recognized standard.

Bausch & Lomb Offers Gift to New Graduates

Bausch & Lomb announced the 1995 availability of its "New Practitioner Program," an annual initiative designed to support newly graduated optometrists and ophthalmologists as they enter into practice. The program is available for one year after a new practitioner's graduation date.

The "New Practitioner Program" provides information and materials to help the professional meet the needs of his/her patients. The program also includes a variety of sample products from Bausch & Lomb's Contact Lens, Personal Products, Pharmaceutical and Eyewear divisions, as well as Polymer Technology Corporation.

"Industry support benefits new graduates, their patients, and provides a stepping stone to future success," said Carol Freihaut, executive director, American Optometric Student Association.

"Although I took over an established practice, the previous doctor was not a frequent contact lens fitter," said James Arlie Williams, Jr., O.D., Glax, VA, a 1994 graduate of the University of Alabama at Birmingham School of Optometry. "This program really saved me time and enabled me to become

more familiar with Bausch & Lomb contact lenses and solutions."

"When new graduates enter practice, they want to quickly realize the benefits of their rigorous education," said William T. Reindel, O.D., director of professional market development for Bausch & Lomb's Personal Products Division. "Each year, we offer new graduates a head start with immediate access to some of the highest quality and most well known brands in the eye care field. A practitioner can count on these products to satisfy patients, and this can give him or her added confidence," he added.

Information regarding program registration materials is available via a Bausch & Lomb representative, or by calling 1-800-828-9030.



Transitions Honors OLA

Transitions Optical, Inc., recognized the Optical Laboratories Association (OLA) with the company's "Pursuit of Excellence" award, honoring the 101-year-old organization for its pivotal role in advancing the technical knowledge of doctors and dispensers about dynamic changes in lens technology.

Leslie Littel, Transitions Optical vice president, presented the award to Jack Dougherty, OLA president, at the association's summer board of directors meeting July 14.

"For the past five years, the OLA has been actively involved in developing a variety of unbiased and impartial multimedia educational programs," Littel said. "As one of the newer members of the optical industry, Transitions Optical understands the importance and difficulty of educating the profession about changes in lens technology."

In presenting the award to Dougherty, Littel highlighted several projects for special recognition. "Perspective on Lenses, a comprehen-

sive review of all current ophthalmic lens technology, is a tremendous publication," Littel said. "Today, it has a circulation of over 100,000 and is recognized as the accepted industry reference source for up-to-date lens technology. *Laboratory Technical Newsletters* focuses on the benefits and advantages of specialty lenses. They've resulted in an industry-wide increase in the understanding and use of specialty lenses."

In addition, Littel said, "ABO-approved slide seminars, the *Lens Menus* and *Progressive Lens Identifier* have helped to establish the association as an impartial booster and advocate of modern lens technology."

Allergan Co-Sponsors Seminar for Goal Planning

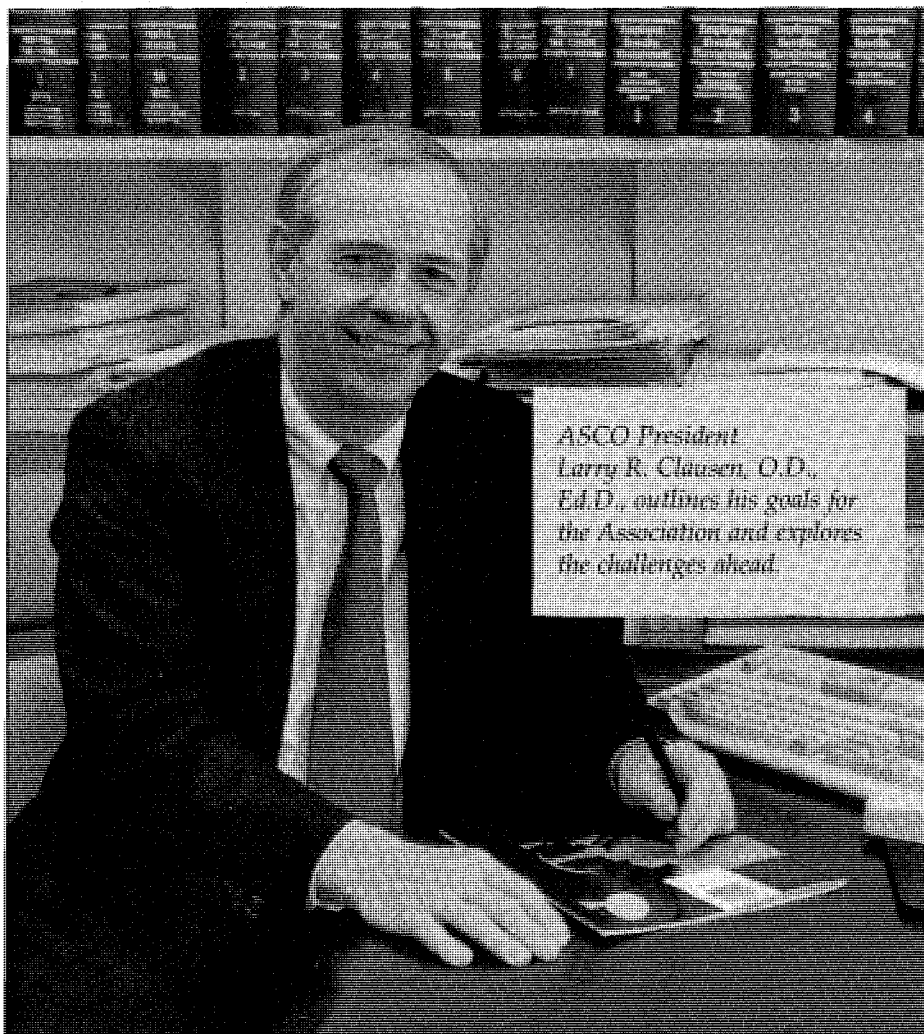
Allergan Inc., beginning this academic year, will co-sponsor a special workshop titled, "The Time is Now - Plan for Your Ultimate Career Goals," with the Irving Bennett Business and Practice Management Center of the Pennsylvania College of Optometry.

The seminar will be offered four times throughout the year to reach each group of fourth year students who rotate one quarter at the college's Eye Institute. Students are at three different externship sites throughout the county during the remaining three quarters of their final year of study before receiving their doctor of optometry degree.

Workshop leaders are Debbie Thomson, senior sales executive of Allergan, Ed P. Taylor, M.B.A., president of Taylor Medical Practice Consulting, Inc., and Janice Mignogna, Bennett Center coordinator. They will lead the students through a self-assessment program designed to help define individual goals and then to develop the strategies to reach them.

Other topics will include updating resumes, loan repayment, and an introduction to the college's "Perfect EyeSite" Placement Network. This service matches eye care professionals with employment or partnership opportunities with graduating students, alumni and other practitioners from around the country.

Focus on the President



*ASCO President
Larry R. Clausen, O.D.,
Ed.D., outlines his goals for
the Association and explores
the challenges ahead.*

Larry R. Clausen, O.D., Ed.D., began a one-year term as ASCO's president in June 1995. Dr. Clausen has been president of The New England College of Optometry (NEWENCO) since 1989. He served as dean of academic affairs at NEWENCO from 1982-1989. From 1978-1982 he was assistant dean at the Pacific University College of Optometry. Dr. Clausen received his O.D. degree from Pacific University in 1970, an M.P.H. from the University of Michigan in 1971 and an Ed.D. from Harvard University in 1994. He was employed by the U.S. Public Health Service and the National Institutes of Health for seven years. Dr. Clausen was interviewed recently by Patricia Coe O'Rourke, managing editor of *Optometric Education*.

OPTOMETRIC EDUCATION: Dr. Clausen, as you begin your term as ASCO's president, what goals have you set for the Association?

Clausen: I have outlined three goals for my year as president: improve ASCO's responsiveness to its core sustaining members, outline a strategic plan and timeline for responding to the recommendations of the Georgetown Summit on Optometric Education, and adopt a five-year dues budget. All are interrelated. The Summit recommendations which were assigned to ASCO approach 70 in number and far exceed the current resources and energies of the association and its member schools. The recommendations must be evaluated regarding their congruence with ASCO's mission and strate-

gic plan, feasibility, and potential to effect meaningful change.

We must seek corporate support to fulfill our prime obligation of advancing the profession. This can only occur through dialogue and partnership with industry. This must begin with our sustaining members and encompass a long-range dues structure that will define the boundaries of ASCO resources available to advance the Summit recommendations.

OPTOMETRIC EDUCATION: What do you see as the challenges facing the schools and colleges of optometry in the mid-1990s?

Clausen: I believe the greatest challenge will continue to be having adequate resources to sustain our educational and research programs. Today, this is particularly acute with many of the state optometric institutions. On the other hand, the private institutions must continue to develop sources of income beyond tuition. The many recommendations that emerged from the Georgetown Summit meetings underscore the critical shortage of resources to support optometric education in the United States. Although schools vary in their ability to fulfill their respective missions, the shortage of resources is at a crisis proportion in the context of what we have identified as our vision of optometric education in the United States for the year 2010 and beyond.

Also, given the changes in the health delivery system, the rapid evolution of managed care and affiliated networks, and other changes in the financing of health care, the colleges will be increasingly faced with the growing problem of maintaining an appropriate base of patients within their clinical education programs. Appropriately, ASCO has identified this issue for its first critical issues seminar which will occur in 1996.

Another issue that I see of major importance is the whole issue of accreditation in higher education. It is unknown what course accreditation will take over the remainder of the decade, but the likelihood of greater involvement by state and federal government is high. We should be concerned about the role that the profession will have in the accreditation process, and we should be concerned about subtle shifts in the purpose and use of professional accreditation.

ASCO must be pro-active in responding to this.

OPTOMETRIC EDUCATION: Why did you decide to pursue educational administration?

Clausen: After I graduated from optometry school at the Pacific University College of Optometry, I pursued a M.P.H. degree in medical care administration at the School of Public Health at the University of Michigan. This eventually led to a position at the National Institutes of Health, within the Bureau of Health Manpower Education. This was an exciting opportunity and proved to be the formative part of my career. I worked directly with the deans and presidents of schools of optometry, as well as leadership in other health disciplines. I was employed by the U.S. Public Health Service for seven years. These years became the critical factor in directing my career into one of administration rather than clinical practice. When federal support for optometric education waned in the late 1970s, I returned to Pacific University as assistant dean in the College of Optometry. I am not so sure that this was a pre-planned step in my career, but I found that I enjoyed the world of health professions education administration and did not want to move into other arenas in or out of government. For me, it has been personally rewarding.

OPTOMETRIC EDUCATION: What has been your focus as president of the New England College of Optometry?

Clausen: When I became president, I began to develop a long-range institutional plan to guide the institution through the 1990s. Out of this process, in cooperation with the Board of Trustees, we established four major goals which we refer to as breakthrough goals. In brief, these are:

- Renovate the College buildings on Beacon Street,
- Grow a \$6 million unrestricted endowment,
- Develop a bioscience research center, and
- Enhance clinical programs.

At the half-way point in our timetable, we can report significant progress on all fronts.

OPTOMETRIC EDUCATION: The New England College of Optometry is at the forefront of establishing international programs. Could you describe those programs and discuss how you see them evolving in the next five to ten years.

Clausen: I agree. I believe that The New England College of Optometry is at the forefront of international programs. The College has established a Center for the International Advancement of Optometry through which we offer several programs. We have a Boston-based accelerated program, two years in length, for optometrists who have obtained their optometric training abroad. Entry into the program requires graduation from a recognized program overseas, and at least two years of active practice or research. We admit 6-10 students into this program each year. As a variation to this program we also conduct educational programs overseas. Currently we are delivering coursework in Italy and South Africa. Faculty from our college, as well as contracted faculty from other institutions, participate in these programs. The program in Italy is nearing completion. Nine students will receive their Doctor of Optometry degree next year. The program in South Africa focuses on expanding clinical skills in the area of DPAs and the management of ocular disease. More than two hundred optometrists have enrolled in this course of study.

The college has also entered into a twin college agreement with Wenzhou Medical College in Wenzhou, China. We are assisting that college in developing the National Optometry Research Center. This is the only formal program of optometric education and research in China, and it has now gained formal recognition by the Ministry of Public Health. Our agreement focuses on educational symposia, faculty exchanges, visiting scholars and research. Two members of their faculty, Dr. Qu Jia, vice president of Wenzhou Medical College and deputy director of the National Optometry Research Center and Dr. Lu Fan, head of the contact lens department, were hosted as visiting scholars at the New England College of Optometry this past year. This was

made possible through the generous support of Vistakon.

We have also conducted programs in Spain, and we are currently exploring the possibility of working with university-based programs in Mexico. Collectively these represent our vision for the next five years. Major expansion into other countries is not envisioned, although new programs could emerge in those countries where we have established relationships. The size of the Boston-based program will also remain stable.

ASCO Receives Galileo Award

The Association of Schools and Colleges of Optometry has received the Galileo Award from the American Foundation for Vision Awareness (AFVA) for excellence in research.

The award was presented during AFVA's Annual Meeting in Nashville, Tennessee, held in conjunction with the American Optometric Association Annual Congress. ASCO President, Dr. Larry R. Clausen, accepted the award from AFVA President Linda Wilkinson.

The Galileo award is presented annually by the Foundation and honors individuals and organizations for their contributions to optometric research, especially in the area of children's vision and learning. In announcing the award, AFVA said that ASCO plays "a leading role in optometric research, including emphasizing children's issues as demonstrated recently in their efforts on the development and expansion of optometric curriculum in the United States. In addition, ASCO has assisted the foundation in distributing information regarding AFVA's research grants, optometric scholarships and the Children's Vision and Learning Campaign."

ASCO is using the award money to establish an annual award for a research article in learning or children's vision published in *Optometric Education* during the preceding year. Recipients of the award will be chosen by members of the journal's review board and presented at ASCO's Annual Meeting.



Faculty Preparedness in Geriatric Optometry Education

Gary L. Mancil, O.D.
Rosalie Gilford, Ph.D.
Sheree J. Aston, O.D., Ph.D.
Tanya L. Carter, O.D.

Abstract

Chief academic officers and primary contact faculty in ASCO member institutions in the United States responded to a mail survey comparing the current status of geriatric optometry education to that in 1986. Results show a 75 percent increase in institutions requiring course work and an 83 percent increase in those offering continuing education in geriatric optometry. Institutional plans are for increased faculty involvement in expanded didactic and clinical training of students. Faculty preparation in geriatrics and gerontology, however, remains at 1986 levels, with 67 percent reporting no formal training. Three models of faculty training in geriatric optometry are proposed for implementation through funding authorized by the federally legislated Health Professions Education Extension Amendments of 1992.

Key Words: Geriatrics, gerontology, optometric education, optometric faculty development

Introduction

The increase in the population of older Americans is expected to continue well into the 21st century. Between 1990 and 2020, the number of persons over the age of 65 is expected to increase by 62 percent, from its now approximately 32 million constituting 13 percent of the population, to over 52 million constituting almost 18 percent of the

Dr. Mancil is chief, optometry section and research health scientist at the Department of Veterans Medical Center, Salisbury, North Carolina. He has a graduate certificate in gerontology and is residency trained in low vision rehabilitation.

Dr. Gilford is professor of sociology at California State University, Fullerton, (CSUF) and founding director of the CSUF gerontology programs. She is adjunct professor at the Southern California College of Optometry.

Dr. Aston is an associate professor at the Pennsylvania College of Optometry and has a graduate degree in gerontology. She has published extensively on the subject including a book, *Clinical Geriatric Eye Care*.

Dr. Carter is an assistant professor at the State University of New York State College of Optometry where she serves as instructor of records for the geriatrics course and supervisor for the Geriatric Residency Program. Dr. Carter is director of optometric services at Coler Memorial Hospital and an associate and faculty member of the Geriatric Education Center.

population. By 2040, it is projected to more than double to over 68 million and to constitute almost 23 percent of the population. Growth of the oldest old, those over age 85, is even more dramatic; their number should double by 2020 and increase almost fourfold to over 12 million by 2040.¹

The aging of the population will create a greater demand for health care due to the fact that older persons utilize health services more heavily than do members of the general population. While people age 65 and over comprise only 12 percent of the U.S. population, they account for more than one-third of the nation's total personal health care expenditures.¹ A recent study estimated a 39 percent increase in the number of physicians who will be needed to care for older persons in the 21st century and a dramatic increase in the number of academic geriatricians needed as well.²

Though no such detailed analysis has been conducted on personnel needs of optometry, similarities in demand undoubtedly exist. Estimates of the numbers of elderly persons with significant loss of vision function include 13 percent of non-institutionalized elderly persons.³ These estimates are significantly higher within older age groups: 16 percent of those 75 to 84 years old and 27 percent of those 85 and older are estimated to be visually impaired. Current figures may be assumed to be underestimated⁴ because of the general tendency of older persons to under-report vision impairment, and because most estimates exclude the institutionalized elderly. Rates among nursing home residents are estimated to be at least four times as high.⁵ Projections to the year 2000 and beyond indicate that the number of older people with functional vision impairments is expected to at least double.

Thus, the optometric profession, like other health care professions, faces an urgent need to increase the level of training in geriatric optometry. Both current optometric trainees and previous graduates alike will need to be better prepared in order to provide for the eye and vision care needs of the growing population of older Americans.

Little is known, however, about the current ability of schools and colleges of optometry to meet the challenge of providing the necessary training to sufficient numbers of personnel. In 1984, Dr. Alfred Rosenbloom assessed

activities in optometric gerontology at the schools and colleges.⁶ In 1986, the Association of Schools and Colleges of Optometry (ASCO) Optometric Curriculum Development Committee surveyed the existing 16 schools and colleges of optometry in the U.S. regarding the existence of academic and clinical course work in geriatric optometry.⁷ Information was gathered on the extent of didactic instruction, clinical programs, and training of primary contact faculty in gerontology and geriatrics, as well as continuing education and public education efforts in vision and aging. The limited comparison analysis that was possible between the findings of the 1986 study and the earlier findings of Rosenbloom (1985) showed an increase in the number and types of on- and off-campus clinical programs, research, and public education/health promotion activities, and a decrease in continuing education courses.

The 1986 effort was instrumental in facilitating additional funding to ASCO through the Administration on Aging to support development of a training manual to provide well-developed and field-tested curriculum materials for use by optometric educators⁸ and to conduct five, highly-rated national training workshops on optometric gerontology and issues related to low-income and minority elderly. A recent survey of American Optometric Association (AOA) members found that 79 percent of respondents indicated an interest in attending specific workshops, courses, or tracks in geriatric optometry at state or regional continuing education meetings.⁹ These have included continuing education presentations, ASCO-and AOA-initiated Department of Health and Human Services (DHHS)-funded training projects, and the trend toward greater inclusion of geriatric content in optometric curriculums.

In 1993, in an effort to better understand optometry's current and projected needs for faculty development in this area, the Geriatric Initiatives Branch of the Bureau of Health Professions (BHP) contracted with ASCO to evaluate the existing state-of-the-art of geriatric optometry education in its member institutions. Recognizing the value of comparing current data to results of the 1986 ASCO study, the BHP contract called for completing the following tasks: 1) conducting an updated survey,

2) making comparisons to the earlier data, 3) identifying the training needs and preferences of faculty engaged in teaching geriatric optometry, 4) ascertaining the level of institutional readiness to support faculty training, and 5) providing specific recommendations pertaining to the formats of faculty training programs which might be funded through the *Health Professions Education Extension Amendments of 1992, Public Law 102-408*.¹⁰ This article reports results from this recent research.

Methods

An ASCO Geriatric Initiatives Committee was established in July 1993 to conduct the study. It began the process of designing a series of three mail-out, mail-back questionnaires to collect data needed in order to pro-

■

*In order for the
Optometric profession
to meet the challenges
and opportunities
described...,
rapid improvement
in geriatric optometry
preparedness
must take place.*

vide the information required in the BHP contract and make comparisons with available data.

Sample and Data Collection The sample for the study consisted of chief academic officers and key faculty at the now 17 U.S. schools and colleges of optometry. The first questionnaire was designed to be completed by the chief academic officers at each institution for the purpose of a) identifying primary contact faculty in geriatric optometry at their sites, b) assessing the number of educators needing training in geriatric optometry, and c) describing their institutions' past and future commitment to geriatric optometry.

The second questionnaire was designed to assess the status of geriatric education as well as the back-

ground and training of the primary contact faculty at the optometric institutions. The instrument included items from the 1986 ASCO study to permit relevant areas of comparison as well as new categories of questions to meet the requirements of the contract with the BHP. The resulting questionnaire was sent to the primary contact faculty. These faculty were asked to provide information on a) number and type of formal optometric gerontology courses offered at their institutions; b) extent of informal (courses, workshops, lectures) and formal (university-based certificate or degree) gerontology/geriatrics training of present primary contact faculty; c) continuing education programs in vision and aging; d) current vision and aging research projects; e) types of on- and off-campus clinical activities; f) local availability of training programs in gerontology and geriatrics for optometric faculty development, and g) optimal modes of structuring a faculty development program in gerontology and geriatrics.

A third questionnaire was designed by the committee to procure more definitive information on the type of faculty training program for geriatric optometry preferred by primary faculty. This instrument specifically required the primary faculty to rank their preferences among a) short-term training of 40 hours duration, b) certificate program of 3 to 6 months duration, c) faculty fellowship of one year duration, and d) various percentage FTE commitments ranging from .25 FTE to 1 FTE.

Data Analysis Data from the first survey of chief academic officers yielded a) a list of 27 primary contact faculty who became respondents in the second and third surveys, b) the number of faculty to be trained in geriatric optometry which was tabulated, and c) the level of institutional commitment to the area of geriatric optometry which was categorized as to (i) major types of development which had taken place since 1986 in geriatric education at the schools and colleges and (ii) institutional shifts and expansions in this area that were planned to take place over the next five years. Data from the second survey were refined and summarized in tables. Data from the third survey on training preferences involved raw and weight ranked scoring. The weighted score was arrived at by

assigning the value of 1 to the type of training that was selected by the most people, value of 2 to the training selected as second choice, etc. The weighted choice gives a truer picture of preference. The results of the analysis are presented in the following section.

Results

The significance of the present results is best understood by comparison with the 1986 results. In 1986, a trend within the ASCO member institutions toward expanding the geriatric content of their curriculums was documented. However, despite institutional emphasis on the topic, the majority of the key individuals in geriatrics had no formal training in the subject. Furthermore, only half the respondent institutions maintained a required separate course in optometric gerontology and only a limited number of clinical settings emphasizing geriatrics were provided to optometry students, typically in off-campus settings. Little attention was given to vision and aging in research or continuing education programs. In short, significant limitations in optometric gerontology educational programs and activities were identified in 1986.

Growth in Geriatric Optometry Table 1 compares the findings on geriatric course work of the present study with those of 1986. While in 1986, 5 institutions reported no formal course in geriatric optometry, by 1993, only 1 school reported this status. In 1986, 8 of the schools offered a separate required course in geriatric optometry, and this number increased by 6 to total 14 schools by 1993, constituting a 75 percent increase in the number of schools and colleges offering a separate required course over the seven-year period.

Table 2 presents the educational background in gerontology and geriatrics of the primary contact faculty. The educational background of faculty having teaching responsibilities in geriatrics or gerontology remains limited. In 1986, 69 percent, or eleven primary contact faculty reported having had no formal training, and in 1993, there were still 67 percent, or 18 faculty in this category. There is some evidence that individual primary contact faculty took advantage of resources for specialized informal training available at Geriatric Education

Centers (GECs), universities, and through the previously conducted ASCO workshops, but the overall extent of faculty formal training has not improved.

Table 3 shows an almost doubling in the number of schools and colleges reporting continuing education relat-

ed to vision and aging. That is, from 1986 to 1993, the number of schools reporting no such continuing education courses declined from 10 to 5. The number of schools that did offer such courses increased by 5, from 6 schools in 1986 to 11 in 1993, constituting an 83 percent increase over the

Table 1
Formal and Separate Geriatric Optometry Course Work

<i>Type of Course</i>	<i>Number of Schools and Colleges</i> N=16	
	1986	1993
No formal course	5	1
Elective course	2	0
Combined with low vision	1	1
Separate required course	8	14

Table 2
Geriatrics and Gerontology Training of Primary Contact Faculty

<i>Type of Training/Education</i>	<i>Primary Contact Faculty</i> N=16 N=27	
No formal training	11	18
ASCO Workshops	N/A	13
Geriatric Education Center (GEC) Rotation	3	4
Degree Training/Certificate (e.g., university-based certificate, formal grad. degree)	3	6

Table 3
Continuing Education Courses on Vision and Aging

<i>Type of Course</i>	<i>Number of Schools and Colleges</i> N=16	
	1986	1993
No specific courses	10	5
Specific course on vision and aging	6	11

Table 4
Current Vision and Aging Research
Completed or On-going Research
N=16

	1986	1993
No	10	10
Yes	6	6

Table 5
Institutional Readiness for Geriatric Optometry

Area of Activity	<i>Chief Academic Officers</i> N=17				Total
	Past Accomplishments	Future Plans	Expansions Foreseen	Issues Foreseen	
Clinical Services/ Training	8	3	10	7	28
Formal Faculty Training	4	1	2	2	9
Informal Faculty Training	7	5	-	1	13
Research Initiatives	3	1	2	-	6
Inter-/Multi- Disciplinary Education/ Training	14	4	8	5	31
Knowledge of Normal/ Abnormal Vision Changes With Aging	-	-	1	3	4
Knowledge of Social and Health Care Policy	-	-	-	7	7

[Note: Numbers reflect multiple responses in a single area of activities from some individual Chief Academic Officers.]

Table 6
Local Resources for Geriatric/Gerontologic Education

Resource	<i>Number of Schools and Colleges</i> N=17	
	Yes	No
Geriatric Education Center (GEC)	14	3
University Training Programs in Geriatrics/Gerontology	15	2

Table 7
Affiliations With Outside Geriatric Clinical Settings

Resource	<i>Number of Schools and Colleges</i> N=16	
Veterans Affairs Medical Centers	9	
Nursing Homes	7	
Low Vision Centers	3	
Homebound Programs	8	
No Affiliations	5	

[Note: Numbers above reflect schools with more than one affiliated site.]

seven-year period.

Table 4 shows that research activities on vision and aging were unchanged. Over the seven-year period, the schools and colleges appear to have directed their resources toward the gerontology and geriatrics education and training of clinicians and practitioners to work directly with older patients rather than toward research which has a delayed benefit to older persons.

Together, the data in Tables 1-4 comparing the present results to those of the earlier study document an increase in geriatric optometry course work and continuing education activities over the seven-year period. Faculty training in gerontology and geriatrics, however, remains modest.

Institutional Commitment Tables 1 and 3 show that over the last seven years, the schools and colleges of optometry have demonstrated a commitment to geriatric education through changes in their curriculum and postgraduate educational offerings. The 75 percent increase in the number of institutions offering course work in gerontology and geriatrics, and an 83 percent increase in those offering such content in continuing education courses document the growing recognition of the importance of vision and aging topics to their education programs. Moreover, chief academic officers anticipate the need for training approximately 160 to 190 faculty in geriatric optometry to staff these courses (data not shown).

Institutional and Faculty Readiness Table 5 presents evidence of readiness on the part of schools and colleges of optometry and their faculty to undertake geriatric optometry education and training. Specifically, it presents chief academic officers' reports of past accomplishments and future plans at their institutions regarding faculty training and geriatric optometry education, as well as the most significant issues they expect to emerge in geriatric optometry education in the near future. Responses fell into seven areas of activity: clinical services and training, formal, or informal faculty training, research initiatives, inter- and multidisciplinary education and training, normal vs. abnormal vision changes with age, and social and health care policy.

It can be seen from the first column in Table 5 that inter- and multidisciplinary education and training of faculty was the most frequently mentioned

activity accomplished (14 responses), followed by clinical services and training (8), informal faculty training (7), and formal faculty training (4). The second column indicates that future plans mentioned for faculty training involve informal training (5 responses), followed by inter- and multidisciplinary training (4), clinical services and training (3), formal training (1), and research (1). The third column shows the most prominent area of expansion in geriatric optometry education to be clinical services and training (10 responses), followed by inter- and multidisciplinary education and training (8), formal training (2), research (2), and knowledge of normal vs. abnormal vision changes with age (1). Finally, the fourth column shows that the most significant issues expected to emerge in geriatric optometry are clinical services and training and knowledge of social and health care policy (7 responses each), inter- and multidisciplinary education and training (5), knowledge of normal vs. abnormal vision changes with age (3), formal faculty training (2), and informal faculty training (1). Summing responses across the columns, then, it can be seen that three areas of geriatric optometry in which schools and colleges of optometry appear to be most heavily invested are: inter- and multidisciplinary education (31 responses), clinical services and training (28), and informal faculty training (13).

A second gauge of the schools and colleges' capability of supporting intense geriatric faculty training is the availability of appropriate resources within commuting distance. The Committee consulted listings from the BHP_r, the Association for Gerontology in Higher Education Directory¹¹, and survey responses from primary faculty members to ascertain the availability of local GECs, university-based training programs and other education and training resources (e.g., Veterans Affairs Interdisciplinary Team Training in Geriatrics (ITTG) or Geriatric Research Education and Clinical Care (GRECC) programs). Table VI shows that the majority of schools and colleges have nearby resources available.

A third factor that was considered indicative of readiness was the current affiliation with outside geriatric clinical settings. Table VII shows that two-thirds of the schools and colleges not only had such an affiliation, they maintained affiliations with multiple

institutions and programs.

As a final indicator of readiness, primary optometric faculty were surveyed regarding their preference for faculty training format, absent the usually perceived barriers to faculty involvement (e.g., the need for release time, funding limitations, etc.). Table 8 presents the rank ordering of the faculty's preferred training formats and durations. While 18 percent of the twenty-one respondents indicated a willingness to participate in an optometry fellowship program of longer duration, the majority were interested in programs of shorter duration and less time, 57 percent preferred short-term training and 25 percent preferred a certificate program.

Discussion

The findings of the present study, interpreted within the context of current health policy and programs for the older population, call for a massive training effort. A larger cadre of present faculty leaders in schools and colleges of optometry must be trained in gerontology and geriatrics in order to conduct the education and training of future optometrists to deliver care to the aging population.

Health Policy Trends and Implications
Much of what is discussed in the current health care debate centers on the growing needs of older patients, and optometry is a major provider in the health care industry's ability to meet

Table 8
Rank Order of Faculty Preferred Training Options

Primary Contact Faculty N=21				Percent of Faculty Preferring Each Category of Training Options
Rank Order	Training Option	Rank Order	Training Option	
Raw		Weighted**		
1	Short Term Training	1	Short Term Training }	57
2	Certificate (0.25 FTE)	2	Certificate (0.50 FTE) }	25
3	Certificate (0.50 FTE)		Certificate (1.0 FTE) }	
4	Certificate (1.0 FTE)	4	Certificate (0.25 FTE) }	
5	Fellowship (0.50 FTE)	5	Fellowship (0.50 FTE) }	18
6	Fellowship (0.75 FTE)	6	Fellowship (1.0 FTE) }	
7	Fellowship (1.0 FTE)	7	Fellowship (0.75 FTE) }	

* 1 indicates most and 7 indicates least preferable

** The weighted score is arrived at by assigning the highest value to the number of people who select a category as first choice, second highest value to the number of people who select a category as second choice, and so on.

Table 9
Recommended Faculty Training Options in Geriatric Optometry

1. Faculty Fellowship Training program in Geriatric Optometry (one year with minimum of .5 FTE commitment)
2. Faculty Development Certificate Program in Geriatric Optometry (six months with a minimum of .25 FTE commitment)
3. Faculty Enhancement Short-term Training in Geriatric Optometry (100 hour minimum commitment)

future needs. Optometrists are by definition primary eye care providers, and much has been said about the shortage of primary care providers in meeting the needs of health care reform. The larger numbers and wider distribution of optometrists relative to ophthalmic surgeons underscores the role of optometrists in caring for older adults. Without routine, periodic vision and eye care, virtually all older adults would suffer impairment due to uncorrected refractive error (especially presbyopia) and the risk that undetected eye diseases (most commonly cataract, macular degeneration, glaucoma, and diabetic retinopathy) would not be detected early enough for most beneficial treatment. Current training and scope of licensure of optometrists underscore this profession's ability to meet these needs.

Trends in Geriatric Optometry Education The present research documents the recent growth and planned increase in the emphasis on geriatrics content in the curriculum of the schools and colleges of optometry. Paradoxically, the survey also documents a virtual stalemate in faculty development in this area (see again Table 2). The majority of faculty teaching geriatric optometry curriculum who report having had no formal training at all are, by conventional definition, under-prepared for that responsibility. In order for the optometric profession to meet the challenges and opportunities described above, rapid improvement in geriatric optometry preparedness must take place.

Faculty Preference in Training and Implications The majority of faculty respondents in the present research stated a preference for shorter rather than longer training formats, although almost 20 percent of respondents did recognize the need for and value of a training program of broader scope. This finding suggests that the optometric profession is still evolving toward an academic specialty of geriatric optometry. Granted, there is an immediate need for trained faculty, and therefore, short-term training of faculty. But in order to meet the diverse needs of current faculty who have teaching responsibilities in the field expeditiously, more than one format for the training should be developed.

Recommendations

With these background considerations in mind, the following recom-

mendations for faculty training programs in geriatric optometry are proposed.

Training Models Based on the documented commitment to geriatric education on the part of the schools and colleges, the need for training of optometric educators, and the level of faculty readiness for professional development, the ASCO Geriatric Initiatives Committee recommends three models of faculty training.

These models should include didactic, clinical, teaching, administration, research, evaluation, and other components as appropriate. It is recognized that the training programs may differ somewhat, both within and across models, based on the unique organizational structure, program aspects, and local resources of the schools and colleges of optometry which may offer them.¹²

Specifically, the Committee recommends that a) two Centers of Excellence be established to offer training to optometry faculty under a one-year fellowship model, b) five programs be funded to support faculty training through a faculty certificate program, and c) a faculty enhancement short-term training program be developed. Furthermore, the committee recommends that d) existing federally funded faculty development fellowship programs in geriatric medicine and dentistry make their resources available to support optometric faculty training, and e) federally funded GECs establish or expand affiliations with schools and colleges of optometry in order to make additional resources available for optometry faculty training programs. Finally, the Committee recommends that f) BHP support participation by optometry in future renewal legislation of the *Health Professions Education Extension Act* in order to maintain sustained development of optometry faculty training programs and ensure long-term improvement of optometry faculty preparedness.

These are actions which are needed in order to upgrade geriatric optometry education to levels that are required by population demographics and epidemiology of eye disorders.

Acknowledgement

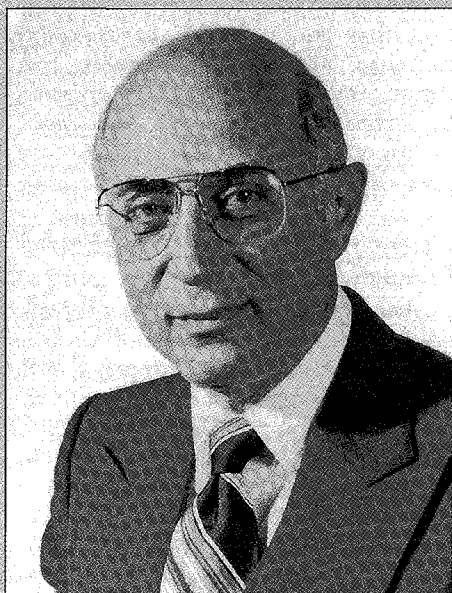
The ASCO Geriatric Initiatives Committee expresses its thanks to a number of individuals without whose assistance this research project would not have been possible: Mr. Dave

Danielson (AOA lobbyist who worked diligently to have optometry included in PL 102-408); Ms. Jackie Doyle (former ASCO grants manager who supported AOA efforts early on, responded to BHP requests, and served as project manager for this research contract); Mr. Martin Wall (ASCO executive director); Bureau of Health Professions staff, and numerous key individuals in the 17 ASCO member institutions (who tirelessly responded to multiple surveys, phone calls and other requests to provide the data needed to complete this research).

References

1. U.S. Department of Health and Human Services. Aging America: trends and projections, 1991. Springfield, VA: United States Department of Commerce. DHHS Publication No. (FCOA) 91-28001. Washington DC.
2. Reuben DB, Zwanziger J, Bradley TB, et al. How many physicians will be needed to provide medical care for older persons? Physician manpower needs for the twenty-first century. JAGS 1993; 41:444-453.
3. Havelik RJ. Aging in the eighties: impaired senses for sound and light and persons aged 65 years and over. Advancedata No. 125, 1986.
4. Greenburg DA, Branch LG. A review of methodological issues concerning incidents and prevalence data of visual deterioration in elders. IN: Secular R, Kline D, Dismukes K (eds.), Aging and human visual function. New York: Allen R. Liss, 1982.
5. Kirchner C. Data on blindness and visual impairment in the United States: a resource manual on characteristics, education, employment, and service delivery. New York: American Foundation for the Blind, 1985.
6. Rosenbloom A. Optometry and gerontology: a vital link. Journal of Optom Educ 1985 Fall; 11(2): 15-18.
7. Aston, SJ, DeSylvia, DA, Mancil, GL. Optometric gerontology: state of the art in schools and colleges of optometry. Journal of Optom Educ 1988; 14 (1): 8-12.
8. Aston, SJ, DeSylvia, DA, Mancil, GL., eds. Optometric gerontology: a resource manual for educators. Association of Schools and Colleges of Optometry, Rockville, MD., 1990., revised 1992.
9. Swanson M, Rosenbloom A, Music, J. The perceived needs of practicing optometrists in geriatric continuing education. J Am Optom Assn 1994; 65(8): 596-599.
10. Health professions education extension amendments of 1992, Pub. L. No. 102-408, Annotated 42 U.S.C. 2940 (c).
11. Lobenstine J, Went P, Peterson D, eds. National directory of educational programs in gerontology and geriatrics (6th Ed.). Washington, DC: Association for Gerontology in Higher Education, 1994.
12. Mancil GL, Aston SJ, Carter TL, Gilford R. Faculty training in geriatric optometry. Rockville, MD: Department of Health and Human Services, Bureau of Health Professions, Geriatric Initiatives Branch, 1994.

Former ASCO President Receives AOA Award



Dr. Alfred A. Rosenbloom

Dr. Alfred A. Rosenbloom, president of the Association of Schools and Colleges of Optometry from 1979-1981, received the American Optometric Association's 1995 Distinguished Service Award, which was presented at AOA's 98th Annual Congress in Nashville.

Dr. Rosenbloom was dean and then president of the Illinois College of Optometry, positions he held over a 26-year period. He served on numerous committees and commissions in the American Optometric Association and in the American Academy of Optometry. He co-edited two widely used textbooks on aging vision and pediatric optometry.

His efforts in the low vision area date back to the mid-1950s when he established direct patient low vision

clinical services at The Chicago Lighthouse for People Who are Blind or Visually Impaired. He continues to serve as director of low vision services.

Dr. Rosenbloom currently is on the boards of the American Foundation for the Blind, the Illinois Society for the Prevention of Blindness and the National Accreditation Council for Agencies Serving the Blind and Visually Handicapped.

Dr. Rosenbloom is a graduate of the Illinois College of Optometry and the University of Chicago. He currently is a Ph.D. candidate at the University of Chicago.

In his acceptance remarks, Dr. Rosenbloom expressed his "sincere appreciation to many academic colleagues in the U.S. and abroad. Among them have been teachers, administrators, and researchers. From my associations with them, I have learned and grown professionally. Our bonds were further strengthened through a common commitment to goals fostered by the Association of Schools and Colleges of Optometry."

NEW VOLK Combination Lens Sets

With optics for both the slit lamp and indirect ophthalmoscope, field of view and magnification are at your fingertips in the compact 3" x 4" case.

NEW VOLK COMBINATION LENS SETS FEATURE THE FOLLOWING LENSES:

- VOLK 20D or Pan Retinal 2.2 Lens and
- SuperField NC, 90D, 78D or 60D Lens and
- VOLK 3 Mirror Gonio Fundus Lens

FIELD AND MAGNIFICATION CHARACTERISTICS

Indirect Ophthalmoscope Lenses	Approximate Image Magnification	Approximate Field of View
20D 50mm	2.97	46°
Pan Retinal 2.2 52mm	2.56	56°

Slit Lamp Lenses	Approximate Image Magnification	Approximate Field of View
60D 31mm	1.09	67°
78D 31mm	.87	73°
90D 21.5mm	.72	69°
SuperField NC 27mm	.72	120°

VOLK 3 Mirror Gonio Fundus Lens	Full fundus examination is provided by mirror angles designed to eliminate "gaps" in the visualized fundus. The mirrors are angled at 76°, 66° and 60°.
---------------------------------	---



VOLK lenses are the only U.S. manufactured indirect lenses made of GLASS and come standard with *SupraCoat* anti-reflection multi-coating. VOLK lenses can be ordered from any authorized VOLK distributor or by calling VOLK direct.

VOLK The Leader in Aspheric Optics 7893 Enterprise Drive, Mentor, OH 44060 U.S.A.
Phone: 1-800-345-8655 or (216)942-6161 • TLX: 211395 VOLK UR • FAX: (216)942-2257

Including Optometric Services for the Homebound Elderly in the Curriculum

Benjamin Freed, O.D.
Mark Kirstein, O.D.

Abstract

A mobile primary eyecare service is offered to homebound elderly residents of New York City by the State University of New York College of Optometry. Fourth year students are required to participate in the visits as they learn the techniques of using hand held equipment to examine individuals who have a high rate of ocular disease and might otherwise not receive ophthalmic services.

Key Words: Home eye care, home health care, primary vision care, homebound elderly, low vision care

Introduction

The College of Optometry of the State University of New York has conducted an optometry service for homebound residents of New York City as a part of its professional curriculum for three years. Primary eye examinations, eyeglasses, and low vision

devices are provided by faculty members and senior optometry students in the homes of elderly individuals who could not otherwise access such services. This article will present a profile of the service as a part of the fourth year curriculum in an effort to encourage other optometrists, schools and agencies to incorporate home visits into their programs.

For older people with functional impairments, living at home offers many advantages: they can remain in familiar surroundings, retain some continuity of lifestyle, and have a choice in the acquisition of services.¹ Living at home also remains the lower cost option compared to a nursing home for many individuals. According to the 1990 census, an estimated 5.9 million people over 65 (over 20% of this age group) reported having either a mobility or self-care disability (difficulty traveling outside the home alone or taking care of personal needs).² Estimates range from 1.6 million severely impaired elderly living at home, needing substantial long-term care assistance with the activities of daily living,³ to as many as 9 to 11 million Americans in need of home care services.⁴ The growth in the number of elderly people in need of long-term care at home has been and is projected to be greater than the growth of the nursing home population.⁵ Since the population over 65 is predicted to nearly double by the year 2030,⁶ the demand for home-based

medical and related services will increase accordingly.

A complex combination of mental and physical disorders affects this population which is already beset by poor housing, financial difficulties, and social isolation. Two-thirds of individuals over 65 living at home suffer from at least one chronic condition that can decrease independent mobility.⁷ The primary disabling conditions in this age group are: arthritis, hypertension, hearing impairment, orthopedic impairment, heart disease, and visual impairment.⁸

Ocular Disease in the Homebound Population

Although high rates of ocular disease in nursing home populations have consistently been reported, little is known about ocular disease in the homebound population. Out of 50 of our own cases randomly chosen for review, 37 (74%) were diagnosed with cataracts, 15 (30%) were diagnosed with macular degeneration, 6 (12%) were diagnosed with glaucoma, and 3 (6%) were diagnosed with diabetic retinopathy (age range 32-98, mean = 78 years). When reviewing the records of 25 randomly selected home-bound patients (50 eyes) for whom Snellen chart acuities were obtainable, we found the average corrected logMar visual acuity to be .53 (20/68). To compare, a review of 25 age-matched non-homebound patients seen at the University Optometric Center had an average logMar acuity of .26 (20/36). Given that measurements were not well controlled in this retrospective study, it could not be concluded that homebound patients have significantly lower visual acuities than the non-home-bound, only that a more rigorous analysis is needed to prove this hypothesis.

However, research has shown that the homebound are more than twice as likely as the non-homebound to report difficulty in reading regular print.⁹ Furthermore, visual impairment has been shown to be a significant contributor to functional disability in long term care patients.¹⁰ The homebound population therefore appears to present a greater demand for optometric services than the non-homebound. They are, however, underserved by eyecare professionals due to the lack of financial incentive. Indeed, out of 50 cases chosen for review, only two had been seen previ-

Dr. Freed directs the Homebound Visitation Program at the SUNY College of Optometry and is a staff member at the Lighthouse Inc.

Dr. Kirstein is a faculty member of the SUNY College of Optometry and the New Jersey Medical School.

ously for a home visit by either an optometrist or ophthalmologist.

SUNY's Homebound Optometric Services

To fill this gap of service in the community, the SUNY College of Optometry provides homebound optometric services to the five boroughs of New York City. It has been funded since 1992 by the Corporation for National and Community Service, a federal program funding higher education learning-through-community-service initiatives. In addition to the provision of optometry services to homebound elderly, the mission of the program has been to:

- **instill** a sense of community service in fourth year optometry students;
- **teach** the students the clinical skills required in the use of portable optometric equipment; and
- **develop** linkages with other medical and social service agencies that serve this population.

Third year optometry students at the SUNY College of Optometry are introduced to the concepts of homebound care and the use of portable equipment during their geriatrics course. Trial frame refractions are taught in a separate course in low vision care. For at least one day during their senior year, students participate in the homebound program which operates two days per week. Students are encouraged to perform as much as possible of the exam, which generally lasts one and one half hours.

The suggested examination protocol and equipment needed for home visits has been described.¹¹ The basic portable equipment includes a trial lens set and frame, slit lamp, binocular indirect ophthalmoscope with battery pack, direct ophthalmoscope, retinoscope, battery-powered lensometer, frame assortment, low vision aids, Goldman tonometer, eyecharts, and diagnostic pharmaceutical agents.

Referrals for the visits are accepted from a variety of sources including families, social workers, nurses, physicians, optometrists and opticians. Prior to the visit, the faculty member telephones the patients to conduct a needs assessment, describe the service, and schedule the appointment. Medicare and Medicaid reimbursements are accepted as payment for examinations. Eyeglasses are often

an out-of-pocket expense and are paid for at the time of the visit, although arrangements can be made to reduce fees if necessary. Eyeglass frames are adjusted at the site during the visit. The same frame has lenses inserted at the Optometric Center and is mailed to the patient along with instructions on its use. Low vision aids, if needed, are dispensed at the time of the visit. After the visit, reports are written back to the referral sources, and follow-up visits are made when necessary. Students are required to follow up on their patients by telephone after the glasses are received.

In addition to primary care, the program provides basic refractive and appliance services to individuals in need of an update in their eyeglass prescriptions, a much appreciated program benefit. (Of our fifty-case sample, 74% were in need of an update in at least one pair of glasses.) For example, a 68-year-old male, bed-bound and without glasses for several years had resigned himself to his "blindness." A simple refraction corrected him to 20/20 vision in each eye; new bifocals were mailed to him which likely changed his quality of life by enabling him to read normally.

An important distinguishing characteristic of the homebound population is their reluctance to consider surgical treatment of ocular conditions such as cataract and retinal neovascularization. They either have "had enough of doctors," can't cope with the prospect of surgery, or simply won't or can't make the trip to the office or hospital. Of a sample of 20 patients in our program who were recommended to have surgical evaluations for cataract removal, 90% refused, and the remaining 10% still had not had the surgery at a one-year follow-up. This reluctance to consider intervention must be taken into account when making clinical decisions. The issue of patients' rights that arises for many homebound cases presents an excellent opportunity for students to learn sensitivity to patients' needs in the context of medical ethics.

In addition to new clinical skills learned, the home visit presents students with a unique opportunity to observe patients in their everyday functional environment and make recommendations in the following areas:

- illumination needs;

- visual status as it affects activities of daily living;
- use of glasses and low vision aids for specific tasks;
- need for other professional intervention, e.g., physicians, nurses, social workers, etc.

Conclusion

As the need for long term home health care grows, so too will the need for optometry to play an essential role as a part of the home health care team. Training optometry students in the field sensitizes them to the medical and functional needs of both the homebound and non-homebound geriatric populations, while instilling in them a sense of community service.

References

1. Orr A. Issues in the continuum of long-term care. In: Orr A, ed. *Vision and aging, crossroads for service delivery*, New York, New York: American Foundation for the Blind, 1992:311.
2. U.S. Department of Health and Human Services/Public Health Service. Prevalence of mobility and self-care disability - United States, 1990. In: *Morbidity and Mortality Weekly Report* 1993 Oct; 42(39):760-767.
3. Rowland, D. Help at home: long term care assistance for impaired elderly people, a report of the Commonwealth Fund Commission on Elderly People Living Alone. Baltimore, MD: The Commonwealth Fund Commission, 1989: 18.
4. Anonymous. Basic statistics about home care. Washington, D.C.: National Association for Home Care, 1994:5.
5. Anonymous. Aging America, trends and projections. Prepared by the U.S. Senate Special Committee on Aging, The American Association of Retired Persons, the Federal Council on Aging and the U.S. Administration on Aging, 1991: 149.
6. United States Bureau of the Census. Statistical Abstract of the U.S.: 1993. Washington, D.C.: 1993:24.
7. Orr A. Aging and Blindness: toward a systems approach to service delivery. In Orr A, ed. *Vision and aging, crossroads for service delivery*, New York, NY: American Foundation for the Blind, 1992:6.
8. Siegel J. A Generation of change: a profile of America's older population. New York, NY: Russel Sage Foundation, 1993:244.
9. Horowitz A, Teresi J, Cassels L. Development of a vision screening questionnaire for older people. In: Nancy Weber N, ed. *Vision and aging: issues in social work practice*. Binghamton, New York: The Haworth Press, 1991:46.
10. Horowitz A. Vision impairment and functional disability among nursing home residents. *The Gerontologist* 1994 Jun; 34(3): 316-323.
11. Windsor R. Management of low vision patients who are homebound or in long-term care facilities. In: Cole R and Rosenthal B ed. *Problems in optometry, patient and practice management in low vision*, vol. 4, no. 1, Philadelphia, PA: JB Lippincott, 1992: 139.

Meeting Future Demands for Educators In Geriatric Optometry

Nina Tumosa, Ph.D.
Timothy A. Wingert, O.D.
W. Howard McAlister, O.D., M.A., M.P.H.

Abstract

The size of the geriatric population is increasing. More training of optometric clinicians and educators in geriatrics is needed to meet the demands of this growing population. This paper describes a residency program in geriatric optometry combined with a Master of Science (M.S.) in Gerontology which is designed to provide optometric training in geriatrics. This program has three components: optometric care of elderly patients, supervised student teaching, and course work in geriatrics. The clinical component of the program is incorporated into the coursework requirements for the M.S. degree. The teaching component is designed to train clinicians to be educators. This program provides multidisciplinary training in the treatment of the geriatric patient. Such training makes graduates better aware of how to provide medical, emotional, and social care of the elderly.

Key Words: Optometric geriatric education, nursing home care, Geriatric residency program

Introduction

The Association of Schools & Colleges of Optometry (ASCO) conducted a survey of the 69 optometry residencies offered by 15 Schools of Optometry in 1993.¹ Primary care and family practice residencies accounted for slightly less than 40% of all resident positions, 22% were in pediatrics/vision therapy, 17% in disease, 12% in contact lenses, and 7% in low vision. Only 3% were in geriatrics.

This is alarming given that 12% of the United States' population (25 million) are over the age of 65² and the number is expected to rise to 51 million by the year 2020.³ The fastest

growing portion of the population is comprised of those over the age of 85. Presently 1% of the population (2.5 million) are over 85² and by the year 2000 that figure is expected to double.²

The average age of nursing home residents in the U.S. is 79,⁴ with 80% over the age of 75,⁵ and 45% over the age of 85.⁴ Unlike physical therapy, psychiatric evaluation, and routine medical care, optometric care is normally not available at a nursing home unless the patient's family makes private arrangements. Only 26.2% of long-term care facilities offer any eye care,⁶ although the need for optometric care in nursing homes is well documented.⁷⁻¹¹

The need for increased optometric care is not limited to nursing home patients. Among all of the elderly there is an increased risk with age for cataracts, macular degeneration, glaucoma, and diabetic retinopathy.¹² These four diseases are the leading causes of blindness in the United States.¹³ A recent study of the elderly in Los Angeles quantifies the prevalence of these diseases as 29.5%, 5.1%, 6.3%, and 1.2% respectively.¹⁴ Concurrent with the increase of these ocular diseases is an increase in other optometric problems such as presbyopia, impaired visual acuity, dry eye, and eyelid anomalies. This increase in optometric problems is paralleled by an increase in other physical, emotional, medical, and social problems. All of these problems make treatment of an eye disease in an elderly patient more complicated than treatment of that same disease in a younger, healthier patient.

In order to train optometrists to better treat the elderly patient it is not enough to simply increase the number of residencies in geriatrics. The type of training must change also. It is not enough to train clinicians to treat the optometric problems of the elderly. They must be trained also to understand the problems of being elderly.

This paper describes a two-year residency program designed to educate optometrists to better understand the challenges of growing old. A residency in geriatrics is combined with an academic program in gerontology. This combined program trains optometrists to provide geriatric care and also how to teach geriatrics to optometry students. Thus, the dual role of training clinicians and educators is met.

Dr. Tumosa is an assistant professor at the University of Missouri - St. Louis School of Optometry (UMSL) and chief of the Primary Case Clinic.

Dr. Wingert is an associate professor at UMSL School of Optometry and a fellow of the American Academy of Optometry.

Dr. McAlister is an associate professor and the director of residencies at UMSL Optometry. He is a fellow of the American Academy of Optometry and a diplomate in the Academy's Public Health Section.

Description of the Program

The program has three components: 1) clinical responsibilities in nursing homes and in a co-management center, 2) student teaching of geriatric topics in professional optometric courses supervised by a resident advisor, and 3) coursework in the field of gerontology. The resident's time is not split equally among the three items, but all are essential components of the program. Each of these components is discussed below.

Clinical Program: The first component, the clinical program, teaches the resident to provide patient care at nursing homes and to participate in co-management of surgical patients in an ophthalmology practice. During both years of the residency program, the resident makes weekly visits, under the supervision of a clinical faculty member who is a licensed optometrist, to four nursing homes. In year one of the program the supervision is direct, with that supervisor present at all patient encounters. In year two the supervision is indirect with the supervisor reviewing all patient records with the resident after the encounters.

Each week at all four nursing homes newly-admitted patients are given a comprehensive optometric examination. If spectacles are prescribed the patient selects a frame and the resident dispenses the glasses during his or her next visit. Former patients are seen for follow-up on an as-needed basis determined by recommendations from the floor nurses and/or the resident. Pharmacological agents are prescribed and monitored as needed with each visit. For those diseases which have progressed beyond the scope of optometric practice, consultations are requested from ophthalmologists, other specialists, and/or primary care physicians. These diseases include diabetic retinopathy, cataracts, macular degeneration, suspected tumors, and detached retinas. Letters of referral and consultation requests are handled by the resident. Whenever possible, ophthalmological consults for patients from these four nursing homes are scheduled for one of the two half-days that the resident is at the co-management center. This allows for continuity of care for the nursing-home patients as well as for co-management education for the resident. The other half-day is devoted to furthering the resident's education in

disease and pathology. The resident spends that day reviewing surgical cases and observing patients from the ophthalmology practice under the supervision of the staff ophthalmologist and optometrist.

The resident, in conjunction with clinical faculty from the school of optometry, provides 24-hour emergency coverage to the nursing-home patients. These emergencies have ranged from such things as adverse drug reactions and acute red eye to broken spectacles. Emergencies seldom arise more often than once a month in any one nursing home. The most common emergency is a broken frame or a shattered lens.

The resident is responsible for overseeing the third party billing for all services. Because the four nursing homes are independent of one another, no uniform billing procedure can be established. Sometimes billing is done in cooperation with the billing clerk at the nursing home and sometimes the billing is done independent of the nursing home. This management of the billing by the resident allows the university's fiscal agent to track revenue resulting from the resident's professional services at each of the nursing homes.

Teaching Program: The resident is trained by the residency advisors to teach in the professional curriculum. The residency advisors are optometrists and other tenure-track faculty at UMSL. These people administer the residency program and educate the resident in teaching techniques. The resident is trained in both didactic and clinical teaching.

For didactic instruction, the advisors teach the resident how to research, develop, and organize a lecture in weekly meetings. Practice lectures are critiqued by the advisors. The resident then delivers these didactic lectures to optometry students in both public health and geriatric optometry.

The resident also delivers in-service lectures to nursing home aides, nurses, and administrative personnel. The topics of these in-service programs include common ophthalmic drugs and their use, as well as discussion of the effects of commonly prescribed systemic drugs on the visual system.

In addition to the didactic teaching, the resident also does clinical teaching during the second year of the residency. Fourth-year optometric students

do a community service rotation in one of the four nursing homes served by the residency program. Every eight weeks a different group of 4th-year interns works at the nursing home. During the first year of the residency, one of the residency advisors serves as the supervising doctor for both the resident and the interns. During the second year of the residency, the resident serves as the supervising doctor for the interns.

Academic Program: Over the two-year period of the program, the resident is also required to earn an M.S. degree in gerontology granted by the Gerontology Department at the University of Missouri-St. Louis (UMSL). The resident takes coursework in an interdisciplinary program that prepares him or her for management or direct service positions working with the aged. The resident then has not only an optometric career, but also the credentials to interact with social service organizations in providing comprehensive medical care to the elderly. The M.S. degree also provides the resident with academic credentials should he or she decide to enter a teaching career in a school of optometry or medicine. Several faculty at UMSL hold joint appointments in optometry and gerontology and assist in instructing non-optometrists, as well as optometrists, in optometric-based didactic courses.

The degree program consists of 45 credit hours including 27 hours of gerontology courses, a 3-hour research methods course, and 15 hours of specialization. Courses may be selected from the fields of biology, optometry, education, psychology, social work, public policy, or anthropology. The area of specialization can be in any of these areas but is expected to be in the student's area of professional training. The areas of emphasis for both required and elective courses are listed in Table 1. There is no thesis requirement in this M.S. degree program.

The combined residency/M.S. in Gerontology takes two years to complete. For the resident who cannot devote two years to the program, a one-year alternative has been developed. In this program, the resident is required to complete a minimum of 18 credit hours in the gerontology curriculum, instead of the 45 credit hours required for the Master's degree. Upon completion of these 18 credit hours, the resident receives a

Table 1
Required Coursework
M.S. Degree in Gerontology
45 Credit Hours

Area of Emphasis	Minimum # of credits
Public Policy and Aging	6 credits
Health Behavior of the Elderly	2 credits
Physiological Theories of Aging	2 credits
Psychological Aspects of Aging	3 credits
Sociocultural Aspects of Aging	3 credits
Research in Gerontology	3 credits
Specialization Area	15 credits
Electives	11 credits

Table 2
Required Coursework
Certificate in Gerontology
18 Credit Hours

Area of Emphasis	Minimum # of credits
Public Policy and Aging	3 credits
Health Behavior of the Elderly	2 credits
Psychological Aspects of Aging	3 credits
Sociocultural Aspects of Aging	3 credits
Electives	6-7 credits

Graduate Certificate in Gerontology. While not an official degree, the certificate documents that the recipient has devoted significant time to further study of gerontology at the post-graduate level. A graduate certificate program does not have a thesis or research requirement beyond that of the residency. The required coursework for the graduate certificate in gerontology is listed in Table 2.

Conclusions

Recruitment: The demand for this program from the nursing homes is so great that it could easily be expanded if we could find qualified candidates who were willing to extend their education another two years after graduation. Unfortunately, the interest on the part of applicants in making a two-year commitment beyond their professional degree is far less. Eight candidates have been interviewed in the two years that we have recruited for this program. Only 25% have expressed a willingness to spend two years earning an M.S. degree. The remaining 75% have expressed a wish to work on the Certificate in

Gerontology only. The most common reason given for doing a one-year residency was the large debt load incurred in optometry school. Resident applicants wished to earn a higher salary sooner rather than later in order to pay back student loans on schedule.

Two people have been accepted into the two-year program.

One person could not relocate to St. Louis for personal reasons. The other resident began the program but returned to active duty in the Army at the beginning of the second year. He received a Graduate Certificate in Gerontology. As a direct result of his residency training he is qualified to assist in the development of residency programs within the medical treatment facilities of the Army. Thus, both the clinical and the teaching aspects of the program will be used by this resident.

The component of the program that causes few candidates to consider it as their first choice for a residency is the two-year commitment. Only a quarter of the applicants were willing to commit two years beyond their

professional degree to further education, even though the graduate degree would increase their options for a career in optometry. Haffner¹⁵ was right when he stated that there is a need to show new optometric graduates that graduate school is both an economically and an occupationally viable option.

Therefore, there is a need to consider non-traditional candidates such as mid-career optometrists who have already paid back their loans and are looking for a sabbatical. In addition, retiring optometrists who are looking for the opportunity to remain active in the profession without requiring the higher income traditionally received in private practice are likely candidates. An unexpected source of residents has been our other residency programs. A former family practice resident has taken over the nursing-home duties of the geriatric residency in order to expand her experiences with the elderly population. In addition, because the demand for geriatric care from the community is so great, we have expanded our family practice residency to include some nursing homes not covered by the geriatric residency. The addition of the geriatric component to the family practice residency was the extra element that caused this year's successful applicant to choose our offer over another.

Cost: The revenues from patient care provided in nursing homes cover the salary, tuition, and fringe benefits of the resident. The initial budget for equipment, including portable optometric equipment as well as a portable computer for on-site record keeping, was funded by internal research funds from UMSL. Because geriatric care has been identified as an underserved need in the community, we have had little difficulty in receiving grant funding through the university, the government, and private foundations such as the Retirement Research Foundation to cover these set-up expenses.

Benefits: In addition to providing training and clinical care in an underserved area, this residency program increases optometry's visibility in the community. The residents and supervising optometrists interact with patients, nursing home administrators, other health-care professionals, and families of patients. These interactions allow others to see the valu-

able contributions optometrists can make to health care.

Acknowledgements

We thank our dean, Dr. Jerry Christensen, and our associate deans, Drs. David Davidson and Gerald Franzel, as well as Dr. Robert Calsyn, director of gerontology, for their enthusiasm for this new program. Without them this residency would not have been developed. This work was supported by a grant from the Retirement Research Foundation. □

References

1. Barresi BJ. Viewpoint* new federal support needed for residency programs. ASCO'S Eye on Education. January/February 1994: 1.
2. Aston SJ. Demographics of aging. In: Aston, SJ, DeSylvia-Valenti D, Mancil GL, eds. Optometric Gerontology: A Resource Manual for Educators. Association of Schools and Colleges of Optometry, 1989.
3. Thompson PG. Aging in the 1990s and beyond. Occupational Med 5:807.
4. Butler RN, Lewis MI, and Sunderland T, ed., Aging and mental health. positive psychosocial and biomedical approaches. New York: Macmillan Publishing Company, 1991.
5. U. S. Senate. Special Committee on Aging. Aging America: trends and projections. U.S. Government Printing Office, 1986:498-116-814/42395.
6. The Marion Merrell Dow Managed Care Digest. Long Term Care Edition. Kansas City, MO. 1993:1-52.
7. Morer JL. The nursing home comprehensive eye examination. J Am Optom Assoc 1994;65(1):39-48.
8. Mancil G. Delivery of optometric care in nontraditional settings: the long-term care facility. Opt Vis Sci 1989;66(1):9-11.
9. Wingert TA, Tumosa N, McAlister, WH. Epidemiological evidence that access to routine optometric care benefits nursing home residents. Optom Vis Sci 1992;69(1):886-888.
10. Whitmore WG. Eye disease in a geriatric nursing home population. Ophthalmology (Rochester) 1989;96(3):393-8.
11. Woodruff ME, Pozza M, Gagliardi M. Vision impairment and blindness in New Brunswick nursing homes. Can J Optom 1985;47(1):11-24.
12. Kini MM, Leibowitz HN, Colton T, Nickerson MA. Prevalence of senile cataract, diabetic retinopathy, senile macular degeneration, and open-angle glaucoma in the Framingham eye study. Amer J Ophthalmol 1978;85(1):28-34.
13. Pizzarello LD. The dimensions of the problem of eye disease among the elderly. Ophthalmology 1987;94(9):1191-1195.
14. Haronian E, Wheeler NC, Lee DA. Prevalence of eye disorders among the elderly in Los Angeles. Arch Gerontol Geriatr 1993;17(1):25-36.
15. Haffner AN. Graduate education in optometry-what do we need? Optom Vis Sci 1993;70(8):614-615.

ASCO Meetings Calender

September 1995 – August 1996

November 1995 Fall Meetings – Boston, Massachusetts

2nd	Executive Committee Meeting (Sheraton Boston Hotel and Towers)
3rd	Board of Directors (Sheraton Boston Hotel and Towers)
4th	Board of Directors (NEWENCO)

December 1995

8th	Continuing Education Directors SIG Meeting (New Orleans Hilton)
10th	Residency Education SIG Breakfast (New Orleans Hilton)

February 1996

16th – 18th	Optics Faculty SIG Conference (Lansdowne Conference Resort, Leesburg, VA)
-------------	---

March 1996

15th	Spring Board of Directors Meeting (Lansdowne Conference Resort, Leesburg, VA)
15th – 17th	Critical Issues Seminar (Lansdowne Conference Resort, Leesburg, VA)

June 1996

Annual Meeting – Portland Oregon

19th	Executive Meeting
20th – 21st	Annual Meeting
21st	Annual Luncheon
23rd	Sustaining Member Breakfast

August 1996

9nd – 11th	Residency Education SIG Conference (Lansdowne Conference Resort, Leesburg, VA)
------------	--

IN REVIEW

Primary Care of the Cataract

Patient, Cynthia Ann Murrill, David Lee Stanfield and Michael D. Van Brocklin, East Norwalk, Conn., Appleton & Lange, 1994, 267 pages, index, illustrated, \$80.00.

As the scope of optometric practice expands, and as the population ages, the need for cooperation between ophthalmologists and optometrists in the comanagement of patients with cataracts is essential to provide cost effective, quality care. This text is a comprehensive treatment of the subject of cataract comanagement. The editors and contributing authors are optometrists and ophthalmologists who work together in a regional comanagement system delivering cataract care in the state of Washington. The system has provided over 40,000 surgeries at the time of publication. This shared experience and the spirit of cooperation and teamwork among the providers provides the basis for an excellent and detailed text on the subject that will be of great value to eye care students and practicing clinicians alike.

The text is divided logically into five sections. It begins with general considerations and reviews current trends in cataract care along with a description of comanagement and chapters on the anatomy and physiology of cataracts. The concluding chapter of this section presents useful and well-illustrated grading systems that apply to the clinical findings described in the text. The next three sections deal thoroughly with preoperative, operative, and postoperative care of the cataract patient. The section on postoperative care is extremely detailed, and covers all possible complications one might encounter from the day of surgery onwards. The background, clinical presentation and assessment, differential diagnosis, treatment, follow-up and prognosis are presented for each complication. The book concludes with a

highly useful set of appendices including patient educational material, examples of professional correspondence and informed consent forms used by the authors in their comanagement system.

The text has an opening section of high quality color plates. Each chapter is illustrated with black and white photographs and contains useful black and white figures and tables. The references at the end of each chapter are thorough, up to date, and well organized by topic.

The one drawback I found with this text is the brevity of the chapter on special instrumentation. For example, more detail on the performance of A and B-Scan Ultrasonography would be helpful to those readers not already familiar with these techniques.

This text will be a welcome addition to the bookshelves of optometrists who comanage patients with cataracts. It will also be useful to optometric students, residents and our ophthalmologic colleagues.

Reviewer: Dr. Neal N. Nyman
Pennsylvania College of
Optometry

Cataract Detection, Measurement and Management in Optometric Practice

William A. Douthwaite, Ph.D. and Mark A. Hurst, Ph.D., Oxford, Butterworth-Heinemann, 1993, 140 pages, including index, hardbound, \$39.95.

Cataract is written by seven distinguished optometry faculty. Six currently lecture in the United Kingdom and one is located at the School of Optometry in Waterloo, Ontario, Canada.

This book is prefaced by stating, "It is apparent that the optometric profession is in need of a publication which describes the optometric aspects of cataract detection and management." While there are chapters dedicated to these topics, the main thrust of the book is

geared towards practitioners or scientists interested in geometrical and physiological optics. The management of patients with cataracts by practicing optometrists is not enhanced by this text.

There are various facets within this book that provide pleasurable reading. Lens structure, biochemistry and transparency are covered in a very concise and readable manner which will benefit optometrists as an overview. Mechanisms of cataract formation are reviewed in depth; this is helpful. Over 25 cataract types are described by nature, location, cause, and correlation to systemic disease or condition. These well-written sections would be better served by color plates or diagrams.

The patient's perception of visual disturbances is described in a clear manner. Cataracts associated with glare, color vision changes, field loss, etc. are covered in detail.

The discussion of new clinical techniques to evaluate cataracts provides optometrists with potential options to monitor cataract changes. Current methods of evaluation such as contrast sensitivity, disability glare, and laser interferometry are reviewed. Useful to clinical scientists includes the overview of A-/B-scan ultrasonography and electrodiagnostic testing of the cataract patient. Potential future use of evaluative techniques (including cataract photography, computer image analysis, and fluorophotometry) are discussed as well.

Surgical management is limited to the extracapsular cataract extraction (ECCE) with intraocular lens (IOL) implantation. This one-page review does not assist optometrists in understanding the various procedures available. There is mention of the future availability of foldable IOLs. This is no help to a large percentage of optometrists in the United States because foldable IOLs are available and widely used in the U.S.

Postoperative management of the cataract patient is a major topic in the United States. This is discussed only as a superficial review without providing practitioners in-depth medical management options of complications. The post-operative aspects of patient management include three intensive chapters involving geometrical and physiological optics of the intraocular lens and of aphakic spectacles and contact lenses.

Various aspects of *Cataract* may prove to be beneficial to didactic course work in optometry. This book is not a useful adjunct to clinical practitioners in actually managing patients with cataracts.

Reviewer: Dr. John B. Gelvin
Indiana University
School of Optometry

Professional Communications in Eye Care, Ellen Richter Ettinger, O.D., M.S., Boston, Butterworth-Heinemann, 1994, 319 pages, \$39.95.

The practicing optometrist will most likely spend more time communicating with patients, staff and other professionals than doing technical procedures. The doctor-patient relationship based on the model of the patient as a "partner" requires good communication. The concept of informed consent has both an ethical and legal basis and necessitates effective communication. Yet, we in education spend very little time in an admittedly very crowded curriculum on communication. For most of us, good communication is not simply an intuitive skill, but, like our technical skills, requires study and practice.

Dr. Ettinger has written an outstanding book which helps to address the need for study in the area of communication. Because she is a practicing optometrist, she has been able to write a book which is practical for the optometric clinician. It is well organized and contains numerous relevant examples and clinical cases which provide models for good patient care through good communication.

The book is divided into two parts, the first dealing with basic communication skills and the second with the application of these

skills to specific patient groups. One chapter is devoted to record keeping, one to interdisciplinary interactions and communication and one chapter to doctor-staff communications. Questions for thought are presented at the end of each chapter along with an excellent reference list and suggested additional readings. Appendices include specific interview questions by exam type such as primary care, contact lens, vision therapy, low vision, pediatric and even a list of interview questions for potential office members.

This book would make an excellent text for a curriculum course or portion of a course dealing with communication and/or the doctor-patient relationship. It would also serve as an outstanding study guide, if this topic were taught in a self-study format. Perhaps the best use of the book would be in a first year course such as an introduction to optometry, with its continued use throughout the four years of optometry school by all course and clinic instructors in a "communication across the curriculum" concept. Since the study and improvement of communication skills should be a lifelong pursuit, *Professional Communication in Eye Care* would also make an excellent addition to the practitioner's library.

Reviewer: Dr. James E. Paramore
Ferris State University
College of Optometry

Ocular Manifestations of Systemic Disease, Bernard H. Blaustein, ed., New York, Churchill Livingstone, 1994, 321 pages, \$105.00.

Ocular Manifestations of Systemic Disease is a text that reviews the majority of systemic conditions that have ocular implications. This book, intended for students and practitioners alike, reviews a wealth of material in a condensed fashion. Each area reviewed discusses the systemic condition in general including the pathophysiology, tests used to establish the diagnosis, ocular sequelae and treatment for those ocular disorders. Chapters included are on cardiovascular disease, cerebrovascular disease, rheumatologic

disease, metabolic disease, diabetes, connective tissue disorders, AIDS, and oncologic disease. There are also chapters in the beginning of the book on laboratory tests and diagnostic tests that set the tenor of the book.

This book was written by 18 different "experts" under the direction of Dr. Blaustein. Considering the number of authors involved, the writing style is even throughout. The text is readable, in particular because most sections are several pages in length. In addition, there are ample tables throughout the text that summarize the key information. Each chapter begins with a case report that reviews a condition and details the ocular examination, diagnosis, and both ocular and systemic treatment. More case reports would have been useful. Photos and other imaging tests that accompany each case could have been included in the text in order to fully understand the case discussed.

One minor criticism is that certain conditions are included in the text that I would consider rare in its presentation to an optometrist while others, such as Sarcoidosis are not included. Beyond this criticism, this book would be useful for most students and practitioners to have in that it reviews in a succinct fashion the majority of systemic conditions that affect the eye.

Reviewer: Dr. Murray Fingeret
Department of Veterans Affairs
Medical Center - Optometry
Brooklyn/ St. Albans, New York

REQUEST FOR PROGRAMS

Optometric Faculty are invited to submit computer based instruction programs for review in a new department that will be inaugurated in *Optometric Education*. Computer instruction programs will join resource reviews and abstracts as regular departments in *Optometric Education*.

Please submit the programs to:
Patricia C. O'Rourke
Association of Schools
and Colleges of Optometry
6110 Executive Blvd., Suite 690
Rockville, MD 20852

Include name of program, publisher and instructions for obtaining copies.

How
do we
say
"thinner
and
lighter"?

(WITHOUT SOUNDING
LIKE EVERYONE ELSE)

Today every manufacturer has a lens material they call "thinner and lighter." Some even offer true 1.6 high-index plastic, the thinnest material available for your high-power prescriptions. That's a good start because a 1.6 index means lenses that are up to 23 percent thinner and lighter than standard plastic. But only one thin and light PAL provides the design advantages and proven performance you need for all your presbyopes. So when Varilux says "thinner and lighter," we say:



Varilux® Comfort 1.6 High-Index Plastic

High, wide reading area with soft, usable periphery. Comfortable vision with half the head movement and ocular effort of other progressives. Advanced, Multi-Design optics. Varilux® Comfort, the first choice of independent eyecare practitioners, now available in 1.6 high-index plastic.



Best
by Design

Varilux and Varilux Comfort are registered trademarks of Varilux, Inc. © 1997 Varilux, Inc. All rights reserved. PAL is a registered trademark of Varilux, Inc. 1.6 High-Index Plastic is a registered trademark of Varilux, Inc.

Optical Design Division