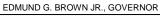


#### STATE BOARD OF OPTOMETRY

2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834 P (916) 575-7170 F (916) 575-7292 www.optometry .ca.gov





Continuing Education Course Approval Checklist

Title:

Provider Name:

✓ Completed Application
 Open to all Optometrists?
 ✓ Yes
 ✓ No
 Maintain Record Agreement?
 ✓ Yes
 ✓ No

Correct Application Fee

☑ Detailed Course Summary

Detailed Course Outline

PowerPoint and/or other Presentation Materials

☑ Advertising (optional)

CV for EACH Course Instructor

☑License Verification for Each Course Instructor Disciplinary History? □Yes ☑No



February 1, 2017

California State Board of Optometry 2450 Del Paso Road, Suite 105 Sacramento, CA 95834

Dear California State Board of Optometry,

Re: Returned CE Course Approval Request - Viral Infections of the Anterior Segment

This letter serves to furnish the items requested after preliminary review of my initial application.

A sincere effort was made to submit the initial application 45 days in advance of the presentation date; however, I did not receive the presentation materials from Dr. Neda Shamie within an acceptable time frame. That said, I waited to mail the entire CE application packet until I was in possession of all presentations for the Kaiser Permanente 2017 Optometry Symposium. In the future, I will be more stringent with each instructor to ensure I have all necessary materials well in advance of the symposium date.

Additionally, there was a misunderstanding of the CE Course Approval Application process as I was unaware of the requirement that the application be submitted electronically and not by mail. Moving forward, I am now clear of the requirements and will submit future applications via email.

If you have any questions, please feel free to contact me at (626) 405 – 4648 or by email jennifer.n.iacuaniello@kp.org.

Sincerely,

Jennifer la cuaniello

Jennifer Iacuaniello

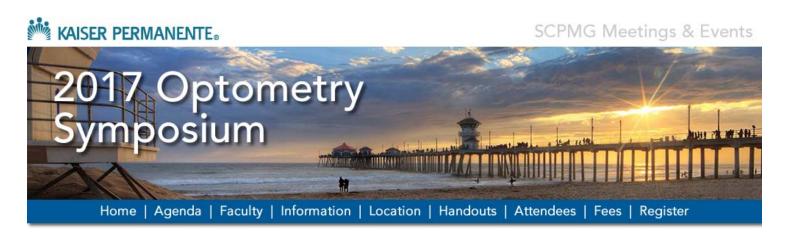
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Optometry [	OPTOMETRY (916) 575-7170 F (916) 575-7292 www.optometry.ca.gov					
CONTINUING EDUCATION COURSE APPROVAL						
\$50 Mandatory Fee APPLICATION						
Pursuant to California Code of Regulations (CCR) § <u>1536</u> , the Board will approve continuing education (CE) courses after receiving the applicable fee, the requested information below and it has been determined that the course meets criteria specified in CCR § 1536(g).						
In addition to the information requested below, please attach a copy of the course schedule, a detailed course outline and presentation materials (e.g., PowerPoint presentation). Applications must be submitted 45 days prior to the course presentation date. <b>Please type or print clearly</b> .						
Course Title						
Viral Infections of the Anterior S	Segment 02/11/2017					
	Course Provider C	ontact Infor	mation			
Provider Name						
Jennifer	lacuaniello Nami					
(First) Provider Mailing Address	(	_ast)	(Mide	dle)		
Provider Mailing Address						
Street 393 E. Walnut, 1st FI City Pasadena State CA Zip 91188						
Provider Email Address						
Will the proposed course be open to all California licensed optometrists?				🗹 YES 🗆 NO		
Do you agree to maintain and furnis of course content and attendance a from the date of course presentatio	∎YES □NO					
Course Instructor Information Please provide the information below and attach the curriculum vitae for <u>each</u> instructor or lecturer involved in the course. If there are more instructors in the course, please provide the requested information on a separate sheet of paper. Instructor Name						
David	Sendrows	ki	Peter			
(First)	(L	ast)	])	Middle)		
License Number 8376		License Typ	oe Optometrist			
Phone Number (714) 449-7414		Email Address dsendrowski@ketchum.edu				
I declare under penalty of perjury under the laws of the State of California that all the information submitted on this form and on any accompanying attachments submitted is true and correct.						
Aufrefallo 1.5.17						
Signature of Course Provider	12		Date	Form CE-01, Rev. 5/16		
		2				

# Transaction Details

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#### WELCOME!

Please join us at this informative conference for Kaiser Permanente optometrists, opticians and other interested health care professionals. This event will provide a congenial atmosphere to exchange ideas and learn from notable experts in optometry and related fields.

Madhu Chawla, OD Chairperson, Optometry Symposium Committee

#### DATE & LOCATION

Saturday, February 11, 2017

#### The Waterfront Beach Resort, A Hilton Hotel 21100 Pacific Coast Highway

21100 Pacific Coast Highway Huntington Beach, CA 92648 (714) 845 - 8000

AGENDA Download the symposium agenda

FACULTY Click here to meet the faculty

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4

**Reminder** Name badges will no longer be printed. Please bring your Kaiser Permanente issued badge for identification.

1/1



#### LEARNING OBJECTIVES

At the end of this activity, participants should be able to:

- 1. Enhance their knowledge surrounding the treatment and management of glaucoma
- 2. Co-manage patients with corneal disorders
- Be informed and learn about new diagnostic technology available for patient care for the treatment and management of glaucoma and corneal disorders
- Gain a better understanding of treatment options available for anterior segment disorders
- 5. Enhance knowledge of systemic disease as it applies to eye care
- Reinforce knowledge of the standard of care within the profession and optimize care delivery

#### TARGET AUDIENCE

Optometrists, Ophthalmologists, Opticians and any other interested health care professionals

#### ACCREDITATION

**Optometrists –** California State Board of Optometry approval pending.

#### PERSONS WITH DISABILITIES

In compliance with the Americans with Disabilities Act, all reasonable efforts will be made to accommodate persons with disabilities at the meeting. If you have any special dietary or accommodation needs, please notify the meeting planner listed, prior to the symposium at (626) 405-4648 or tie-line 8-335-4648. This advance notice will help us serve you better.



# 2017 Optometry Symposium

Saturday, February 11, 2017

Agenda	
7:00 am	Registration and Breakfast
7:50 am	Welcome and Introductions
8:00 am	Potpourri of Corneal Cases Neda Shamie, MD
8:50 am	Corneal Dystrophies and Pathology Neda Shamie, MD
9:40 am	Morning Break
10:00 am	Systemic and Medical Jeopardy David Sendrowski, OD
10:50 am	Viral Infections of the Anterior Segment David Sendrowski, OD
11:40 am	OD of the Year
11:50 am	Lunch
12:50 pm	Lessons Learned as a Malpractice Consultant Andrew Mick, OD
2:30 pm	Afternoon Break
2:40 pm	The Other Glaucoma Andrew Mick, OD
3:30 pm	Enlarged Optic Nerve Cupping Andrew Mick, OD
4:20 pm	Closing Comments and Raffle
Agenda is su	bject to change



**Course:** Viral Infections of the Anterior Segment

Speaker: David Sendrowski, OD, FAAO

**Time:** 10:50 am – 11:40 am

#### CE Requested: 1 Hour

**Summary:** Viral infections are common throughout a patient's lifetime. These acquired viral infections may manifest secondary ocular complications or begin as an ocular complaint. The lecture covers both types of presentations along with their ocular and systemic treatment and management.

**Objective:** Gain a better understanding of treatment options available for anterior segment disorders.

#### **Topical Outline**

- 1. Herpes Simplex Virus
  - a. Description
  - b. Location
  - c. Presentations
- 2. HSV Epidemiology
  - a. Incidence
  - b. Prevalence
  - c. Risk Factors
- 3. HSV Diagnosis
  - a. Lab Work Up
- 4. Treatment
  - a. HSV Epithelial Disease
  - b. Treatment: Why Zirgan?
- 5. Oral Recommendations
  - a. Non-Topical
  - b. Nutrition and Dietary Supplements
- 6. Follow-Up Recommendations
  - a. Patient Monitoring
  - b. Patient Education
  - c. Prognosis
  - d. Complications
  - e. Pediatric/Adult Considerations
- 7. ICD 10 Codes
  - a. ICD-10:B00.52

- 8. Adeno-Viral Conjunctivitis
  - a. Causes of Conjunctivitis
  - b. Clinical Accuracy
  - c. Clinical Challenges
  - d. Signs
  - e. Symptoms
  - f. Peri-ocular Manifestations
  - g. Confidence in Diagnosing
  - h. Easy 4-step Process
  - i. AdenoPlus Results
  - j. Adenoviral Conjunctivitis Management
  - k. Treatment

#### 1 🖾 New Thoughts on Viral Eye Infections.

David P Sendrowski, OD, FAAO Chief, Ophthalmology Consultation Service Professor/SCCO@MBKU

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#### 3 B Description

- Herpes simplex virus type 1 causes ocular infection following introduction of the virus in childhood as a subclinical or mild systemic infection. The HSV becomes latent in ganglion around the eye (trigeminal).
- Conjunctival inflammation precedes corneal vesicles, Superficial Punctate Keratitis (SPK), and then branching epithelial ulcer, a classic dendritic ulcer which may enlarge to a geographic form.
- Deeper corneal forms of herpes simplex virus keratitis (HSVK) may follow days/weeks later. Disciform keratitis is an immune form of HSV involving corneal endothelium leading to edema.

#### 4 Herpes Simplex Location

#### 5 Herpes Simplex Presentation

#### 6 HSV Presentations

#### 7 . FPIDEMIOLOGY

#### Incidence

- HSV type 1 is the leading cause of blindness from an infectious corneal disease. By age 5 years, over 60% show antibody evidence systemic HSV.
- About 1% of HSV infected patients develop ocular HSV.

#### Prevalence

- There are about 20,0000 new primary cases of HSVK seen yearly. Most are dendritic keratitis.
- About 30,000 recurrent HSVK cases are seen annually.

#### 8 🔝

RISK FACTORS (History questions)

• Fever, URI, ocular trauma, menses, high stress, CL use, UV exposure all have been considered risk factors, but not proven.

\*

#### 9 Physical exam

COMMONLY ASSOCIATED CONDITIONS

· Fever blisters around the mouth, nose, and eye often accompany ocular HSV.

10 DIAGNOSIS

#### 11 💽

Presentation:

- Young adult or child with ocular inflammation and eye irritation (pain) often precede HSVK.
- Blurred VA when the infection is in the visual axis.

12

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PHYSICAL EXAM
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<u>Slit-lamp examination (cornea & conjunctiva) is critical to diagnose ocular HSV.</u> Vital dyes such as fluorescein, lissamine green, or Rose Bengal are very helpful. PA node is helpful.

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13

14 🖾

<u>Lab</u>

- Most often lab tests such as culture are not necessary as slit-lamp diagnosis of dendritic keratitis is very specific. With more complicated, deeper forms of HSVK, culture, PCR, or immune tests are used.
- 15 🔝 Lab Work Up
  - Giemsa stain –(multinucleated giant cells)
  - PAP Stain- (intranuclear inclusion bodies)
  - · RPS adeno dectection (In-Office) r/o adenovirus
  - Viral cultures: HSV antigen detection tests, such as the enzyme-linked virus inducible system (ELVIS) (results 2 - 4 hours)
  - EIA (Herp Chek -in-office) (1/2 days)
  - (PCR / Multiplex PCR) using tear samples (3 to 5 days)

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- Dendritic keratitis responds well to trifluridine drops topically and third generation topical gels such as ganciclovir.
- Oral antivirals, acyclovir and valacyclovir are useful. (Famvir: Ok-- but more expensive)
- Steroids should be avoided for ocular surface HSVK, but are used with antivirals for stroma HSVK, disciform, necrotizing and uveitis.

#### 17 . HSV epithelial disease – Topical Treatment

 Viroptic drops q2h up to 9x/day
 Reduce drops to 4 to 5 times after 3 to 5 days OR...
 Zirgan eye gel (topical ganciclovir) (ave: \$165)
 Less Utilized – still available
 Topical Acyclovir (not avail. in US)
 Topical Idoxuridine (Herplex / Stoxil) D/c Hard to get and causes a lot of local toxicity ●Topical Vidarabine (Vira –A) ointment (Comp. lab)
 ●

#### 18 🖾 Treatment: Why Zirgan?

Older drugs: Chemotherapy for the eye- inhibited all DNA replication (healthy and HS infected corneal epithelial cells) Zirgan targets Viral DNA.
 Higher levels of corneal toxicity

#### 20 Oral Recommendations:

#### 21 BY Epithelial Disease- Treatment Non-Topical

- Corneal debridement used in adult if HSK is superficial and no prior use of steroids. (AB for epi. breakdown- be careful not to break Bowmans layer)
- Oral Acyclovir\*\*(400mg 3-5X/day) off label but cheap. Oral Valacyclovir (Valtrex) 500mg (3X/day), Famciclovir (250 mg 3X/day), Acyclovir (Zovirax), suspension 200mg/5ml (kids)

\*\*Sozen E, Avunduk AM, Akyol N. "Comparison of efficacy of oral valacyclovir and topical Acyclovir in the treatment of herpes simplex keratitis: a randomized clinical trial" Chemotherapy; 52: 29–31 (2006).

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#### 22 HSV Epithelial Disease- Treatment Non-Topical

- Recurrent Epithelial episodes
  - HEDS II found that 400 mg Acyclovir BID, for 1 year significantly reduced the risk of recurrence (41%) of ocular HK (>one episode /year), stromal keratitis, and orofacial HSV compared with placebo.
  - Benefit provided (HEDS II) by long term Acyclovir was seen in those with a history of stromal keratitis (51%).
  - Resistance is low in the immuno-competent population.
  - There are no FDA approved vaccines for the prevention of herpes simplex infection or recurrence. There have been relatively few clinical trials investigating the efficacy of a vaccine in the prevention of ocular HSV infections.

#### 23 Nutrition and Dietary Supplements

• Lysine.

 Several studies suggest that lysine may help reduce the number of recurring outbreaks of cold sores. A few studies also suggest that lysine may help shorten the length of an outbreak.

· Propolis.

 A resin made by bees, propolis is loaded with antioxidants that help fight infection and boost immune function

Zinc.

- In test tubes, zinc is effective against HSV-1 and HSV-2

#### 26 E FOLLOW-UP RECOMMENDATIONS

#### Patient Monitoring

• With HSV dendritic keratitis follow-up, slit-lamp exams as necessary until resolution, with stromal disease, very long-term follow-up is critical. Herpes is forever.

### 27 🔝

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PATIENT EDUCATION

• Discussion of long-term therapy. Not to self-medicate with recurrences, but to expedite office examination.

28 🔝

PROGNOSIS

- · Good for initial and early recurrent dendritic keratitis with topical Rx. or oral Rx.
- Guarded for stromal HSV.

29 🔛

COMPLICATIONS

· Significant morbidity and visual loss with stromal HSV.

30 🔝

Pediatric / Adult Considerations

- · Infants and children can develop HSVK after loss of maternal antibodies.
- Steroids should never be used for a red eye in this group unless a slit-lamp examination is done.

#### 31 **ICD 10 CODES**

ICD-10: B00.52(1or 2) Herpes viral keratitis

#### 32 CLINICAL PEARLS

 Always suspect possible ocular HSV in patients with an acute red eye and do slit-lamp examination (cornea and conj.) with vital dye to avoid treating HSV with topical steroids especially in children.

33 🔝

#### 34 Adeno-Viral Conjunctivities

35 Causes of Conjunctivitis

#### 36 Causes of Conjunctivitis

#### 37 Clinical Accuracy<sup>1-4</sup>

- Leibowitz et al.<sup>2</sup>
  - -31% of presumed bacterial conjunctivitis were culture positive
  - -52% with presumed viral conjunctivitis were culture positive for pathogenic bacteria
- Cheung et al.<sup>3</sup>

- 67% of Adenoviral cases presented unilaterally

- and the misdiagnosis rate was 42% in these patients
- During a clinical trial to evaluate cidofovir treatment at 16 academic centers, experts showed a clinical accuracy of about 48%

#### 38 Clinical Challenges

#### 39 Symptoms

- · Sudden, explosive onset of red, irritated eyes
- · Watery discharge, foreign body sensation
- Itching and burning may be primary complaints; milder forms of EKC may have milder symptoms (patient and doctor may underestimate contagiousness and seriousness of infection)
- Photophobia, excessive tearing with SPK

40 🗔

#### Rule of 8's for EKC

- 1. Type 8 & 19 very common (probably most common)
- 2. First eight days of infection most dangerous since patient is asymptomatic (however, contagion lasts up to stage of SEI's)
- 3. Day 16 SEI develop ( non-contagious and may last months to years
  - Presents in classically defined 8 day periods
  - Increasing variations in cyclical periods due to increasing viral mutations and increased virulence
  - Some stages may present much earlier or not at all (i.e., immediate keratitis, absent conjunctivitis)

41 🔝

- Somewhat predictable stages of development
  - Starts as non-specific "pink eye"
  - SPK about one week later (diffuse, fine, or coarse); if virulent strain, much sooner
  - About one week after onset of SPK, small / delicate subepithelial infiltrates may develop; diffuse, possibly related to areas of prior SPK; but if from virulent strain, appear much sooner
- 42 🔝 <u>Signs</u>
  - Acute follicular conjunctivitis; usually starts in one eye first; second eye follows in one week or less; bilateral but often asymmetric
  - Tender pre-auricular node (may be visible)
  - Lid edema

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43 🗔
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- Subconjunctival or petechial hemorrhages possible; EKC is primary infectious cause of subconjunctival hemorrhages
- Pseudomembrane possible in more serious cases (EKC is also likeliest infectious cause of pseudomembranes); varies from thin film to dense, opaque sheet
- · Mild iritis if keratitis is sufficiently severe

44 🛄

45 🛄

- Progression through stages (conjunctivitis to SPK to SEI) may occur in predictable periods (per Rule of 8's); with increasing viral mutations, stages are often prolonged or totally absent; more virulent forms progress to keratitis much more quickly
- Late SEI's are anterior stromal in location; occur more than 2 weeks after SPK has cleared; exist under clear epithelium; last months to years

46 🛄

- Usually minimal systemic symptoms: mild fever (if any)
- Vision changes
  - Mild case usually 20/20 to 20/30
  - SPK can drop VA to 20/40
  - -SEI's can drop VA to 20/60 or worse
  - Severe keratitis can cause 20/100 at any time
- Subepithelial infiltrates (SEI's) may additionally cause glare
- · Ocular symptoms (except for blur) usually have calmed down by day 10 to 14

#### 47 🔛

#### 48 Peri-ocular Manifestations

- Adenoviruses
  - Adenopathy (Pre-auricular, submandibular)
  - Fever
  - Pharyngitis
  - -URTI
  - Lid swelling

49 []]

The *first and only FDA-cleared,* CLIA-waived POCT to aid in the rapid differential diagnosis of acute conjunctivitis (pink eye).

#### 50 Confidence in Diagnosing

- Accurate: 90% sensitivity, 96% specificity
- Point-of-care: CLIA-waived
- Easy to use: 4 simple steps

- · Cost effective: Single use, disposable test
- Reimbursable: 87809QW
- · Fast: Results in 10 minutes
- Right treatment: Help reduce antibiotic resistance
- · Low limit of detection: 6 ng/ml

#### 52 Easy 4-step Process

#### 53 🔯 AdenoPlus® Results

#### 54 Adenoviral Conjunctivitis Management

- Supportive therapies
  - Artificial tears (may be refrigerated)
  - -Topical NSAID's for discomfort
- Decontamination at home
- Hand washing
- Isolation 5-7 days
- Anti-viral therapy
  - No FDA-approved drugs specific for the treatment of Adenoviral conjunctivitis
  - Zirgan (Ganciclovir) use is being studied (some anecdotal reports)
  - In-Office use of Betadine and Top. Steroid
  - Antibiotics are ineffective against treating the viral
  - Avenova- disappointing results in phase II 2015

- 55 🔝
- Betadine (povidone iodine) 5% sterile ophthalmic prep solution for moderate/ severe EKC
  - 1 gtt proparacaine
  - 2 gtt Betadine solution
  - patient rolls eyes for several seconds
  - clean lid margins w/2-3 gtts drops of Betadine on cotton tip applicator
  - rinse eyes with sterile saline, wipe off eyelid margins with cotton ball
  - -Rx topical steroid to reduce inflammation

56 🔝

- Supportive, symptomatic therapy
  - Sunglasses
  - Lubricants, as frequently as needed
  - Vasoconstrictor drops, QID
  - Cool compresses
  - Patient may experiment with alternating warm and cool compresses; warm will exacerbate the hyperemia while enhancing the immune response
  - Aspirin, acetaminophen, or other analgesics (NSAID's)

#### 57 🛄 Treatment

- -Rule out dendrites and scrupulously avoid use of any steroids
- Primary goal in the office is prevention of spread
- Strict maintenance of hygiene: hand washing, disposable gloves, no applanation

tonometry on a hot eye (substitute NCT)

Virus is hardy: survives 4-6 days on tonometer tip, up to 7 days in air-dried state
 Extreme likelihood of iatrogenically spread infections; best cleaning is with dilute bleach

85 W Questions

86 🔝

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#### DAVID P. SENDROWSKI, O.D., FAAO

#### **Current Address**

**College Address** 

54 Vela Court Coto De Caza, CA 92679 949.589.6559 E-mail: <u>dsendrowski@cox.net</u> 2575 Yorba Linda Blvd. Fullerton, CA 92831-1699 714.449.7414 • Fax: 714.992.7848 E-mail: dsendrowski@ketchum.edu

### **PROFESSIONAL OBJECTIVE**

To serve the profession of Optometry by providing the highest quality in-patient care, teaching, continuing education, instruction, and consultation.

### EDUCATION

- C.R. Certificate of Residency in Hospital-Based and Geriatric Optometry V.A. Medical Center Hospital West Los Angeles, California 1986
- O.D. New England College of Optometry Boston, Massachusetts 1985
- B.S. University of Massachusetts Amherst, Massachusetts 1981 Major: Zoology Minor: Chemistry

#### PUBLICATIONS

Viral Infections: "Claim Victory Over Viral Conjunctivitis" Sendrowski, DP, Maher, JF. Review of Optometry, June 2016, pp: 78-86

Pseudo-glaucoma in a Patient with Double Optic Nerve Head Pits David P. Sendrowski, OD, FAAO, Southern California College of Optometry, Marshall B. Ketchum University Poster: AAO, OVS supplemental pub (on-line); New Orleans, LA. October 2015

Book Review: *Ocular Pathology Case Reviews (1<sup>st</sup> Edition)* ISBN: 978032387951 Sendrowski, DP. Optometry/Vision Science (OVS), Vol. 91, No. 11, November 2014

Zero in on a Differential Diagnosis of Uveitis Sendrowski, DP Optometry Times, August 2013 *Neurological Disorders: Know When and What to Look For* Sendrowski, DP Optometry Times, October 2012

*Common Ocular Disorders in the Pediatric Population* Sendrowski DP, Lingua RW Clinical and Refractive Optometry, 23:4, 2012, 17-23.

*Current Treatment for Vitreous Floaters* Sendrowski, DP, Bronstein, MA Optometry, March 2010, 81(#3); 157-161.

#### Thyroid Eye Disease

Sendrowski DP, Lingua B. Clinical Ocular Pharmacology, Fifth Ed. Bartlett & Jaanus, Ed. (Chap. 33). Butterworth/Heineman Publisher, St. Louis, MO, ISBN: 978-0-7506-7576-5, November 2008.

#### Anti-Inflammatory Drugs

Sendrowski DP, Jaanus S. in Clinical Ocular Pharmacology, Fifth Ed. Bartlett & Jaanus, Ed. (Chap 17). Butterworth/Heineman Publishers, ISBN: 978-0-7506-7576-5, October 2008.

Comparison of the Optic Nerve Rim Tissue between Healthy Caucasians and Hispanic Populations Using the HRT II. Sendrowski DP, Kostura MR, Kostura S. California Optometry 2007: 34(1); 48-51.

Update on Thyroid Disease Clinical and Refractive Optometry 2006: 17(4); 149-145.

Book Review: Laser Treatment of Eye Floaters Sendrowski DP. Optometry and Vision Science 2006: 83(6); 354.

Acquired Toxoplasmosis in an Immunocompetent Patient from a Petting Zoo Sendrowski DP, Bronstein M. (Abstract) AAO Supplemental 2006: 83(12S); p. 85.

*Managing the Thyroid Eye Patient* Sendrowski DP. Clinical & Refractive Optometry (17) No. 4: p. 140-145, April 2006.

*Pseudo-Foster Kennedy Syndrome Secondary to Malignant Hypertension* Sendrowski, et al (Abstract), AAO Supplemental 2005; 82(12S) p. 79.

Ocular Dermatology in Primary Eye Care

Sendrowski DP, Floyd LL, Cornish A. Clinical and Refractive Optometry, Vol. 16, No. 3, pp 7-14, March 2005.

*Pseudo-Foster Kennedy Syndrome Secondary to Malignant Hypertension* Sendrowski DP, Bronstein MA, Lingua RL. Clinical and Refractive Optometry, Vol. 16, No. 1, pp: 6-14, January 2005 Comparison of Optic Nerve Rim Tissue between Healthy Caucasian and Hispanic Populations Using the HRT II Sendrowski DP, Kostura II, MR, Kostura SK. Clinical and Refractive Optometry, Vol. 15, No. 5, pp 142-149, May 2004.

Comparison of Optic Nerve Rim Tissue between Healthy Caucasian and Hispanic Populations Using the HRT II Sendrowski D, et al. (Abstract) JAAO, Vol. 80, No. 12s, p. 132, December 2003.

*Visual Consequences of Retinopathy of Prematurity* Hadler J, Sendrowski D (Abstract) JAAO, Vol. 80, No. 12s, p. 35, December 2003.

*Update on Thyroid Eye Disease* Practical Optometry, Vol. 14, No. 1, pp 24-30, January 2003.

The Oculus Easyfield Perimeter in Vision Field Screening: Specificity and Sensitivity to Glaucoma and Other Causes of Field Loss Comer G, Sendrowski D, et al. (Abstract) JAAO, Vol 79, No. 12, p 13, December 2002.

*Ocular Dermatology in Primary Eye Care* Practical Optometry. Vol 12. No. 2, pp 41-46, March 2001.

Chapter 37, Fourth Edition of *Clinical Ocular Pharmacology*, Bartlett/Jaanus, Butterworth/Heinemann Publishers, Boston, February 2001. ISBN 0-7506-7039-8.

*Thermal Cautery Following Chalazion Surgery and Its Effect on Recurrence Rates* Optometry and Vision Science, Vol. 77, No. 11, Nov. 2000, pp 605-607.

*"Update on Thyroid Eye Disease"* Practical Optometry, Vol. 10, No. 1, pp 16-20, February 1999

"Differential Diagnosis in Primary Eye Care"

Textbook written by Bezan, Nishimoto, Larussa, Sendrowski. Butterworth/Heinemann Publishing Company, Boston, MA, January 1999. ISBN: 0-7506-9462-9.

Hyperthyroidism/Hypothyroidism – Chapters #12 and 13, "*Handbook of Primary Care Optometry*", Amos/Classe/Casser, W.B. Saunders, Co. Philadelphia PA, December 1999. ISBN: 0-7506-9317-3.

"An Investigation of Sympathetic Hypersensitivity in Chronic Fatigue Syndrome" Optometry and Vision Science, Vol. 74, No. 8, pp 660-663, September 1997

"Thyroid Eye Disease"

Chapter 36, Third Edition of Clinical Ocular Pharmacology: Butterworth/Heinemann Publisher, September 1995. ISBN: 0-7506-7039-7.

*"Hyperthyroidism and Parathyroid Dysfunction:* in Optometry Clinics Systemic Disease and the Eye, edited by John Classé, Appleton & Lange, Inc. Publisher, Vol. 3, No. 4, pp 87-97, June 1994. ISBN: 1050-6918. "Emergency Medicine"

Clinical Medicine in Optometric Practice Chapter 15, pp 348-361, Muchnick, Mosby Publisher, St. Louis, March 1994. ISBN: 0-8016-6306-7.

"Results of the ONTT Study - What Should the Optometrist Know?" "Perceptions" Orange County Optometric Society Publication, page 2, January 1994

Evaluation of a Patient with Thyroid Disease "Perceptions" Orange County Optometric Society Publication, page 4, 1992

Presurgical Evaluation of the Cataract Patients' In Your Office "Perceptions" Orange County Optometric Society Publication, page 4, February 1989

Why Would An OD Want to Screen for Hypertension in Their Practice "Perceptions" Orange County Optometric Society Publication, page 5, March 1988

*Unilateral Pigmented Mobile Vitreous Cyst* J Am Optom Assoc; 58(7):592-596. August 1987

## RESEARCH

Prospective case crossover study to assess whether PDES Inhibitor exposure in men with erectile dysfunction increases the risk of the development of non-anteritic anterior Ischemic Optic Neuropathy (NAION), March 2009 – (2 years), study site - contributor

Comparison of Rim Tissue Changes in Normal vs. Glaucomatous Optic Nerve Heads in the Hispanic Population (2004)

Isoclear Research Team for New Contact Lens Case (2005) (Consultant for patient application and subject evaluation)

Phase III FDA Trials for Moxifloxacin drug study (2002-2003)

Grant Application: Design of Adaptive Optics Scanning Laser Ophthalmoscope P.I.-Neal Hartsough, December 2002

Phase III FDA Trials for Acute Bacterial Conjunctivitis Study, Protocol SPCL-GFLY 3/02 (2001-2002) - no investigator

Ocular Hypertensive Study Group, National Study – contributor (completed 2002)

Collaborative Ocular Melanoma study - contributor

Telemedicine Research Project with State of Hawaii, Research Member, October 1999

#### **PROFESSIONAL EXPERIENCE (Private Practice / Academia)**

# Chief, Ophthalmology Consultation / Chronic Care and Special Testing Service (1990 - present)

Southern California College of Optometry / Optometric Center of Fullerton Fullerton, CA 92831

#### Associate / Private Optometric Practice (1992-present)

24000 Alicia Pkwy Suite #11 Mission Viejo, CA 92691

#### Director of Residency Programs (1990 - 1992)

Southern California College of Optometry Fullerton, CA 92831

# Director of the Outreach Program at the North Orange County Community Health Clinic (1989 - 1995)

(University of California Medical Center - Irvine) 300 West Romneya Dr. Anaheim, CA 92801

#### **Optometric Consultant - CSUF Clinic (1995 - present)**

California State University Medical Clinic / Fullerton Fullerton, CA 92831

# Residency in Hospital-Based Primary Care and Geriatric Optometry (1985 - 1986)

Veterans Administration Hospital West Los Angeles, California 90073

#### East Boston Community Health Center (1985)

East Boston, Massachusetts 02145

#### Brooke Army Medical Center (1984)

Fort Sam Houston San Antonio, Tex 78234

#### **RESPONSIBILITIES AT THE COLLEGE**

#### DIDACTIC

Lab Instructor in Ocular Health Assessment I (#660, Spring 1987-2017)

Course Instructor in Clinical Medicine (#612, Fall 1987-90)

Course Coordinator and Instructor in Advanced Procedures (#761, Winter 1987-2017)

Course Coordinator/Lab Instructor for Ocular Disease Management III (#763, Spring 1991-2017)

Course Instructor for Ocular Disease Management I Course Coordinator as of 1994 (#664 Spring 1987-2017)

Lecturer for Ocular Disease: Diagnostic and Therapeutic Courses (1988-2008)

Lab Instructor for Ocular Disease: Diagnostic and Therapeutic Course TPA Lab Coordinator (1989-2004)

Lab Instructor in Human Resource Development (#536, Fall 1986 - 89)

Lab Instructor for Courses: (Case Analysis 7361 / Advanced Ocular Procedures III 7321, 2001-2017)

### CLINICAL

Full Professor; Tenured (Initial Tenure 2004; Re-Tenured 2010, 2015) Southern California College of Optometry

Chief, Ophthalmology Consultation / Chronic Care Service (1991-present)

Adjunct Assistant Professor in Primary Care/Internal Medicine Service, UCI Medical School, Irvine, California (NOCCC) – 1989-1995

Director of Optometric Services - North Orange Community Care Clinic (NOCCC), Anaheim, CA (1989-1995)

Private Practice Optometry: Floyd/Sendrowski, Mission Viejo, CA 92682 (1992-present)

Staff Optometrist: California State University Fullerton - Medical Clinic (1995-2002)

#### CONSULTANT / EXTERNAL COMMITTEES

SCCO Deans Search Committee (2012-2013) (appointed by the President/MBKU)

COA Faculty Relations Subcommittee (2004-2009)

Prospect Medical Group, Inc. Santa Ana, CA (2002-2017) – Procedures / Surgical Review Committee

Speakers Bureau for ISTA / Pfizer Pharmaceuticals / Allergan Core Speaker / Alcon Speakers Alliance / VSP/ Sucampo Pharmaceuticals / Shire Pharmaceuticals Advisory Board / Speaker Advisory Board Member for The Laser Center (TLC), Brea, California (1999-2001)

Consultant for Akorn Pharmaceuticals, Board of Advisors (1998-2001)

Consultant in the Ocular Disease Section for the California State Board of Optometry (1990 - present)

Member: California Optometric Association Pathology Education Committee (1991-2002) (2015-2017) (Chairman - 1996)

Consultant: California Optometric Association - Legislative Committee in TPA (1992-present) (worked on Senate Bill 492 & 622)

Referee for Journal American Optometric Association articles (1991-present)

Lead Examiner for California State Board in Optometry (1992-96)

### FACULTY COMMITTEES

President of Faculty Council (2000-2002), (2012-2014), Vice President (2010-2012), Immediate Past President (2014-2016)

Faculty Promotion/Tenure Committee (2002-2004), (2007-2010), (2016-2018), Committee Chair (2010-2012)

Faculty Merit Committee, Chairman (2004-2006) (member 2007)

Immediate Past President Faculty Council Executive Committee (2002-2004)

Academic Standing and Policy (1986-1992, 1998-2004, 2009-2018), Chairman (1999-2001)

Admissions Policy (1987-1988; 1996-1997) (2004-2009) (Chairman 2006-2008)

Continuing Education (member: 1988-2010, 2014-2017) (Chairman: 1997-2003)

Faculty Council Executive Committee Director (1990-1995; 1999- 2016) (Secretary/Treasurer 1993-1995) (2008-2010)

Faculty Travel Committee (1990-97) – Committee Chairman (1992)

Faculty Recruitment Committee - Chairman (1996-1999)

Clinic Council Member (1992-2017)

#### ACADEMIC PRESENTATIONS / CONTINUING EDUCATION / SEMINARS

Unilateral Pigmented Mobile Vitreous Cyst Poster at American Academy of Optometry, 1986

*Differential Diagnosis of Arcuate Field Loss in the Young Patient* Poster at American Academy of Optometry, December 1987

*Cranial Nerve Evaluation* CE course, SCCO, March 1987

Blood Pressure Techniques: Patient's That Are At Risk CE course, SCCO, March 1987 Optic Nerve Head Evaluation: Differential Diagnosis of the Swollen Disc CE course, SCCO, June 1988

*Ultrasonography for the Optometrist* CE course, SCCO, June 1988

*Differential Diagnosis of an Amelanotic Nevus* Poster at American Academy of Optometry, December 1988

The Spectrum of Visual Field Defects Associated with Optic Nerve Head Drusen Poster at American Academy of Optometry, December 1988

*Clinical Comparison of Direct Ophthalmoscopy and Optomized Photographic Techniques in the Detection of Retinal Nerve Fiber Layer Loss* Poster at American Academy of Optometry, December 1988

*Binocular Indirect Ophthalmoscopy Workshop* Vision Expo CE Course, Anaheim, CA, April 1989

*Pre/Post Cataract Evaluation* Allergan/Humphrey CE Course, Butte, MT, May 1989

*Co-Management of the Pre-Post Cataract Patient* Allergan/Humphrey CE Course, La Crosse, WI, September 1989

Management of Lacrimal Disorders, Orbital Disease, Thyroid Eye Disease, Pre/Post Cataract Panel Washington TPA Course, Seattle, WA, October 1989

Co-Management of the Pre/Post Cataract Patient Allergan/Humphrey CE Course KOA Congress, Wichita, KS, October 1989

*Thyroid Eye Disease / Diagnosis, Treatment, Management of Corneal Ulcers* San Fernando Optometric Society, San Fernando, CA, November 1989

Swollen Disc Syndrome

CE Course, SCCO, September 1989

An Unusual Case of CMV Retinitis Poster at American Academy of Optometry, New Orleans, LA, December 1989

*Diabetes and Diabetic Retinopathy* CE Course, SCCO, December 1989

Swollen Disc Syndrome: Part 2 CE Course, SCCO, December 1989

Papilledema: Etiology and Treatment CE Course, SCCO, January 1990

*Thyroid Eye Disease* Inland Eye Institute/Surgical Center, CE Course, San Bernardino, CA, April 1990

Laboratory Testing for the Optometrist / Cataract Co-Management: Pre/Post Op CE Course, SCCO, May 1990

*Orbital and Thyroid Eye Disease* TPA Course at SCCO, June 1990

*Ocular Emergencies Workshop* COA Pathology Seminar, Newport Beach, CA, November 3, 1990

*Swollen Disc Syndrome* CE Course, SCCO, December 1990

Bournevilles Disease, A Case Report Poster at American Academy of Optometry, Nashville, TN, 1990

*Congenital Encephalomalacia of the Occipital Lobes* Poster at American Academy of Optometry, Nashville, TN, 1990

*Primary Care Optometry* UCI Medical School, CE Lecture, January 1991

*Corneal Ulcers: Diagnosis, Treatment, and Management* CE Course, SCCO, February 1991

*Neuro-Optometric Examination: Techniques and Management* CE Course, SCCO, February 1991

Ocular Emergencies Save Your Vision - Television Talk Show/Continental Cablevision, Los Angeles, CA, March 1991

Binocular Indirect Ophthalmoscopy Workshop / Ocular Emergencies Workshop CE Course, SCCO, April 1991

Evaluation of Anterior Uveitic Syndromes / Visual Field Interpretation and Testing Workshop

Vision Expo Course, Anaheim, CA, September 1991

New Advances in Glaucoma Symposium - Moderator COA Pathology Seminar, Monterey, CA, November 1991

Background Diabetic Retinopathy CE Course, SCCO, November 1991

*Bilateral Optic Atrophy Secondary to a Pinealoma and Panhypopituitarism* Poster, American Academy of Optometry, Anaheim, CA, December 1991

*Ocular Complications of AIDS* CE Course, SCCO, January 1992

*Orbital Disease and Lacrimal Disorders* Fresno, CA, February 1992

*Red Eye Diagnosis, Treatment, Management* Bakersfield Optometric Society, Bakersfield, CA, February 1992

Peripheral Retinal Disorders Beaumont Optometric Society, Beaumont, CA, March 1992

*Thyroid Eye Disease* California Optometric Association Congress, Anaheim, CA, March 1992

*Red Eye Diagnosis, Treatment, Management* San Diego Optometric Society, San Diego, CA, May 1992

Uveitic Disorders / Pre- and Post-Surgical Evaluation of the Cataract Patient / Optic Nerve Head Disorders TPA Course, SCCO, July 1992

Nonproliferative Diabetic Retinopathy CE Course, SCCO, August 1992

*Ocular Complications of AIDS* Alumni Weekend, SCCO, October 1992

Thyroid Eye Disease: Diagnosis and Management / Anterior and Intermediate Uveitis / Clinical Introduction to Automated Perimetry: Workshop / Posterior Uveitis: Clinical Evaluation and Management

*Pupils, Ptosis, Associated Disorders* CE Course, San Diego Optometric Society, March, 1993 *Ocular Disease in the Pediatric Population* CE Course, SCCO, April 1993

Uveitis: Diagnosis, Treatment and Management / Orbital Disease and Thyroid Dysfunction / Cataract Co-Management

*Non-Proliferative Diabetic Retinopathy* CE Course, SCCO, August 1993

Anterior and Posterior Uveitis: Diagnosis, Treatment and Management / Orbital Disease and Thyroid Dysfunction Mesa, AZ, TPA/SCCO, August 1993

Common Pupil and Ptosis Anomalies - Should You Refer / When and How to do a Basic Neurologic Evaluation of Your Patient / Anterior Uveitis - Idiopathic or an Early Sign of Systemic Disease / Introduction to Automated Visual Field Testing Vision Expo, Anaheim, CA, October 1993

*Ocular Complications from AIDS* Tri-City Optometric Meeting, San Francisco, CA, November 1993

*Optic Nervehead Disorders* TPA Course, SCCO, December 1993

Anterior, Intermediate, Posterior Uveitis TPA Course, SCCO, January 1994

Peripheral Retinal Disorders / Optic Nerve Disorders / Background Diabetic Retinopathy Kaiser Permanente, Los Angeles Medical Center, January 1994

*Pre- and Post-Surgical Management of the Cataract Patient* TPA Course, SCCO, February 1994

Lacrimal Disorders / Anterior Uveitis, Diagnosis, Treatment and Management / Orbital Disease and Thyroid Eye Disease Colorado TPA Course, Denver, CO, February 1994

*Orbital Diseases, Diagnosis, Treatment and Management* TPA Course, Ventura, CA, March, 1994

*Dry Eye Diagnosis* TPA Course, Ventura, CA, March 1994

Pre- and Post-Cataract Management / Optic Nerve Head Disorders / Thyroid Eye Disease / Ocular Complications of AIDS TPA Course, Ventura, CA, March 1994

*Diagnosis of the Red Eye* San Diego Optometric Society, May, 1994 Optic Nerve Head Disorders / Anterior Uveitis Disorders / Orbital Disease: Dx, Tx, Management / Pre/Post Cataract Management TPA Course, SCCO, July 1994

Peripheral Retinal Degenerations: Diagnosis and Management CE Course, Pasadena, CA, August 1994

Anterior Segment Disorders: Conjunctival Infections CE Course, SCCO, September 1994

*Ocular Complications of AIDS* SCCO Alumni Weekend, SCCO, October 1994

Clinical Evaluation and Ocular Complications of a Patient with AIDS / Visual Fields Workshop - Automated Perimetry Vision Expo, Anaheim, CA, November 1994

*Evaluation of a Patient with Non-Proliferative Diabetic Retinopathy* San Bernardino Optometric Society, San Bernardino, CA, December 1994

Common Pupil and Ptosis Anomalies / Common Peripheral Retinal Disorders COA Congress, Sacramento, CA, March 1994

*Ocular Complications of AIDS* COA Congress, Sacramento, CA, March 1995

Anterior Segment Disorders: Optometric Co-Management CE Course, Pasadena, CA, March 1995

Disorders of the Optic Nerve Head / Evaluation of a Patient with Thyroid Eye Disease / Non-Proliferative Diabetic Retinopathy (NPDR) SFOS Pathology Symposium, San Fernando, CA, April 1995

*Diagnosis and Management of the Red Eye Patient* Orange Co. Optometric Society, Orange, CA, May 1995

*Ocular Changes in the Diabetic Patient* SCCO CE Course, Fullerton, CA, July 1995

Pupils and Ptosis Anomalies - When Should You Be Concerned / Ophthalmic Imaging and Telemedicine: New Diagnostic Frontiers / Visual Fields Workshop: Introduction to the Use of Automated Perimetry Vision Expo '95, Anaheim, CA, September 1995

*Optometric Testing for Posterior Pole Disorders* SCCO CE Course, Fullerton, CA, November 1995

*Punctal Plug Workshop* COA Pathology Symposium, Monterey, CA, November 1995 *Optic Neuritis: How to Differentially Diagnose Swollen Nerve Heads* SCCO CE Course, Fullerton, CA, December 1995

Punctal Plug Workshop / Binocular Indirect Workshop / Red Eye Triage for Staff Personnel COA Congress, Anaheim, CA, March 1996

Visual Fields Interpretation and DPA Use COA Congress, Anaheim, CA, March 1996

Disorders of the Optic Nerve Head / Conjunctival Disease / Anterior and Posterior Uveitis / Orbital Disease and Hyperthyroidism TPA Course, SCCO, Fullerton, CA, March 1996

Anterior Uveitis, Common Diagnostic Mistakes / Thyroid Eye Disease Indian Health Service Meeting, Phoenix, Arizona, April 1996

Anterior and Posterior Uveitis / Ocular Complications of AIDS / Optic Nerve Head Disorders TPA Course, SCCO, Fullerton, CA, June 1996

Conjunctival Disease and Management / Case Presentations in Ocular Disease / Orbital Disease and Hyperthyroidism TPA Course, SCCO, Van Nuys, CA, July 1996

Anterior Uveitis, Common Diagnostic Errors / Introduction to Visual Field Analysis: Workshop Vision Expo, Anaheim, CA, September 1996

Conjunctival Disease and Management / Optic Nerve Disease: Detection and Diagnosis / Orbital Disease and Hyperthyroidism TPA Course, SCCO, Fullerton, CA, November 1996

*Optic Neuritis Update: Symposium on Acute Visual Loss* American Academy Meeting, CE Lecture, Orlando, FL, December 1996

*TMOD Review* SCCO CE, Fullerton, CA, December 1996

*Conjunctival Disease Diagnosis and Management* Kaiser Permanente, Long Beach, CA, January 1997

Conjunctival Disease Diagnosis and Management / Update on AIDS / Thyroid and Orbital Disease TPA Course, Sacramento, CA, February 1997

*Punctal Plug Workshop* COA Congress, Palm Springs, CA, March 1997

*TMOD Review / Update* Advanced Sight Medical Group, Los Angeles, CA, April 1997 *Uveitis: Diagnosis, Treatment and Management / AIDS Update* TPA Course, Montclair, CA, April 1997

*Optic Nerve Head Disorders and Orbital Disease / Posterior Uveitis Syndromes* Montana Optometric Association, Masula, MT, May 1997

Ocular Complications of Rheumatological Disorders / Disc Edema vs. Papilledema / Posterior Uveitis Syndromes AOA Congress, St. Louis, MO, June 1997

Orbital Disease / Anterior Uveitis: Dx, Tx, and Management SCCO TPA Course, Van Nuys, CA, June 1997

*TMOD Review Course* Kaiser Permanente, San Diego, CA, July 1997

Conjunctival Disease: Dx, Tx, and Management / Orbital Disease / Anterior Uveitis: Dx, Tx, and Management / TMOD Review SCCO TPA Course, Fullerton, CA, July 1997

*TMOD Review* Rio Hondo Society, Las Vegas, NV, August, 1997

Visual Field Workshop / Episcleritis and Scleritis Workup Vision Expo, Anaheim, CA, September 1997

*Update on Thyroid Disease* American Academy Meeting, Ellerbrock CE Course, San Antonio, TX, December 1997

*Ophthalmic Office Aseptic Techniques Workshop* COA Congress, Sacramento, CA, March 1998

Anterior Uveitis: Dx, Tx Management / Orbital Disease SCCO TPA Course, Fullerton, CA, March 1998

*Ocular Dermatology / Aseptic Techniques in Ophthalmic Practice* AOA Congress, Orlando, FL, June 1998

Conjunctival Disease / Uveitic Disorders / Orbital Disease / Hyperthyroidism / Optic Nerve Head Disorders SCCO TPA Course, July 1998

Conjunctival Disease / Uveitic Disorders / Orbital Disease / Hyperthyroidism TPA Course, Honolulu, HI, August 1998

Visual Fields Workshop / Rheumatology and Ocular Complications Vision Expo CE Course, Los Angeles, CA, September 1998

Diabetes Mellitus and Ocular Complications / Common Systemic Diseases You Should Know

Greater Western Council of Optometry, CE Course, Portland, OR, October 1998

Conjunctival Disease / Uveitic Disorders / Orbital Disease / Hyperthyroidism SCCO TPA Course, October 1998

*TMOD Review Course* CE Course, SCCO, November 1998

Update on Thyroid Eye Disease / Physical Evaluation of the Head and Neck Workshop American Academy of Optometry, Ellerbrock CE Course, San Francisco, CA, December 1998

*New Pharmaceuticals for Iritis: Iritis Case Rounds* SCCO/Colorado Amplification CE Course, Fullerton, CA, February 1999

Rheumatology and Its Ocular Complications COA Congress, Santa Clara, CA, March 1999

Anterior/Posterior Uveitis; Orbital Diseases and Management SCCO TPA Course, Fullerton, CA, March 1999

*TMOD Review Course* SCCO CE Course, Fullerton, CA, April 1999

Anterior and Posterior Segment Disease Review C&E Ocular Symposium, Fullerton, CA, April 1999

Peripheral Retinal Disorders/Anterior Segment Review AVP Vision Plans, San Diego, CA, May 1999

Anterior/Posterior Uveitis; Orbital Disease and Management SCCO TPA Course, Fullerton, CA, June 1999

*TMOD Review Course* SCCO CE Course, Fullerton, CA, June 1999

Peripheral Retinal Disorders/Optic Nerve Disorders/Anterior Segment Disorders AVP Vision Plan, Napa, CA, August 1999

*Episcleritis and Scleritis: Simple Diagnostic Approaches* Vision Expo '99, Las Vegas, NV, September 1999

Aseptic Techniques for the Optometric Office Vision Expo '99, Las Vegas, NV, September 1999

Orbital Disease: When to Refer Vision Expo '99, Las Vegas, NV, September 1999

Anterior and Posterior Uveitis: Clinical Challenges Vision Expo '99, Las Vegas, NV, September 1999 *Conjunctival Disease: TPA Course* SCCO TPA Course, Fullerton, CA, September 1999

*Orbital Disease: TPA Course* SCCO TPA Course, Fullerton, CA, October 1999

Anterior Uveitis: TPA Course SCCO TPA Course, Fullerton, CA, October 1999

Update on Topical Glaucoma Medication California Pharmacists Association – Western Education Conference, Anaheim, CA, October 1999

Anterior Segment Disorders: Allergan Pharmaceuticals Brea, CA, October 1999

*TMOD Review Course* SCCO TPA Course, Fullerton, CA, November 1999

VSP Test Taking CE Course SCCO TPA Course, Fullerton, CA, November 1999

*Primary Care Management of Thyroid Eye Disease* American Academy, Ellerbrock Lecture, Seattle, WA, December 1999

*Thyroid Eye Disease: Diagnosis and Treatment* SCCO CE Cruise, Baja, CA, January 2000

*Optic Nerve Head Disorders: Swollen Disc* SCCO CE Course, Fullerton, CA, February 2000

Anterior Segment Disorders C & E Group Course, Fullerton, CA, March 2000

*Update on Glaucoma Medications* Orange County Optometric Society, Fullerton, CA, April 2000

TPA Lectures: Orbital Disorders, Uveitic Disorders, Episcleritis / Scleritis Canadian TPA Course, Toronto, Canada, June 2000

TPA Laboratories: Foreign Body Removal / Lacrimal Procedures / Glaucoma Procedures Canadian TPA Course, Toronto, Canada, June 2000

Update on Glaucoma Medications / Anterior Segment Disorders Canadian TPA Course, Toronto, Canada, June 2000

Aseptic Techniques in the Optometric Office AOA Congress, Las Vegas, NV, June 2000

*Ocular Dermatology* AOA Congress, Las Vegas, NV, June 2000

*Episcleritis / Scleritis: Treatment Options* AOA Congress, Las Vegas, NV, June 2000

*Orbital Disorders* AOA Congress, Las Vegas, NV, June 2000

*Glaucoma Update / Anterior Segment Disorders* SCCO CE, Banff, Canada, July 2000

*TMOD Review Course* SCCO CE, Fullerton, CA, August 2000

*Ocular Complications of AIDS* Vision Expo West, Las Vegas, NV, September 2000

*Clinical Cases in Anterior Uveitis* Vision Expo West, Las Vegas, NV, September 2000

Update on Thyroid Eye Disease Vision Expo West, Las Vegas, NV, September 2000

*Glaucoma Update* Tri County Optometric Society, Santa Barbara, CA, October 2000

*Topical Steroids Use in the Red Eye* SCCO CE, Fullerton, CA, December 2000/January 2001

*Utilizing Drugs in SB 929* San Diego Optometric Society CE, San Diego, CA, January 2001

*Glaucoma 24 Hour Certification Course* SCCO CE, Fullerton, CA, February 2001

*Glaucoma 24 Hour Certification Course* COA Congress, Oakland, CA, March 2001

*Utilizing Drugs in SB 929* Alameda/Contra Costa Optometric Society, San Francisco, April 2001

Utilizing Drugs in SB 929 Fresno Optometric Society/San Fernando Optometric Society CE, Fresno/San Fernando, CA, May 2001

*Glaucoma and Uveitis Update Course* Canadian Optometric Society, Toronto, Canada, May 2001

TPA Course: Conjunctivitis/Orbital Disease/Uveitis

SCCO CE, Fullerton, CA, June 2001

*Glaucoma 24 Hour Certification Course* SCCO CE, Fullerton, CA, July 2001

Anterior Segment Disease Tri-County Pathology Symposium, Ventura, CA, October 2001

*Ocular Dermatology* South Bay Optometric Society, Torrance, CA, October 2001

*Glaucoma 24 Hour Certification Course* SCCO CE, Valley Presbyterian Hospital, Van Nuys, CA, November 2001

*Glaucoma 24 Hour Certification Course* SCCO CE, San Diego Society, November 2001

Anterior Segment Disorders SCCO CE, Fullerton, CA, December 2001

*New Advances in Glaucoma / Anterior Segment Disease* Snowvision Conference, Park City, UT, January 2002

SCCO Glaucoma Course (24 Hr Certification Course) SCCO CE, Fullerton, CA, February 2002

*Optic Nerve Disease* San Gabriel Valley Optometric Society, Riverside, CA, April 2002

*Glaucoma Jeopardy / Thyroid Disease / Anterior Uveitis Challenges* North Central States Conference, St. Charles, IL, May 2002

SCCO TPA 80 Hour Course: Conjunctiva / Uveitis / Orbit Diseases SCCO CE, Fullerton, CA, June 2002

*Clinical Pearls in Ocular Disease* SCCO CE, Fullerton, CA, June 2002

*Glaucoma Challenge / Uveitis Disorders (PUCO Conference)* Pacific University, Victoria BC Conference, July 2002

*Update on Glaucoma* Rio Hondo Optometric Society, Las Vegas, NV, July 2002

Anterior Uveitis / Episcleritis / Anterior Segment Disease Vision Expo West, Las Vegas, NV, September 2002

*Corneal Ulcers / Anterior Segment Disease* COA Pathology Conference, Monterey, CA, November 2002 Botox – Understanding the Basics SCCO CE, Fullerton, CA, December 2002

*Physical Exam of the Head and Neck* American Academy of Optometry CE, San Diego, CA, December 2002

Optometric Jeopardy – Glaucoma / Anterior Segment Case Analysis / Eye Care Technology Update Snowvision – Review of Optometry CE, Steamboat Springs, CO, January 2003

Anterior Segment Disorders / Optical Steroid Use – Update Kaiser Permanente Optometry Symposium CE, Del Mar, CA, February 2003

Anterior Segment Disorders / Clinical Management of Uveitis SCCO CE, Fullerton, CA, February 2003

*Clinical Pearls in Anterior Segment Disease* Inland Eye Optometric Society CE, Ontario, CA, March 2003

Anterior Segment Clinical Challenges San Diego Optometric Society CE, San Diego, CA, March 2003

Anterior Segment Jeopardy Steel Refractive Group, Burbank, CA, April 2003

*Clinical Pearls in Corneal Ulcers / Glaucoma Update* C & E Optometric Symposium, Anaheim, CA, April 2003

*Glaucoma Certification Course – Case Analysis* SCCO CE, Fullerton, CA, July 2003

Anterior Segment Disorders, Diagnosis and Management (Black Alumni Optometric Series) SCCO CE, Torrance, CA, August 2003

AIDS Update / Anterior Uveitis / Episcleritis and Scleritis Vision Expo West CE Program, Las Vegas, NV, September 2003

Anterior and Posterior Uveitic Syndrome "Allen Fried Honorary Lecture Series" Alumni Weekend SCCO CE, Fullerton, CA, October 2003

*Optometric Jeopardy – Glaucoma Challenge* Dr. Steel Fall Lecture Symposium, Burbank, CA, November 2003

Update on Fourth Generation Fluoroquinolones Guest Speaker, Alcon Symposium, American Academy of Optometry, Dallas, TX, December 2003

Anterior Segment Disorder / Anterior and Posterior Uveitis Snow Vision Lecture Series – Reed Exposition Group CE Whistler, Canada, January 2004

Anterior Segment Disorders / Optometric Jeopardy – Glaucoma Challenge Pacific Eyes Island CE Program (Pacific University), Maui, HI, February 2004

Anterior Segment Disorders San Jose Optometric Pathology Symposium, San Jose, CA, February 2004

*Optometric Jeopardy – Glaucoma Challenge / Anterior Infections* Alameda Contra Costa Society, Pathology Symposium, San Francisco, CA, April 2004

Episcleritis and Scleritis / Physical Exam of the Head and Neck / Orbit Disorders / Anterior and Posterior Uveitis Disorders South Dakota Optometric Association – Annual Meeting, Chamberlain, SD, April 2004

Update on Fourth Generation Fluoroquinolones / Oral Medications / Optometric Jeopardy TLC Refractive Group, Bajamar, Mexico, May 2004

Anterior and Posterior Uveitic Disorders SCCO CE, Fullerton, CA, July 2004

HIV Update / Anterior and Posterior Uveitis / Neurologic Examination / Disorders of the Optic Nerve Head Vision Expo West CE Program, Las Vegas, NV, September 2004

*Optometric Jeopardy* SCCO Alumni Anniversary Weekend, Fullerton, CA, October 2004

Fourth Generation Fluoroquinolones / Anterior Segment Disease TLC CE Seminar, Primm, NV, November 2004

*Optic Nerve Disorders / Optometric Jeopardy / Anterior and Posterior Uveitis* COA Pathology Symposium, Monterey, CA, November 2004

Anterior Segment Disease: Treatment Update COA House of Delegates, Oakland, CA, December 2004

Anterior Segment Disease / Fourth Generation Fluoroquinolones San Diego Optometry Pathology Symposium, San Diego, CA, March 2005

Anterior and Posterior Uveitic Disorders Inland Empire Optometric Society, Ontario, CA, March 2005

Anterior Segment Disorders: Therapeutic Update C & E Pathology Symposium, Fullerton, CA, April 2005

Anterior Uveitis, Diagnosis, Treatment & Management SCCO CE, Fullerton, CA, July 2005

*Update on HIV Infection / Neuro Work-up for General Practice / Disc Edema (5 Hrs)* Optowest / Vision Expo Continuing Education Program, Las Vegas, NV, September 2005

Update on Fluoroquinolones / Episcleritis and Scleritis / Case Review of Anterior Segment / Thyroid Eye (4 Hrs)

Ohio Optometric Association CE Program, Cleveland, OH, October 2005

*Disc Edema / Uveitis Work-up / Update on Fluoroquinolones (5 Hrs)* Kaiser Permanente CE Program, Portland, OR, October 2005

Disc Swelling and DDx / Anterior Segment Jeopardy / Case Analysis of Anterior Inflammation Berkeley School of Optometry, Alumni CE Program, Hawaii, HI, November 2005

*Glaucoma Jeopardy for the Private Practitioner* SCCO CE, Fullerton, CA, December 2005

*First Line Glaucoma Medications* San Diego Optometric Society CE Program, San Diego, CA, February 2006

*Thyroid Eye Disease / Ocular Dermatology / Anterior Segment Jeopardy / Neuro Work-up* Arkansas Optometric Association CE Program, Hot Springs, AR, April 2006

*Mad Science / Mad Drugs* TLC CE Program, Anaheim, CA, June 2006

*Dry Eye Syndrome* Rio Hondo Optometric Society, Las Vegas, NV, July 2006

SCCO Glaucoma Course: VF Evaluation of the Glaucomatous Patient SCCO CE, Fullerton, CA, September 2006

*Thyroid Eye Disease / You've Got Some Nerve Disc Disease / Anterior Segment Jeopardy* Great Western Council of Optometry (GWCO), Portland, OR, October 2006

*Optic Nerve Disease / How to Do a Basic Neurologic Work-up* C & E Symposium, Garden Grove, CA, January 2007

*Ocular Emergencies / Anterior Segment Diseases* SCCO CE, Fullerton, CA, February 2007

Anterior/Posterior Uveitis: Clinical Challenges San Jose Optometric Winter Symposium, Stockton, CA, February 2007

First Line Glaucoma Medications / Ocular Dermatology / Thyroid Eye Disease / Episcleritis & Scleritis California Optometric Association – Optowest, March 2007

*Fourth Generation Fluoroquinolones* Fresno Optometric Society, Fresno, CA, March 2007 *First Line Glaucoma Medications* Alcon Symposium, San Diego, CA, April 2007

*Optic Nerve Disease / Anterior Segment Disorders / Anterior Segment Jeopardy* San Diego Optometric Society, San Diego, CA, May 2007

*Fundus Technology in Optometric Practice* TLC Lecture, Anaheim, CA, June 2007

*Gonioscopy / Foreign Body Removal* SCCO CE, Fullerton, CA, July 2007

Anterior Uveitis / Systemic Inflammatory Disorders of the Eye / Case Review of Ocular Inflammation Manitoba, Canada, Manitoba Optometric Association, September 2007

*Thyroid Eye Disease / Panel Discussion New Technologies / Ocular Dermatology* Vision Expo – West, Las Vegas, NV, October 2007

*Systemic Medical Jeopardy* American Academy of Optometry, Tampa, FL, October 2007

*Case Studies in Glaucoma and Visual Field Loss* SCCO Glaucoma Course, Fullerton, CA, November 2007

Papilledema / The Swollen Optic Nerve SCCO CE Course, Fullerton, CA, December 2007

Infectious Disease of the Eye / Anterior Segment Jeopardy / Episcleritis and Scleritis National West Optometric Meeting, Los Angeles, CA, December 2007

*Famous Red Eyes / Lacrimal Lab: Punctal Plugs* SCCO CE Course, Fullerton, CA, March 2008

*Neurologic Work-up for the Optometric Office / Systemic Medicine Jeopardy* VSP CE Course, Denver, CO, May 2007

Anterior & Posterior Uveitis / Anterior Segment Jeopardy Tyrie Jensen Refractive Center CE Course, Honolulu, HI, May 2008

*Ocular Surface Disease / Allergic Response of the Eye* San Fernando Optometric Society, Tarzana, CA, June 2008

Anterior Segment Disorders Orange County Optometric Society, Anaheim, CA, June 2008

*Ocular Emergencies / Lacrimal Lab – Punctal Plugs* SCCO CE Course, Fullerton, CA, July 2008 Neuro Eval / Systemic Medicine Jeopardy / Swollen Disc Syndrome / Thyroid Eye Disease Update Vision Expo CE Course, Las Vegas, NV, September 2008

*Video Gonioscopy Workshop* American Academy of Optometry, Anaheim, CA, October 2008

Anterior Segment Jeopardy Alcon-sponsored CE, Los Angeles, CA, November 2008

*CE Potpourri : Chief of Service* SCCO CE, Fullerton, CA, December 2008

*Ocular Disease; Part I (Lacrimal Lab / Dilation / Irrigation Lab / Anterior Segment Jeopardy)* SCCO CE, Fullerton, CA, January 2009

*Ocular Emergencies / Swollen Disc Syndrome / Systemic Medicine Jeopardy* NOA CE Meeting, Lake Tahoe, NV, March 2009

Anterior Segment CE: Lacrimal Lab / Fourth Generation Fluoroquinolones SCCO CE, Fullerton, CA, March 2009

*Glaucoma Jeopardy / Paraoptometric Jeopardy* Inland Empire CE Program, Ontario, CA, April 2009

*First Line Glaucoma Medications* C & E Symposium, Norwalk, CA, May 2009

*Ocular Emergencies / Neuro Evaluation / Glaucoma Jeopardy* San Diego Optometry Society, San Diego, CA, May 2009

Foreign Body Workshop & Lecture / Ulcerative Keratitis SCCO CE Program, Fullerton, CA, July 2009

Medical Mysteries / First Line Glaucoma Meds / Systemic Medical Jeopardy GWCO, Portland, OR, October 2009

Anterior Segment Disease Update SCCO CE Program, Fullerton, CA, November 2009

*Binocular Indirect Workshop – Laboratory* SCCO CE Program, Fullerton, CA, December 2009

Anterior Segment: Lids and Beyond Inland Empire Optometric Society, Ontario, CA, February 2010

*Binocular Vision / Anterior Segment Jeopardy* SCCO CE Alumni Weekend, Fullerton, CA, February 2010

Posterior Uveitis / Glaucoma Management Cases

SCCO CE (Ocular Disease Part I), Fullerton, CA, March 2010

*Managing the Dry Eye Patient* Alcon CE, Fullerton, CA, March 2010

Neuro Evaluation / Systemic Causes of Ocular Inflammation / Anterior Segment Disease: Lids and Beyond / Ocular Emergencies South Dakota Optometric Society (Spring Convention), Pierre, SD, April 2010

*Controversies in Modern Eye Care* Maconey Vision Institute, Los Angeles, CA, April 2010

*Ocular Emergencies / Ocular Dermatology* Indian Health Service Annual Meeting, SCCO, Fullerton, CA, May 2010

Advances in Ocular Disease Technology SCCO CE Program, Fullerton, CA, June 2010

*Ocular Surface Disorders* Alcon CE Program, Sacramento, CA, June 2010

*Physical Exam of the Head & Neck / First Line Glaucoma Medications* Rio Hondo Optometric Society, Buena Park, CA, July 2010

Anterior Segment Disease: Lids and Beyond Orange County Optometric Society, Santa Ana, CA, August 2010

*Ocular Dermatology / Neurologic Evaluation / Medical Jeopardy / Ocular Emergencies* Vision Expo West, Las Vegas, NV, October 2010

Herpes Simplex Inferons of the Anterior Segment / Physical Examination of the Head and Neck American Academy of Optometry – Ellerbrock CE, San Francisco, CA, November 2010

Anterior Segment Disease Kaiser Permanente Spring CE Program, Long Beach, CA, January 2011

Anterior Segment Disease / First Line Glaucoma Medications British Columbia Optometric Association (Congress), Vancouver BC, February 2011

*Ocular Disease Symposium* SCCO CE Program, Fullerton, CA, February 2011

*Ocular Emergencies / Anterior Segment Disease / Challenges in Uveitis* Mountain West Council of Optometry (MWCO), Las Vegas, NV, April 2011

*Glaucoma Certification Course (16 Hour)* SCCO, Fullerton, CA, May 2011 *Neurologic Work-up / Challenges in Uveitis* Saskatoon Optometric Association, Saskatoon, Canada, June 2011

Glaucoma Grand Rounds – Instructor

ECC: 16 Hours of Patient Grand Rounds for Board Certification, September 2011-October 2012, monthly

*Glaucoma Certification / Systemic Disease and the Eye* COA Pathology Symposium, Monterey, CA, November 2011

*Ocular Emergencies / Physical Exam and Ocular Diagnosis* Canadian Optometric Association – Vancouver, BC, March 2012

*Glaucoma Treatment and Management Course* COA Optowest, Indian Wells, CA, April 2012

*Glaucoma Jeopardy / Ocular Emergencies / Ocular Dermatology* Colorado Optometric Association, Steamboat Springs, CO, July 2012

*Ocular Emergencies / Ocular Neurology* Vision Expo West, Las Vegas, NV, September 2012

*Glaucoma Jeopardy / Ocular Emergencies* Minnesota Optometric Association, September 2012

*Systemic Virus and Ocular Complications* American Academy of Optometry, Phoenix, AZ, October 2012

*Glaucoma Certification Lecture* COA Optowest, Indian Wells, CA, April 2013

Managing IOP in Glaucoma Patients Sacampo Lecture, Sacramento, CA, August 2013

*Travatan-2 Update* Northeastern State University, Tahlequah, OK, September 2013

Pediatric/Adult Orbital Disease Ellerbrock Lecture, American Academy of Optometry (October 2013), Seattle, WA

*Glaucoma Certification Lecture* COA Pathology Symposium, Monterey, CA, November 2013

*Infectious Keratitis* C & E Lecture, Orange, CA, January 2014

*Connective Tissue Disease and the Eye, Glaucoma Jeopardy* SCCO CE Course (OD Part I), Fullerton, CA, March 2014

*Glaucoma Case Presentation (with Dr. Maher)* SCCO CE Course (OD Part II), Fullerton, CA, July 2014

*Ocular Emergencies, Ocular Dermatology, Pediatric Orbital Disorders* Vision Expo 2014, Las Vegas, NV, September 2014

Ocular Emergencies, Ocular Dermatology, Systemic Medical Jeopardy (with Drs. Scalfani/Kading), Adults Orbital Disorders GWCO, Portland, OR, October 2014

*Ocular Emergencies, Pediatric Orbital Disorders, Jeopardy* Arizona Optometric Fall Congress, Sedona, AZ, November 2014

*Uveitis Challenges, Ocular Dermatology, Orbital Disorders* VisionExpo West, Las Vegas, NV. September 2015

*Invited Lecturer (University of Houston) CE Lecture: Uveitis, Clinical Case Challenges* School of Optometry, Houston, TX, October 2015

Poster Presentation: "*Double ONH Drusen*" American Academy of Optometry, New Orleans, LA, October 2015

*New Testing for Viral Infections* SCCO CE Lecture, Fullerton, CA. March 2016

*OCT and Glaucoma Progression* NVision Symposium, Anaheim, CA. June 2016

*Dry Eye and Rheumatoid Disease* SCCO/CE Lecture, Fullerton, CA. July 2016

Uveitis and Orbital Disorders C&E Lecture Symposium, Orange, CA. September, 2016

Advanced Procedures, Uveitis and Systemic Medical Jeopardy GWCO meeting, Portland, OR. October, 2016

*OCT and Glaucoma Progression* San Diego Optometric Society, San Diego, CA. October 2016

*New Advances in Optometric Practice* SCCO/CE Lecture, Fullerton, CA. December 2016

#### **AWARDS / PROFESSIONAL SERVICE**

COA Excellence in Optometric Education Award 2012, 2014 Trustee: Orange County Optometric Society, 1986-99 (Health Care Chairman 1997-99) Membership Chairman: Orange County Optometric Association 1988-1992 OCOS delegate to the COA Congress, February, 1990, 1992-2002, 2004, 2009, 2012 Graduated magna cum laude, University of Massachusetts, Amherst, MA, 1981 Optometric Recognition Award, 1987, 1988, 1989, 1990, 1994, 1995, 1998, 2000, 2008, 2012, 2015 AOA Continuing Education Award, 1987, 1988, 1993, 1994, 1995, 1998, 2001, 2010, 2015 Who's Who in California Yearbook, 1988, 1995, 1997, 1998, 2001 20-Year Membership Award (AOA), 2003 25-Year Membership Award (AOA), 2008 30-Year Membership Award (AOA), 2013 Teacher of the Year Award (1996, 2006, 2007, 2009, 2010, 2012, 2013) SCCO Service Award, 1991, 1996, 2001, 2006, 2011, 2016 Exceptional Service Award (UCI-NOCCC), 1990 Outstanding Young Men of America, 1996, 1997, 1998 Certificate of Recognition MBKU (Outstanding Dedication/Service) 2014 **PROFESSIONAL AFFILIATIONS** Optometric Glaucoma Society (OGS) – Active

Fellowship in the American Academy of Optometry (Diplomate: Active)

American Optometric Association Member - Active

California Optometric Association Member – Active

Beta Sigma Kappa Honor Society – Active

Omega Delta Optometric Fraternity Member – Active

Association of Optometric Educators – Active

Orange County Optometric Society Member – Active

American Diabetes Association Member – Active

Optometric Advisory Board (Assemblyman William Morrow) - Inactive

# LICENSURE/CERTIFICATION

Present licenses in Massachusetts (expires 2017), California (expires 2017)
IAB Certification in Ocular Diagnosis and Therapeutics, 1986, 1996
TPA Certification in California, December 1996
Glaucoma Certification, February 2004 (completed 50 co-management patients)
DEA certification, June 2001 (expires 2019)

## REFERENCES

References upon request.