

**Curriculum Vitae—Andrew J.W. Huang, M.D., M.P.H.**

**Citizenship:** [-----]

**Address:** (Office) Department of Ophthalmology and Visual Sciences  
Washington University School of Medicine  
660 South Euclid Avenue, Campus Box 8096  
St. Louis, MO 63110 USA  
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Fax 314-747-2851  
[-----]

**Present Position:** Professor of Ophthalmology and Visual Sciences  
Washington University School of Medicine  
St. Louis, Missouri

**Education:**

Graduate:

- [----] MD, National Taiwan University School of Medicine, Taipei, Taiwan
- [----] MPH, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland

Postdoctoral Training

- [----] Research Fellow, Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, Maryland
- [----] Postdoctoral Fellow, Division of Biophysics, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland
- [----] Research Fellow, Department of Ophthalmology, Harvard Medical School,  
Research Associate, Eye Research Institute of Retina Foundation, Boston, Massachusetts
- [----] Research Fellow, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, Florida
- [----] Resident in Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, Florida
- [----] Clinical Fellow in Cornea and External Disease, Bascom Palmer Eye Institute, University of Miami, Miami, Florida

**Academic Positions/Employment**

- 1991-97 Assistant Professor of Ophthalmology  
Bascom Palmer Eye Institute, University of Miami, Miami, Florida
- 1997-00 Associate Professor of Ophthalmology  
Bascom Palmer Eye Institute, University of Miami, Miami, Florida
- 2000-05 Associate Professor of Ophthalmology  
University of Minnesota, Minneapolis, Minnesota
- 2000-07 Lyon Chair of Ophthalmology, University of Minnesota, Minneapolis, Minnesota

- 2006-08/07 Professor of Ophthalmology, University of Minnesota, Minneapolis, Minnesota
- 08/2007- Professor of Ophthalmology & Visual Sciences  
Washington University School of Medicine, St. Louis, Missouri

### **Hospital Appointments**

- 1991-97 Associate Staff, Anne Bates Leach Eye Hospital, Miami, Florida
- 1997-00 Active Staff, Anne Bates Leach Eye Hospital, Miami, Florida
- 2000-08/07 Attending Staff, Fairview University Medical Center, Minneapolis, Minnesota
- 2000-08/07 Attending Surgeon, Phillips Eye Institute, Minneapolis, Minnesota
- 10/2007- Active Staff, Barnes-Jewish Hospital, St. Louis, Missouri

### **Academic Administrative Appointments**

#### Bascom Palmer Eye Institute and the University of Miami, Miami, Florida:

- 1990-2000 Infection Control Committee, Bascom Palmer Eye Institute
- 1991-2000 Quality Assurance Committee, Bascom Palmer Eye Institute
- 1997-2000 Medical Student Admission Committee, University of Miami School of Medicine
- 1997-2000 Medical Board, Bascom Palmer Eye Institute
- 1999-2000 Residency Selection Committee, Bascom Palmer Eye Institute

#### Department of Ophthalmology, University of Minnesota, Minneapolis, Minnesota:

- 2000-08/07 Director, Cornea and Refractive Surgery
- 2000-08/07 Director, Cornea Fellowship
- 2000-08/07 Associate Medical Director, Minnesota Lions Eye Bank

### **National Scientific Committees**

- 03/02/1999 FDA Orphan Drug Grant Review Committee
- 2002, 2003 Grant Review Committee, National Eye Institute Special Emphasis Panel
- 2000- Member, Fellowship Grant Review Committee  
Fight for Sight, Prevent Blindness America
- 2001-2004 Consultant, FDA Ophthalmic Devices Panel
- 2004- Member, FDA Ophthalmic Devices Panel

### **Consulting Positions**

- 2002- Member, Speaker's Bureau, Allergan (Irvine, CA) and Alcon (Ft. Worth, TX)
- 2005- Consultant, Lantibio and Rx Development Resources, Tampa, Florida

### **Editorial Responsibilities**

#### Editorial Boards:

- 2001 Guest Editorial Board Member, Investigative Ophthalmology and Visual Sciences
- 2005- Editorial Board, Graefes Archives for Clinical and Experimental Ophthalmology

Scientific Reviewer For: American Journal of Ophthalmology  
Archives of Ophthalmology  
Cornea  
Current Eye Research  
Investigative Ophthalmology and Visual Science  
Ophthalmology

American Academy of Ophthalmology:

1996-2001 Co-editor, Cornea and External Disease Section (Book 8),  
Basic and Clinical Science Course  
2002 Reviewer, External Disease & Cornea (a multimedia program)  
2002 Reviewer, Corneal Dystrophies and Degenerations

**Board Certification:**

[-----] Diplomate, American Board of Ophthalmology

**Medical Licensure:**

1989	State of Florida [-----]	2007	State of Missouri [-----]
1992	State of California [-----]	2007	State of Illinois [-----]
2000	State of Minnesota [-----]		

**Honors and Awards:**

[-----] Dean's List and Book Coupon Scholarship, National Taiwan University  
[---] Best Intern Award, National Taiwan University Hospital  
[----] Graduation with Honors, School of Hygiene and Public Health,  
Johns Hopkins University, Baltimore, Maryland  
1986 NEI-ARVO Travel Fellowship  
1986 Pharmacia Travel Fellowship  
1992, 2000 Professor of the Year, Bascom Palmer Eye Institute  
1997 Honor Award, American Academy of Ophthalmology  
2000 Lyon Professor of Ophthalmology, University of Minnesota, Minneapolis  
2001, 2007 Best Faculty Teaching Award, Department of Ophthalmology,  
University of Minnesota, Minneapolis  
2004 Medical Faculty Award, ORBIS International, New York, New York  
2006 Gold Medal, Eye Advance 2006, Mumbai, India

**Professional Societies and Organizations:**

Fellow, American Academy of Ophthalmology (AAO)  
American Medical Association  
Association for Research in Vision and Ophthalmology (ARVO)  
Chinese American Ophthalmologists Society  
Chinese American Professional Association of Minnesota (Board Director, 2000-2002)  
Minnesota Academy of Ophthalmology

**Research Support:**

1991-1992 [-----] Co-Investigator, [-----]  
A randomized double masked clinical trial to assess the safety and efficacy of  
three concentrations of Sandimmune ointment vs. placebo in patients with KCS

- 1987-88 Principal Investigator, Grant-in-aid 0A87-023. [-----] (\$[-----])  
Photothrombosis of Corneal Neovascularization by Treatment with Argon  
Laser and Intravenous Rose Bengal. ([--]effort)
- 1988 Principal Investigator, Contract grant, [-----]  
----] (\$[-----])  
Clinical Efficacy of Topical Tretinoin for Dry Eye Disorders. ([--]effort)
- 1991-92 Co-Investigator, Contract grant K-206, [-----] (\$[-----]  
])  
Clinical Trial of Sandimmune 1% Ophthalmic Ointment for  
Keratoconjunctivitis Sicca. (P.I.-[-----]). ([-]effort)
- 1991-92 Principal Investigator, Contract grants 91-44 and 91-51, [-----].  
(\$[-----])  
Efficacy and Safety Evaluation of Lodoxamide 0.1 % Ophthalmic Solution  
versus Placebo in Vernal Keratoconjunctivitis. ([--]effort)
- 1993-96 Principal Investigator, [-----] Grant FD-R-0008264-1. (\$[-----]  
---])  
Photothrombotic Treatment for Corneal Neovascularization. ([--]effort)
- 2002-03 Principal Investigator, [-----] (\$[-----])  
Structural and Functional Analyses of Keratoepithelin. ([-] effort)
- 2003-05 Principal Investigator, [-----] (\$[-----])  
Molecular Therapy for Myocilin-Related Glaucoma. CUFS 1003-640-5966.  
([--]effort)
- 2003-04 Principal Investigator, [-----] GA03009 (\$[-----])  
Molecular Therapy for Myocilin-Related Glaucoma. CUFS 1752-640-6145.  
([-] effort)
- 2003-04 Principal Investigator, [-----] (\$[-----])  
Molecular Therapy for Myocilin-Related Glaucoma. CUFS 1746-640-6147.  
([--]effort)
- 2003-04 Principal Investigator, [-----]. (\$[-----])  
Molecular Therapy for BIGH3-Related Corneal Dystrophies. CUFS 1746-  
640-6149. ([-]effort)
- 2005-07 Principal Investigator, National Institutes of Health R03-EY016088  
(\$299,000.00)  
Suppression of Myocilin by siRNA. CUFS 1697-640-6169. (20% effort)
- 2005 Unrestricted educational grant, [-----] (\$[-----])  
Ocular Surface Symposium, [-----]
- 2006 Principal Investigator, [-----] #3631-9238-06 (\$[-----])  
siRNA for Treating Myocilin-Related Glaucoma. CUFS 1748-640-6179. ([-]  
effort)
- 2006 Instrument Grant, [-----] #3630-9227-06 (\$[-----])  
Nucleofector for Transfecting Primary Cultured Ocular Cells. CUFS 1748-  
640-6177.
- 2006 Principal Investigator, Contract Grant [--] 1901DE-002, [-----]  
---] (\$[-----])  
A Phase 2 Multicenter, Randomized, Double-Masked, Placebo-Controlled,  
Parallel-Group, Dose Ranging Study of [-----] Ophthalmic Solution in

- Subjects with Moderate to Severe Dry Eye Syndrome. CUFS 1743-640-9023  
([-]effort)
- 2006 Unrestricted educational grant, [-----] (\$[-----])  
Ocular Inflammation Symposium, [-----]
- 2006 Co-Investigator, A Phase 3, Randomized, Double-Blind, Placebo-Controlled  
Trial of Recombinant Human Keratinocyte Growth Factor (fHuKGF) for  
Reduction of Mucositis in Patients with Hematologic Malignancies  
Undergoing Total Body Irradiation (TBI) and High Dose Chemotherapy with  
Autologous Peripheral Blood Progenitor Cell (PBPC) Transplantation.  
A Long-Term Follow-Up Study in Patients with Hematologic Malignancies  
Previously Enrolled in Amgen-Sponsored Clinical Trial Using rHuKGF. PI: [-  
-----])
- 2006-11 Co-Investigator, Core Grant For [-----] 2P30EY011374-11  
(PI: [-----])
- 2007-09 Co-Principal Investigator, National Institutes of Health R21-EY017852  
(\$250,000.00, PI: Yuan, Ching)  
Treatment of BIGH-3 related Corneal Dystrophies with Meptides.  
CUFS 1697-640-6193. (5% effort)

**Patents:**

- 05/1992 FDA IND #38,895, Investigational New Drug of Intravenous Rose Bengal
- 04/1996 US Trademark #74503065, Oblique Keratotomy, OK
- 07/1997 US Patent #5,652,209, Secretory Products of Human Lacrimal Gland Acinar  
Epithelia for Tear Replacement
- 11/2000 US Patent #6,153,607, Non-preserved Topical Corticosteroid for Treatment of  
Dry Eye

**Teaching and Mentoring:**Thesis and Dissertation Advising:

- 2004 [-----], MD; MS thesis, University of Minnesota
- 2007 [-----]; PhD thesis, University of Minnesota

Clinical Cornea Fellows, University of Minnesota (2000-2007):

- |               |               |
|---------------|---------------|
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |
| [-----], M.D. | [-----], M.D. |

Research Cornea Fellows, University of Minnesota (2000-2005):

- [-----], M.D.
- [-----], M.D.
- [-----], M.D.
- [-----], M.D., Ph.D.
- [-----], Ph.D.

Supervisor, Medical Student Summer Research Projects, University of Minnesota (2000-2007):

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[-----]	[-----]
[-----]	[-----]

**Peer-Reviewed Publications (\*corresponding author):**

1. Tseng SCG, Jarvinen MI, Nelson WG, **Huang AJW**, Woodcock-Mitchell J, Sun TT. Correlation of specific keratin antigens with different types of epithelial differentiation: Monoclonal antibody studies. *Cell* 30:361-372, 1982. (**Role:** Isolated keratins from various tissues for comparison.)
2. Tseng SCG, Hatchell D, Tierney N, **Huang AJW**, Sun TT. Expression of specific keratin markers by rabbit corneal, conjunctival, and esophageal epithelia during vitamin A deficiency. *J Cell Biol* 99:2279-2286, 1984. (**Role:** Isolated ocular surface epithelia from vitamin A-deficient rabbits and performed immunoblotting.)
3. Sun TT, Tseng SCG, **Huang AJW**, Cooper D, Schemer A, Lynch MH, Weiss R, Eichner R. Monoclonal antibody studies of mammalian epithelial keratins: A review. *Ann NY Acad Sci* 455:307-329, 1985. (**Role:** Summarized the keratin results of the ocular surface epithelia.)
4. Tseng SCG, **Huang AJW**, Sutter D. Purification and partial characterization of rabbit ocular mucin. *Invest Ophthalmol Vis Sci* 28:1473-1482, 1987. (**Role:** Collected rabbit surface mucins and partook in protein sequence analysis.)
5. **Huang AJW**, Tseng SCG. Development of monoclonal antibodies to rabbit ocular mucin. *Invest Ophthalmol Vis Sci* 28:1483-1491, 1987. (**Role:** Developed the monoclonal antibody to rabbit ocular surface mucin from hybridoma production to antibody characterization. Wrote the paper.)
6. **Huang AJW**, Tseng SCG, Kenyon KR. Morphogenesis of conjunctival goblet cells in the rat. *Invest Ophthalmol Vis Sci* 29:969-975, 1988. (**Role:** Collected and analyzed flat-mount rat conjunctiva to quantify goblet cells. Wrote the paper.)
7. **Huang AJW**, Watson BD, Hernandez E, Tseng SCG. Photothrombosis of corneal neovascularization by intravenous rose bengal and argon laser irradiation. *Arch Ophthalmol* 106:680-687, 1988. (**Role:** Created rabbit neovascularization and conducted occlusion of corneal vessels. Wrote the paper.)
8. **Huang AJW**, Watson BD, Hernandez E, Tseng SCG. Induction of conjunctival transdifferentiation by photothrombotic occlusion of corneal neovascularization. *Ophthalmology* 95:228-235, 1988. (**Role:** Conducted the entire body of research. Wrote the paper.)
9. Gilbard JP, **Huang AJW**, Beldegrun R, Lee JS, Rossi SR, Gray KL. Open-label crossover study of vitamin A ointment as a treatment for keratoconjunctivitis sicca. *Ophthalmology* 96:244-246, 1989. (**Role:** Participated in the clinical examination and impression cytology analysis of this clinical trial.)

10. **Huang AJW**, Beldegrun R, Hanninen LA, Tseng SCG, Kenyon KR, Refojo MF. Effects of hypertonic solutions on conjunctival epithelium and mucin discharge. *Cornea*, 8:15-20, 1989. (**Role:** Conducted the entire research project and analysis. Wrote the paper.)
11. **Huang AJW**, Tseng SCG, Kenyon RK. Pharmacologic therapy for ocular surface diseases. *Ophthalmol Clin of North America*, 2:39-50, 1989. (**Role:** Conducted the entire literature review. Wrote the paper.)
12. **Huang AJW**, Tseng SCG, Kenyon KR. Paracellular permeability of corneal and conjunctival epithelia. *Invest Ophthalmol Vis Sci*, 30:684-689, 1989. (**Role:** Conducted the entire literature review. Wrote the paper.)
13. **Huang AJW**, Tseng SCG, Kenyon KR. Alteration of epithelial paracellular permeability during corneal epithelial wound healing. *Invest Ophthalmol Vis Sci* 31:429-435, 1990. (**Role:** Conducted the entire literature review. Wrote the paper.)
14. Pflugfelder SC, **Huang AJW**, Schuchovski PT, Pereira IC, Tseng SCG. Conjunctival cytological features of primary Sjogren's syndrome. *Ophthalmology* 97:985-991, 1990. (**Role:** Collected impression cytology specimens and assisted in the interpretation.)
15. Pflugfelder SC, **Huang AJW**, Crouse C. Epstein-Barr virus keratitis following a chemical facial peel. *Am J Ophthalmol* 110:571-573, 1990. (**Role:** Assisted in clinical care and collection of impression cytology specimens.)
16. Tseng SCG, Chen JJY, **Huang AJW**, Kruse FE, Maskin SL, Tsai UF. Classification conjunctival surgeries for corneal disease based on stem cell concept. *Ophthalmol Clin of North America*, 32:595-610, 1990. (**Role:** Assisted in formulating the concept of limbal stem cells, and contributed to the research data.)
17. **Huang AJW**, Tseng SCG. Corneal epithelial wound healing in the absence of limbus. *Invest Ophthalmol Vis Sci* 32:96-105, 1991. (**Role:** Conducted the entire research project and wrote the paper.)
18. **Huang AJW**, Tseng SCG, Kenyon KR. Change of paracellular permeability of ocular surface epithelium by vitamin A deficiency. *Invest Ophthalmol Vis Sci* 32:633-639, 1991. (**Role:** Conducted the entire research project. Wrote the paper.)
19. **Huang AJW**, Tseng SCG, Kenyon KR. Letters to the Editor. In reply regarding paracellular permeability of ocular surface epithelia. *Invest Ophthalmol Vis Sci* 32:2163-2165, 1991. (**Role:** Conducted the entire research project and wrote the paper.)
20. Simon MW, Miller D, Pflugfelder SC. Murchinson FJ, **Huang AJW**, Atherton SS. Comparison of immunocytology to tissue culture for diagnosis of presumed herpes virus dendritic epithelial keratitis. *Ophthalmology* 99:1408-1413, 1992. (**Role:** Assisted in the analysis of impression cytology.)
21. Culbertson WW, **Huang AJW**, Mandelbaum SH, Pflugfelder SC, Boozalis GT, Miller D. Effective treatment of phlyctenular keratoconjunctivitis with oral tetracycline. *Ophthalmology* 100:1358-1366, 1993. (**Role:** Contributed to most of the patient care and the concept of the therapy.)
22. Sellitti TP, **Huang AJW\***, Schiffman J, Davis JL. Association of herpes zoster ophthalmicus with acquired immunodeficiency syndrome and acute retinal necrosis. *Am J Ophthalmol* 116:297-301, 1993. (**Role:** Sponsored the paper as the senior author. Supervised data collection and the manuscript.)

23. Hummer J, Gass JDM, **Huang AJW\***. Conjunctival Kaposi's sarcoma treated with Interferon alpha-2a. *Am J Ophthalmol* 116:502-503, 1993. (**Role:** Provided the original concept of using interferon for ocular Kaposi and supervised patient care.)
24. Santos CI, **Huang AJW**, Foster CS, Friedlander M, McCulley JP. Efficacy of Iodoxamide 0.1% ophthalmic solution in resolving corneal epitheliopathy with vernal keratoconjunctivitis. *Am J Ophthalmol* 117:488-497, 1994. (**Role:** Assisted in conducting the clinical trial and preparation of the entire manuscript.)
25. Tu EY, Culbertson WW, Pflugfelder SC, **Huang AJW**, Chodosh JC. Therapy of non-necrotizing anterior scleritis with subconjunctival corticosteroid injection. *Ophthalmology* 102:718-724, 1995. (**Role:** Contributed patient care to this trial and developed the concepts of steroid use.)
26. Jager MJ, Chodosh J, **Huang AJW**, Alfonso EC, Culbertson WW, Forster RK. *Aspergillus niger* as an unusual cause of scleritis and endophthalmitis. *Br J Ophthalmol* 78:584-586, 1995. (**Role:** Faculty supervisor of manuscript preparation and patient care.)
27. Gupta A, Monroy D, Ji Z, Yoshino K, **Huang AJW**, Pflugfelder SCP. Transforming growth factor beta-1 and beta-2 in human tear fluid. *Curr Eye Res* 15:605-614, 1996. (**Role:** Assisted in the collection of tear specimens and manuscript preparation.)
28. **Huang AJW\***, Li CH, Bourguignon LYW, Chen YW. Co-expression of bcl-2 and CD44s in basal layers of human ocular surface epithelia. *Lacrimal Gland, Tear Film and Dry Eye Symposium 2. Adv Exp Med Biol* 438:527-531, 1998. (**Role:** Conducted the entire research project. Wrote the paper.)
29. Ford J, **Huang AJW**, Pflugfelder SCP, Forster RK, Alfonso EA, Miller D. Nontuberculous mycobacterial keratitis in south Florida. *Ophthalmology* 105:1652-1658, 1998. (**Role:** Supervised data collection and manuscript preparation.)
30. Alexandrakis G, **Huang AJW\***, Miller D. Amebic keratitis due to *Vahlkampfia* infection following corneal trauma. *Arch Ophthalmol* 116:950, 1998. (**Role:** Senior faculty supervisor of data collection and manuscript preparation.)
31. Liu Z, **Huang AJW**, Pflugfelder SC. Evaluation of corneal thickness and topography in normal eyes using the Orbscan corneal topography system. *Br J Ophthalmol* 83:774-778, 1999. (**Role:** Assisted in data analysis and manuscript preparation.)
32. Wichinsin P, McDonough RL, **Huang AJW\***, Flynn HW. Tissue adhesive in the management of leaking pars plana sclerotomy causing hypotony and choroidal detachment. *Arch Ophthalmol* 119:135-137, 2001. (**Role:** Supervising faculty for patient care and manuscript preparation.)
33. Solomon A, Karp CL, Miller D, Dubovy SR, **Huang AJW**, Culbertson WW. Mycobacterium interface keratitis after laser in situ keratomileusis. *Ophthalmology* 108:2201-2208, 2001. (**Role:** Contributed to patient care and data collection.)
34. Kobayashi A, Shirao Y, Takata Y, Wajima R, Nonomura A, **Huang AJW**. Adult-onset limbal juvenile xanthogranuloma. *Arch Ophthalmol* 120:96-97, 2002. (**Role:** Contributed to patient care and manuscript preparation.)
35. Alfonso EC, Batatt L, Kim M, Vroman D, Rosas A, Culbertson W, **Huang A**, Pflugfelder S, Tseng S, Forster R, Karp C, Yoo S. Infections following refractive surgeries: risk



- factors, prevention and review of cases. *Ann. Inst. Barraquer, (Barc)* 31, 3:391-397, 2002.  
(**Role:** Contributed to data collection.)
36. Souza PMF, Holland EJ, **Huang AJW\***. Bilateral herpetic keratoconjunctivitis. *Ophthalmology* 110:493-496, 2003.  
(**Role:** Supervised data collection and manuscript preparation. Provided patient care.)
37. Karp CL, Tuli SS, Yoo SH, Vroman DT, Alfonso EC, **Huang AJW**, Pflugfelder SC, Culbertson WW. Infectious keratitis after LASIK. *Ophthalmology* 110:503-510, 2003.  
(**Role:** Contributed to patient care and data collection.)
38. Sawada Y, Fischer JL, Verm AM, Harrison AR, Yuan C, **Huang AJW\***. Detection by impression cytology of conjunctival intraepithelial invasion from eyelid sebaceous cell carcinoma. *Ophthalmology* 110:2045-2050, 2003.  
(**Role:** Sole interpreter of impression cytology. Supervised data collection and wrote the paper.)
39. Kobayashi A, Wajima R, Sugiyama K, Nonomura A, **Huang AJW**. Idiopathic limbal squamous metaplasia. *Arch Ophthalmol* 121:1473-1475, 2003.  
(**Role:** Consulted on patient care and manuscript preparation.)
40. Wall V, Yen MT, Yang MC, **Huang AJW**, Pflugfelder SC. Management of the late ocular sequelae of Stevens-Johnson syndrome. *The Ocular Surface* 1:192-201, 2003.  
(**Role:** Contributed to the description of surgical procedures.)
41. Sawada Y, Yuan C, **Huang AJW\***. Impression cytology in the diagnosis of acanthamoeba keratitis with surface involvement. *Am J Ophthalmol* 137:323-328, 2004.  
(**Role:** Interpreted impression cytology. Collected the data and wrote the paper.)
42. Yuan C, Reuland MJ, Lee L, **Huang AJW\***. Optimized expression and refolding of human keratoepithelin in BL21(DE3). *Protein Expr Purif* 35:39-45, 2004.  
(**Role:** Directed laboratory research and supervised manuscript preparation.)
43. Yuan C, Yang MC, Zins EJ, Boehlke CS, **Huang AJW\***. Identification of the promoter region of  $\beta$ *IGH3* gene. *Mol Vis* 10:351-360, 2004.  
(**Role:** Supervised the laboratory research and manuscript preparation.)
44. Boehm MD, **Huang AJW\***. Treatment of recurrent corneal and conjunctival intraepithelial neoplasia with topical interferon alpha-2B. *Ophthalmology* 111:1755-1761, 2004.  
(**Role:** Provided patient care. Supervised data collection and manuscript preparation.)
45. Kobayashi A, Sugiyama K, **Huang AJW**. *In vivo* confocal microscopy in the patients with central corneal cloudy dystrophy of Francois. *Arch Ophthalmol* 122: 1676-1679, 2004.  
(**Role:** Assisted in the analysis of clinical data and manuscript preparation.)
46. Boehlke CS, Yuan C, Kao WWY, **Huang AJW\***. Cytokeratin 12 in human ocular surface epithelia is the antigen reactive with a commercial anti-Gaq antibody. *Mol Vis* 10:867-873, 2004.  
(**Role:** Initiated the collaboration. Supervised research and manuscript preparation.)
47. Yang MC, **Huang AJW\***. Bilateral conjunctival nodules: an unusual presentation of Vogt-Koyanagi-Harada syndrome. *Arch Ophthalmol* 122:1878-1881 2004.  
(**Role:** Provided patient care. Supervised data analysis and manuscript preparation.)
48. Chang WJ, Tse DT, Rosa RH, **Huang A**, Johnson TE, Schiffman J. Conjunctival cytology features of giant papillary conjunctivitis associated with ocular prostheses. *Ophthal Plast Reconstr Surg* 21:39-45, 2005. (**Role:** Assisted in the interpretation of impression cytology.)

49. Telander D, Lee TZ, Pambuccian SE, **Huang AJW\***. Subconjunctival corticosteroids for benign lymphoid hyperplasia. *Br J Ophthalmol* 89:770-771, 2005.  
(**Role:** Provided patient care. Supervised data collection and manuscript preparation.)
50. **Huang AJW\***, Li D-Q, Li CH, Shang TY, Hernandez E. Modulation of corneal vascularization. *The Ocular Surface* 3:S190-193, 2005. (**Role:** Supervised the research projects and wrote the paper.)
51. McDermott AM, Perez V, **Huang AJW**, Pflugfelder SC, Stern ME et al. Pathways of corneal and ocular surface inflammation: a perspective from the Cullen Symposium. *The Ocular Surface* 3:S131-138, 2005.  
(**Role:** Participated in the group discussion, preparation of the draft and designs of illustrations.)
52. Yuan C, Berscheid HL, **Huang AJW\***. Identification of an amyloidogenic region on keratoepithelin via synthetic peptides. *FEBS Lett* 581:241-247, 2007.  
(**Role:** Supervised the research projects and revised the manuscript.)
53. Yuan C, Zins EJ, Clark AF, **Huang AJW**. Suppression of keratoepithelin and myocilin by small interfering RNAs (siRNA) in vitro. *Mol Vis* 2007; 13:2083-2095. (**Role:** Supervised the research projects and wrote the paper.)
54. [-----]  
-----] (*in press*)

**Book:**

External Disease and Cornea: Basic and Clinical Course, Section 8. American Academy of Ophthalmology, San Francisco, CA (Co-editor, 1996-2001)

**Book Chapters:**

1. **Huang AJW**, Tseng SCG, Kenyon KR. Treatment of ocular surface disease. In, Brightbill FS (ed). *Corneal Surgery: Theory Technique and Tissue*. CV Mosby, pp 593-602, 1986.
2. **Huang AJW**, Pflugfelder SC. Nocardial and actinomycotic keratitis. In, Pepose JS, Holland GN, Wilhelmus KR (eds). *Ocular Infection and Immunity*. CV Mosby, pp 1043-1047, 1996.
3. **Huang AJW**, Li CH, Hernandez E. Modulation of corneal vascularization by conjunctivalization. In Lass JH (ed). *Advances in Corneal Research*. Plenum, pp 437-438, 1999.
4. **Huang AJW**. Corneal topography. In, Parrish RK II (ed). *The University of Miami Bascom Palmer Eye Institute Atlas of Ophthalmology*. Current Medicine, pp 19-24, 1999.
5. Forster RK, **Huang AJW**, Cruz OA. Inflammation of cornea and conjunctiva. In, Parrish RK II (ed). *The University of Miami Bascom Palmer Eye Institute Atlas of Ophthalmology*. Current Medicine, pp 55-63, 1999.
6. Vitiello V, **Huang AJW**. Gram-positive aerobic rods. In, Duane TD, Jaeger EA (eds). *Biomedical Foundations of Ophthalmology*. Harper & Row, Vol 2, Chapter 51, pp 1-7, 2001.

7. Wichiensin P, **Huang AJW**. Postsurgical corneal edema. In, Singh K, Smiddy WE, Lee AG (eds). *Ophthalmology Review: A Case Study Approach*. Thieme Medical Publishers. Chapter 10, pp 36-40, 2001.
8. Yang MC, **Huang AJW**, Yeh S, Pflugfelder SC. Surgical therapy for corneal epithelial stem cell deficiency. In, Pflugfelder SC, Beuerman R, Stern M (eds). *Dry Eye and Ocular Surface Disorders*. Marcel Dekker, Inc. Chapter 17, pp 369-390, 2004.
9. **Huang AJW**. Immunosuppressive therapy. In, Pflugfelder SC, Beuerman R, Stern M (eds). *Dry Eye and Ocular Surface Disorders*. M. Marcel Dekker, Inc. Chapter 18, pp 391-419, 2004.
10. **Huang AJW**, Wichiensin P, Yang MC. Microbial keratitis. In, Krachmer JH, Mannis MJ, Holland EJ (eds). *Cornea*, 2<sup>nd</sup> edition. Elsevier-Mosby, Inc. Chapter 81, pp 1005-10033, 2004.
11. **Huang AJW**. Corneal gluing. In, Krachmer JH, Mannis MJ, Holland EJ (eds). DVD-ROM of *Cornea*, 2<sup>nd</sup> edition. Mosby, Inc. Chapter 6, 2004.
12. Chung GW, Iuorno JD, **Huang AJW**. Dry Eye Syndrome Update I, Corneal/External Disease Subspecialty Clinical Updates, Volume 1, Module 6, [www.aao.org/aaoo/education/scu](http://www.aao.org/aaoo/education/scu) American Academy of Ophthalmology, 2005.
13. Chung GW, Iuorno JD, **Huang AJW**. Dry Eye Syndrome Update II, Corneal/External Disease Subspecialty Clinical Updates, Volume 1, Module 7, [www.aao.org/aaoo/education/scu](http://www.aao.org/aaoo/education/scu) American Academy of Ophthalmology, 2005.
14. [-----]. (in press, 2007)
15. [-----]. (in press, 2007)
16. [-----] (in press, 2008)

### Scientific Abstracts

1. Sun TT, Tseng SCG, Nelson W, Jarvinen M, Woodcock-Mitchell J, **Huang AJW**. Tissue distribution of keratin antigens: Studies using monoclonal antibodies. *Invest Ophthalmol Vis Sci* 22(ARVO Suppl):73, 1982.
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4. Sun TT, Tseng SCG, Nelson WG, **Huang AJW**, Jarvinen MI, Woodcock-Mitchell J, Bonitz P, Santana H. Tissue distribution of epidermis related keratin antigens: monoclonal antibody studies. *J Cell Biol* 95:231a, 1982.
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9. **Huang AJW**, Tseng SCG, Kenyon KR. An in vitro perfusion study of rabbit corneal and conjunctival permeability. *Invest Ophthalmol Vis Sci* 26(ARVO Suppl): 15, 1985.
10. Tseng SCO, **Huang AJW**, Kenyon KR. Differential impression cytology in keratoconjunctivitis sicca and blepharitis. *Invest Ophthalmol Vis Sci* 26(ARVO Suppl): 173, 1985.
11. Kenyon KR, **Huang AJW**, Tseng SCG, Gipson 1K. Morphogenesis of conjunctival goblet cells in the rat. *Invest Ophthalmol Vis Sci* 26(ARVO Suppl): 174, 1985.
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13. Tseng SCG, **Huang AJW**, Sutter DJ. Purification and characterization of rabbit ocular mucin. *Invest Ophthalmol Vis Sci* 27(ARVO Suppl): 27, 1986.
14. **Huang AJW**, Tseng SCG, Farazdaghi M, Kenyon KR. Modulation of paracellular permeability during corneal epithelial wound healing. *Invest Ophthalmol Vis Sci* 27(ARVO Suppl): 54, 1986.
15. **Huang AJW**, Tseng SCG, Kenyon KR. Cytological staging as prognostic index of ocular surface morbidity in keratoconjunctivitis sicca. *Ophthalmology* 93(8S): 113, 1986.
16. **Huang AJW**, Tseng SCG. Modulation of paracellular permeability of ocular surface epithelium by retinoids. *Proc Int'l Soc Eye Res IV*: 186, 1986.
17. **Huang AJW**, Watson BD, Hernandez E, Tseng SCG. Induction of conjunctival transdifferentiation by photothrombosis with rose bengal and argon laser. *Invest Ophthalmol Vis Sci* 28(ARVO Suppl): 159, 1987.
18. Ocon M, **Huang AJW**, Tseng SCG. Identification of mucin-associated proteins: possible functional roles. *Invest Ophthalmol Vis Sci* 28(ARVO Suppl): 159, 1987.
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20. **Huang AJW**, Watson BD, Hernandez E, Tseng SCG. A new photothrombotic treatment for corneal neovascularization. *Ophthalmology* 94(10S): 126, 1987.
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39. **Huang AJW**, Kim JE, Culbertson WW, Pflugfelder SC, Miller D. Diagnosis and treatment of Acanthamoeba keratitis. *Ophthalmology* 100(9S): 68, 1993.
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42. Fishburne BC, **Huang AJW**, Miller D. The diagnosis and management of non-tuberculous mycobacterial keratitis. *Invest Ophthalmol Vis Sci* 35(4): 1677, 1994.
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56. Li CH, **Huang AJW**, Chen YW, Bourguignon LYW. Co-expression of bcl-2 and CD-44s in basal layers of normal limbus and conjunctiva. *Invest Ophthalmol* 38(4): S400, 1997.
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58. Leon CR, Alfonso E, Tseng SCG, Fantes F, **Huang AJW**, Pflugfelder S, Forster IL, Culbertson W. Corneal topography criteria for selective suture removal after penetrating keratoplasty. *Invest Ophthalmol* 38(4): S1091, 1997.
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60. **Huang AJW**, Li CH, Hernandez E, Lau H, Pena J. Quantification of bcl-2 and Fas (CD 95) in ocular surface epithelia. *Invest Ophthalmol* 39(4): S 947, 1998.
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62. Battat L, Miller D, **Huang AJW**. Colletotrichum keratitis in southern Florida. *Invest Ophthalmol* 40(4): S552, 1999.
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65. **Huang AJW**, Li DQ, Shang TY, Dursun D. Expression of matrix metalloproteinases (MMPS) in vascularized and transdifferentiated rabbit corneal epithelia. *Invest Ophthalmol* 42(4): S123, 2001.
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67. **Huang AJW**, Shang TY, Li DQ. Cytokine regulation of metalloproteinases expression in cultured rabbit corneal epithelial cells. *Invest Ophthalmol* 43(S): 65, 2002.
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70. Cox CA, Flynn JT, Sawada Y, **Huang AJW**. Impression cytology used to diagnose benign hereditary intraepithelial dyskeratosis. *Invest Ophthalmol* 43(S): 128, 2002.
71. Sawada Y, Yuan C, **Huang AJW**. Lipid supplements support the growth of corneal and epidermal epithelial cells in serum-free culture system. *Invest Ophthalmol* 43(S): 6, 2002.
72. **Huang AJW**. Pseudopterygium: Idiopathic limbal deficiency. 7<sup>th</sup> International Ocular Surface Society. Proceeding: 12, 2002
73. **Huang AJW**, Skolnick CA. Lamellar sclerokeratoplasty for ocular surface reconstruction. The 2<sup>nd</sup> Global Chinese Ophthalmic Conference. Abstract Book: 29, 2002.
74. Yuan C, **Huang AJW**. Suppressing the expression of keratoepithelin (BIGH3) in cultured cells by small interfering RNAs (siRNA). ARVO Program Summary Book: 159, 2003.
75. Yuan C, Zins EJ, Clark AF, **Huang AJW**. Suppression of myocilin expression by small interfering RNAs. ARVO Program Summary Book: 164, 2005.
76. **Huang AJW**, Yuan C. Single nucleotide polymorphism in the BIGH3 gene promoter in a case of presumed corneal lattice dystrophy. ARVO Program Summary Book:271, 2006.
77. Yuan C, **Huang AJW**. Abnormal aggregation of mutant BIGH3 proteins in vitro. ARVO Program Summary Book: 256, 2006.
78. Berscheid HL, Yuan C, **Huang AJW**. TGF- $\beta$ 1 dependent Up-regulation of keratoepithelin is mediated via Smad. ARVO Program Summary Book: 282, 2007.

**Other Scientific Presentations**

1. An in vitro perfusion study of rabbit corneal and conjunctival permeability. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May 6, 1985.
2. Modulation of paracellular permeability during corneal epithelial wound healing. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May 3, 1986.
3. Modulation of paracellular permeability of ocular surface epithelium by retinoids. International Society of Eye Research Meeting. Nagoya, Japan, Oct.1, 1986.
4. Induction of conjunctival transdifferentiation by photothrombosis with rose bengal and argon laser. American Society for Laser Medicine and Surgery, Seventh Meeting. San Francisco, CA: April 15, 1987.
5. Induction of conjunctival transdifferentiation by photothrombosis. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May 5, 1987.
6. Clinical features and management of atypical mycobacterial keratitis. Annual meeting of American Academy of Ophthalmology, Las Vegas, NV, Oct. 15, 1988.
7. Phenotypic alterations of conjunctival flaps on corneal surface by photothrombosis. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May, 1990.
8. Inhibition of corneal vascularization by lamellar keratoplasty in limbal deficient corneas. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May 1, 1991.
9. Modulation of corneal vascularization by conjunctival epithelium. Annual meeting of Association of Research in Vision and Ophthalmology. Sarasota, FL, May 4, 1993.
10. Diagnosis and treatment of Acanthamoeba keratitis. Annual meeting of American Academy of Ophthalmology, Chicago, IL, Nov. 20, 1993.
11. Comparisons between oblique keratotomy a radial keratotomy. First International Symposium of Ophthalmology, Bourdeaux, France, Sept. 10, 1993.
12. Recognition and treatment of acute retinal necrosis. Annual meeting of American Academy of Ophthalmology, San Francisco, CA, Nov. 5, 1994.
13. Expression of matrix metalloproteinases (MMPs) in vascularized and transdifferentiated rabbit corneal epithelia. Annual meeting of Association of Research in Vision and Ophthalmology. Ft. Lauderdale, FL, April 30, 2001.
14. Pseudopterygium: Idiopathic limbal deficiency. 7<sup>th</sup> International Ocular Surface Society. Ft. Lauderdale, May 4, 2002.
15. Single nucleotide polymorphism in the BIGH3 gene promoter in patients with presumed corneal lattice dystrophy. Annual meeting of Association of Research in Vision and Ophthalmology. Ft. Lauderdale, FL, May 4, 2006.



**Invited Lectures and Presentations:**

- 1991 Visiting Professor, National Taiwan University Hospital, Department of Ophthalmology, Taipei, Taiwan  
Visiting Professor, Chung-Gung Memorial Hospital, Department of Ophthalmology, Taipei, Taiwan
- 1992 Invited Speaker, VII Congreso Nacional de Oftalmologia en Guatemala, Guatemala City, Guatemala
- 1993 Invited speaker, II Congreso de Oftalmologia en Colombia, Girardot, Colombia.
- 1994 Visiting Professor, Project Orbis and Qingdao Medical College, Qingdao, People's Republic of China
- 1995 Visiting Professor, Project Orbis and Shantou Medical College, Shantou, People's Republic of China
- 1995 Invited speaker, I Conclave Nacional Omnicquirugico Ano, San Salvador, El Salvador
- 1996 Invited speaker, World Congress on the Cornea IV, Orlando, Florida
- 1996 Invited speaker, Nacional Congreso de Oftalmologia en El Salvador, San Salvador, El Salvador
- 1996 Visiting Professor, National Taiwan University Hospital, Department of Ophthalmology, Taipei, Taiwan
- 1997 Invited speaker, Annual Meeting of Contact Lens Association of Ophthalmologists, Las Vegas, Nevada
- 1997 Session Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, Florida
- 1998 Visiting Professor, Mongolia Medical University, Ulan Bator, Republic of Mongolia
- 1998 Visiting Professor, Medical University of Chungqing, Sichuan, People's Republic of China
- 1999 Visiting Professor, University of Yangon Medical College, Yangon, Myanmar
- 2000 Visiting Professor, Project Orbis and Qingdao Medical College, Qingdao, People's Republic of China
- 2001 Session Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, Florida
- 2001 Moderator, Annual Meeting of Association of Research for Vision and Ophthalmology, Ft. Lauderdale, Florida
- 2002 Visiting Professor, Kellogg Eye Center, University of Michigan, Ann Arbor, Michigan
- 2003 Visiting Professor, Columbia University, New York, New York
- 2004 Visiting Professor, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, Massachusetts
- 2004 Visiting Professor, William Beaumont Hospital, Royal Oak, Michigan

- 2005 Session Moderator and Invited Speaker, Cullen Symposium on Cornea and Ocular Surface Inflammation, Houston, Texas
- 2005 Visiting Professor, Venu Eye Institute and Research Center, New Delhi, India
- 2005 Program Director, Ocular surface Symposium, University of Minnesota, Minneapolis
- 2006 Course Director, Ocular Inflammation Symposium, University of Minnesota, Minneapolis
- 2006 Gold Medal, Eye Advance 2006, Mumbai, India
- 2007 Visiting Professor, Hinduja Hospital and Research Foundation, Mumbai, India
- 2007 Course Director, Cornea Conference, Phillips Eye Institute, Minneapolis, Minnesota

### **Extramural Invited Presentations:**

- 1991 Conjunctival epithelial differentiation. National Taiwan University Hospital, Taipei, Taiwan
- 1992 Photothrombosis and management of corneal neovascularization. Cornea & External Disease Course, Bascom Palmer Eye Institute, Miami, Florida  
 Unusual presentation of adolescent phlyctenular keratoconjunctivitis. Grand Rounds, Bascom Palmer Eye Institute, Miami, Florida  
 Ophthalmic manifestation of systemic diseases. Ninth Annual Review Course of Internal Medicine, University of Miami, Department of Medicine  
 VII Congreso Nacional de Oftalmología en Guatemala, Guatemala City, Guatemala.
  1. Management of cicatricial conjunctivitis
  2. AIDS-related external diseases
  3. Management of sterile corneal ulcer
  4. Management of unusual infectious keratitis
 Problem-solving in external diseases and Course Director, Trade Secrets Course, Bascom Palmer Eye Institute, Miami, Florida
- 1993 Sjogren's syndrome and dry eyes. 23<sup>rd</sup> Annual Miami Winter Meeting of American Dental Association, Miami, Florida  
 Ocular manifestations of systemic disease. Tenth Annual Review Course of Internal Medicine, University of Miami, Department of Medicine  
 Ocular manifestations of systemic diseases. 21<sup>st</sup> Annual Conference of American Academy of Physician Assistants  
 Recent advances in ocular surface diseases. XIX Congreso Panamericano de Oftalmología, Caracas, Venezuela  
 II Congreso de Oftalmología en Colombia, Girardot, Colombia
  1. Anterior segment trauma
  2. Penetrating keratoplasty
- 1994 Ocular manifestations of systemic disease. 11<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine
- 1995 I Conclave Nacional Ommiquisurgio Ano, San Salvador, El Salvador

1. Keratoplastia. indicaciones y tecnicas quirurgicas.refractiva
2. Controversia. excimer laser vrs. KR complicaciones

Clinical management of corneal vascularization. Trade Secrets, Bascom Palmer Eye Institute

Ocular manifestations of systemic disease. 12<sup>th</sup> Annual Review Course for Certification in Internal Medicine, University of Miami, Department of Medicine, Miami, Florida

Modulation of corneal vascularization by conjunctivalization World Congress on the Cornea IV. Orlando, FL

Ocular manifestations of systemic disease. 13<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine

1997 Pathogenesis of corneal vascularization. Annual Meeting of Contact Lens Association of Ophthalmologists. Las Vegas, Nevada

Microsporidial keratitis. Bascom Palmer Trade Secrets Course: Ocular Disease in AIDS

Indications and management of corneal transplantation. IX Congresso Internacional da ABBO e Transplante de Cornea, Brazilian Congress of Ophthalmology. Rio de Janeiro

Anterior Segment Trauma. Annual Safety Workshop of Miami-Dade Fire Rescue Department, Miami, Florida

Ocular manifestations of systemic disease. 24<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine, Miami, Florida

1998 Ocular manifestations of systemic disease. 25<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine

Corneal Graft Failure on Ocular Surface Disorders. XXVIIIth International Congress of Ophthalmology. Amsterdam, The Netherlands

New diagnostic modalities for ocular surface diseases. XXth Curso Interamericano. Miami, Florida

1999 Ocular manifestations of systemic disease. 26<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine

2000 Ocular manifestations of systemic disease. 27<sup>th</sup> Annual Board Review Course in Internal Medicine, University of Miami, Department of Medicine

Recent advances in Ocular surface reconstruction. Qingdao Medical College, Qingdao, China

2002 Immunosuppression for ocular surface reconstruction. 40<sup>th</sup> Anniversary of Bascom Palmer Eye Institute, Miami, Florida

Lamellar sclerokeratoplasty for ocular surface reconstruction. Eye Meeting of the Twin Cities. Minneapolis, Minnesota

Recent advance in lamellar keratoplasty. The 2<sup>nd</sup> Global Chinese Ophthalmic Conference. Taipei, Taiwan

Kellogg Eye Center Visiting Professor Lectures. Ann Arbor, Michigan

1. Recent advance in lamellar keratoplasty
2. Lamellar sclerokeratoplasty for ocular surface reconstruction

- Advanced Keratoplasty Techniques. Joint Meeting of American Academy of Ophthalmology and Pan-American Association of Ophthalmology, Orlando, Florida
- 2003 Columbia University Visiting Professor Lectures. New York, New York
1. Recent advance in ocular surface disease
  2. Recent advance in lamellar keratoplasty
- Topical alpha-interferon therapy for recurrent corneal and conjunctival intraepithelial neoplasia. Eye Meeting of the Twin Cities. Minneapolis, Minnesota
- Annual Meeting of American Academy of Ophthalmology, Anaheim, California
1. Lab Instructor for Advanced Keratoplasty Techniques
  2. Lab Instructor for Microsurgical Suturing Techniques
- 2004 Massachusetts Eye and Ear Infirmary, Harvard Medical School, Visiting Professor, Boston, Massachusetts
1. Corneal Grand Rounds
  2. Recent advance in ocular surface reconstruction and lamellar keratoplasty
- Impression cytology of unusual ocular surface diseases. Eye Meeting of the Twin Cities. Minneapolis, Minnesota
- Update of Dry Eye. City-Wide Rheumatology Conference, Minneapolis. Minnesota
- Joint Meeting of American Academy of Ophthalmology and Society of European Ophthalmology, New Orleans, Louisiana
1. Discussant of "Objective optical quality comparison between penetrating keratoplasty and deep anterior lamellar keratoplasty"
  2. Lab Instructor for Microsurgical Suturing Techniques
  3. Lab Instructor for Advanced Keratoplasty Techniques
- William Beaumont Hospital, Royal Oak, MI, Visiting Professor, Royal Oak, Michigan
1. Grand Rounds
  2. Recent advance in ocular surface reconstruction and lamellar keratoplasty
- 2005 Corneal Angiogenesis. Cullen Symposium on Cornea and Ocular Surface Inflammation, Houston, Texas
- Venu Eye Institute and Research Center, New Delhi, India
1. Treatment of ocular surface diseases with topical interferon alfa-2b
  2. Ocular surface reconstruction with amniotic membrane
- Annual meeting of American Academy of Ophthalmology, Chicago, Illinois
1. Lab Instructor for Microsurgical Suturing Techniques
  2. Lab Instructor for Advanced Keratoplasty Techniques
- 2006 Recent Advances of Ocular Surface Reconstruction. Christian Ophthalmology Society, 30th annual meeting, Cleveland, Ohio
- VIth International Congress on Advances in Ophthalmology, Mumbai, India
1. Diagnosis of and management of sterile corneal ulcer
  2. Diagnosis of unusual ocular surface diseases by impression cytology
  3. Use of topical interferons for ocular surface diseases
  4. Corneal angiogenesis
  5. Recent advances in ocular surface reconstruction
  6. Cicatricial conjunctivitis

Annual Meeting of American Academy of Ophthalmology, Las Vegas, Nevada

1. Lab Instructor for Microsurgical Suturing Techniques
2. Lab Instructor for Advanced Keratoplasty Techniques

2007 Management of Dry Eye. City-Wide Rheumatology Conference, Minneapolis, Minnesota

Ocular Surface Reconstruction. Visiting Professor, Hinduja Hospital and Research Foundation, Mumbai, India

Recent Advances in Ocular Surface Reconstruction, Visiting Professor, Duke University, Durham, North Carolina