

William R. Freeman, M.D.  
Distinguished Professor of Ophthalmology  
Co-Director UCSD Retinal Engineering Center, Institute of Engineering in Medicine  
Director Joan and Irwin Jacobs Retina Center  
Director Retina Fellowship Training Program  
University of California, San Diego  
School of Medicine

Curriculum Vitae  
7/5/16

BOARD CERTIFICATION:

The American Board of Ophthalmology, October 1984.

LICENSURE:

Physician and Surgeon: California #G51579.

Physician and Surgeon: New York #144444.

CURRENT ADDRESS:

Work: University of California, San Diego  
Department of Ophthalmology  
Jacobs Retina Center  
9415 Campus Point Drive  
La Jolla, CA 92093-0946 (858) 534-3513 Fax (858) 534 7985

EDUCATION:

College: Columbia University, New York, New York

Medical: Mount Sinai School of Medicine, New York, New York

Internship: Cedars Sinai Medical Center, University of California, Los Angeles,  
School of Medicine, Los Angeles, California: Internal Medicine.

Residency: Lenox Hill Hospital, New York, New York: Ophthalmology,  
Robert S. Coles, M.D., Director.

Fellowships: The Francis I. Proctor Foundation, University of California, San Francisco:

Uveitis and Immunology, G.R. O'Connor, Director.

Estelle Doheny Eye Foundation, University of Southern California, Los Angeles, California: Vitreo-Retinal Surgery, S.J. Ryan, M.D., Director

CURRENT POSITION:

Distinguished Professor of Ophthalmology, with Tenure  
University of California, San Diego, School of Medicine.

Director of Jacobs Retina Center  
Department of Ophthalmology  
University of California, San Diego.

Director of Ophthalmic Photography,  
Department of Ophthalmology  
University of California, San Diego.

Vice Chair  
Department of Ophthalmology  
University of California, San Diego.

SPECIALTY CERTIFICATION:

Diplomat, American Board of Ophthalmology.

Fellow, American Academy of Ophthalmology.

INSTRUMENT INVESTIGATOR CERTIFICATION

IOLAB Intraocular Lenses, Approved Investigator.

Nd: YAG Vector Technology International, Approved Investigator.

ACADEMIC HONORS AND AWARDS:

Dean's List, Columbia University

Humanities Prize, Columbia University

Merck Award for Clinical Excellence, Mount Sinai School of Medicine,

Alpha Omega Alpha Honor Medical Society, Mount Sinai School of Medicine

Award for Clinical and Research Excellence, UCSD Medical Center  
Who's Who Among Young Americans  
American Academy of Ophthalmology Honor Award Recipient, 1991.  
Marquis Who's Who in the World, 1994.  
The Best Doctors in America, 1994-1995, 1998.  
The Best Doctors in America: Pacific Region 1996-1997.  
Marquis Who's Who in the World, 1997.  
American Academy of Ophthalmology, Senior Achievement Award, 2001.  
UCSD Chancellor's Associates, UCSD Innovator, 2002.  
Honored Member: Strathmore's Who's Who Edition, 2003.  
Who's Who in Medical Sciences Education (WWMSE). Academic Keys, 2004  
Who's Who in American Education, seventh edition 2006-2007. Marquis Who's Who,  
Providence NJ.  
Best Doctors 2005-2006. Best Doctors in America  
Lincoff Lecturer, Cornell University, November 2005  
Marquis Who's Who in Medicine and Healthcare, Providence NJ, 2006-2007  
Best Scientific Poser award, American Academy of Ophthalmology 2006 for "Extension  
Study of Ranibizumab for CNV Due to AMD"  
Best Doctors in America; 2005-2006  
Research to Prevent Blindness, Physician Scientist Award, 2007-2008  
Whittaker Institute of Bioengineering; 2006 – Present  
Best Doctors in America award; 2007-2008, 2009-2010  
Foundation Fighting Blindness award; 2008  
City of San Diego Mayor Award; Dr. William Freeman day April 2008  
American Academy of Ophthalmology; Editor's Choice Lecture, November 2008  
Inclusion in "America's Top Ophthalmologists, 2009. (consumersresearchcncl.org)  
ARVO Silver Medal Fellow Award, 2009  
Professor of Ophthalmology (hon.), Wenzhou Medical College, People's Republic of  
China, awarded March 2009  
Best Doctors in America 2009-2010  
UCSD Galvanizing Engineering in Medicine for artificial retina research, June 2015.  
AAO Special Recognition Award, 2015

#### HOSPITAL AFFILIATIONS

Staff Physician, Ophthalmology Section.

Alhambra Community Hospital. Alhambra, California.  
July 1984 - June 1986.

Staff Physician, Ophthalmology Section.  
Huntington Memorial Hospital. Pasadena, California.  
July 1984 - June 1986.

Staff Physician, Department of Ophthalmology.  
LAC/USC Medical Center. Los Angeles, California.

Staff Physician.  
Doheny Eye Hospital. Los Angeles, California.

Attending Physician, Vitreo-Retinal Surgeon, Department of Ophthalmology,  
University of California, San Diego Medical Center. San Diego, California.

Director Joan and Irwin Jacobs Retina Center, University of California San Diego.  
November 2004 - Present.

Vice Chair, Department of Ophthalmology, University of California San Diego.  
October, 2012 – Present.

PROFESSIONAL SOCIETIES:

American Academy of Ophthalmology.

American Medical Association.

American Uveitis Society.

Aspen Retinal Detachment Society.

Association for Research in Vision and Ophthalmology.

Association of Proctor Fellows.

Fight for Sight Research Division of the National Society to Prevent Blindness.

Macula Society, (member research and education committee).

Ophthalmic Microbiology and Immunology Group (OMIG).

Pacific Coast to-Ophthalmological Society.

Retina Society.

San Diego County Eye Society.

Western Association for Vitreo-Retinal Education (founding member).

FDA Advisory Committee Member for Ophthalmic and Metabolic Drugs.

EDUCATIONAL ACTIVITIES:

Faculty Member: American Academy Ophthalmology Retina Update. November 2008

Faculty Member: American Academy Ophthalmology Retina Update. November 2008

Faculty Member: American Academy Ophthalmology Retina Update. October 2007

Faculty Member: American Academy Ophthalmology Retina Update. October 2006

Faculty Member: American Academy Ophthalmology Retina Update. October 2005

Faculty Member: American Academy Ophthalmology Retina Update. October 2004  
Faculty Member: American Academy Ophthalmology Retina Update. October 2003  
Faculty Member: American Academy Ophthalmology Retina Update. October 2002  
Faculty Member: American Academy Ophthalmology Retina Update. October 2001  
Faculty Member: American Academy Ophthalmology Retina Update. October 2000  
Faculty Member: American Academy Ophthalmology Retina Update. October 1999  
Faculty Member: American Academy Ophthalmology Retina Update. October 1998  
Faculty Member: American Academy Ophthalmology Retina Update. October 1997  
Faculty Member: American Academy Ophthalmology Retina Update. October 1996  
Faculty Member: American Academy Ophthalmology Retina Update. October 1995

Member, Residency Training Committee  
Department of Ophthalmology, University of Southern California School of Medicine  
July 1985 - July 1986.

Resident Supervisor  
Department of Ophthalmology, LAC/USC Medical Center University of Southern  
California School of Medicine  
July 1985 - July 1986.

Administrative Director  
Retina Service  
University of California, San Diego  
August 1988 - Present.

Director  
Vitreoretinal Fellowship Program  
University of California, San Diego

Member, SOCA Ophthalmic Advisory Committee  
June 1990 - Present.

Program Chairman, San Diego County Eye Society  
June 1995 – June 2002.

Treasurer, San Diego County Eye Society  
June 1996 - June 1997.

Food and Drug Administration Advisory Committee  
for Ophthalmic Drugs and Endocrine and Metabolic Drugs  
March 1998.

Ph.D Committee, UCSD  
Lijun Zhu: Adaptive Optics with a Micromachined Membrane Deformable Mirror for  
High Resolution Retinal Imaging  
October 8, 1999

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2009

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1990-1991

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 1991-1992

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1992-1993

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 1993-1994

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1994-1995

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 1995-1996

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1996-1997

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1996-1997

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 1997-1998

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 1998-1999

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 1999-2000

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2000-2001

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2000-2001

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2002-2003

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2002-2003

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2003-2004

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2003-2004

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2004-2005

Moderator Retina Section  
UCSD Residents Fellows Alumni Day June 2005

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2005-2006

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2005-2006

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2006-2007

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2006-2007

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2008

Retina Update for Community Ophthalmologists  
San Diego, CA Nov 2008

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2009

Moderator Retina Section  
UCSD Residents Fellows Alumni Day June 2009

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2009

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2010

Director Uveitis Home Study Course

UCSD Dept. of Ophthalmology 2010

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2011

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2011

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2012

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2012

Director Retina Home Study Course  
UCSD Dept. of Ophthalmology 2013

Director Uveitis Home Study Course  
UCSD Dept. of Ophthalmology 2013

EDITORIAL BOARD MEMBER:

Retina; Associate Editor  
Ophthalmology.  
Ocular Infection and Hygiene.  
Ocular Immunology and Inflammation; reviewing editor  
Delhi Journal of Ophthalmology  
Journal of Clinical Pharmacology, Dovepress

SCIENTIFIC REVIEWER:

AIDS  
American Journal of Ophthalmology.  
Archives of Ophthalmology.  
British Journal of Ophthalmology  
Clinical Infectious Disease.  
Critical Reviews in Immunology.  
Current Eye Research.  
European Journal of Ophthalmology.  
Experimental Eye Research.  
Gene Therapy.  
Investigative Ophthalmology and Visual Science.  
Journal of the American Medical Association.  
Journal of Infectious Disease.



- Journal of Ophthalmic Epidemiology.
- . New England Journal of Medicine.
- Ophthalmology.
- Retina.
- Survey of Ophthalmology.
- Ophthalmic Surgery and Lasers.
- Journal of Refractive Surgery.

GRANT REVIEWER:

Member, Fellowship Review Panel.  
Fight for Sight Research Division of the National Society to Prevent Blindness.  
January 1993 - Present.

Veterans Administration.  
AD HOC Reviewer.

National Eye Institute  
Ad hoc Study Section member: 2000 - 2005

U.S. Food and Drug Administration product reviewer

INSTRUMENTS AND DEVICES DEVELOPED

Mendez Freeman Silicone Oil Injector.  
Eagle Laboratories.

Heidelberg Retinal Angiograph (Confocal ICG Angiography).  
Heidelberg Engineering, Germany.

UNIVERSITY COMMITTEES:

Member of East Campus Planning Committee  
University of California, San Diego  
1999-Present

Operating Room Committee  
University California, San Diego - Medical Center  
September 1986 - 1991.

Medical Staff AD HOC Committee on AIDS  
University of California, San Diego Medical Center  
August 1987 - Present.

Committee on Ambulatory Surgery  
University of California, San Diego  
February 1988 - Present.

Planning Committee  
Satellite Medical Facility, UCSD  
February 1992.

Clinical Practice Committee  
University of California, San Diego

Director Operating Rooms  
UCSD Shiley Eye Center  
1992 - 2000.

Residency Committee  
1994 - 2006

Ph.D. Committee, UCSD  
Lijun Zhu: Adaptive Optics with a Micromachined Membrane Deformable Mirror for  
High Resolution Retinal Imaging  
October 8, 1999

Masters Thesis Committee, UCSD  
Julie Schalhorn: Development and Quantification of a Novel Reactive Gliosis Mueller  
Cell Culture Model  
September 9, 2005

Masters Thesis Committee, UCSD Dept of Bioengineering  
David Kupec: retinal gliosis and structure  
2006-7.

Doctorate Thesis Committee, UCSD Dept of Bioengineering  
Smita Patak; Quantum dot labeling of retinal cells. 2007.

Doctorate Thesis Committee, UCSD Dept of Chemistry  
Elizabeth Wu; Porous silicon drug delivery

REVIEWED PUBLICATIONS:

1. **Freeman WR**, Pichard AD, Smith H: Effect of informed consent and educational background on patient knowledge, anxiety, and subjective responses to cardiac catheterization. Catheterization and Cardiovascular Diagnosis. 1981;7:119-34.
2. **Freeman WR**, Mandel PT, Mandel WJ: Verapamil therapy in variant angina pectoris refractory to nitrates. American Heart Journal. 1981;102:358-62.
3. Friedman AH, **Freeman WR**, Orellana J, Kraushar MF, Starr MB, Luntz MH: Cytomegalovirus retinitis and immunodeficiency in homosexual males. The Lancet. 1982;1:958.
4. Friedman AH, Orellana J, **Freeman WR**, Luntz MH, Starr MB, Tapper ML, Spigland I, Rotterdam H, Mesa Tejada R, Braunhut S, Mildvan D, Mathur U: Cytomegalovirus retinitis: A manifestation of the acquired immune deficiency syndrome (AIDS). British Journal of Ophthalmology. 1983;67:372-80.
5. Wesley AC, **Freeman WR**: Iridoschisis and the corneal endothelium. Annals of Ophthalmology. 1983;15:955-64.
6. **Freeman WR**, O'Connor GR: Acquired immune deficiency syndrome retinopathy, pneumocystis, and cotton-wool spots. American Journal of Ophthalmology. 1984;98:235-7.
7. **Freeman WR**, Char DH, Garavoy MR, Lyon H: Microtechniques for flow cytometric analysis of aqueous humor lymphocytes. Journal of Immunologic Methods. 1984;73:447-55.
8. **Freeman WR**, Lerner CW, Mines JA, Lash RS, Nadel AJ, Starr MB, Tapper ML: A prospective study of the ophthalmologic findings in the acquired immune deficiency syndrome. American Journal of Ophthalmology. 1984;97:133-42.
9. **Freeman WR**, Thomas EL, Rao NA, Pepose JS, Trousdale MD, Howes EL, Nadel AJ, Mines JA, Bowe B: Demonstration of herpes group virus in the acute retinal necrosis syndrome. American Journal of Ophthalmology. 1986;102:701-709.
10. Deschenes J, **Freeman WR**, Char DH, Garavoy MR: Lymphocyte subpopulations in uveitis. Archives of Ophthalmology. 1986;104:233-6.
11. Rosenbaum JT, Raymond WW, Fujikawa LA, Langlois L, Palestine AG, Stamper RL, **Freeman WR**, Deschenes J, Sell C, Samples JR, Parker JA, Nozik RA, Char DH, Nussenblatt RB: Chemotactic activity in aqueous humor from patients with anterior uveitis. Clinical Immunology and Immunopathology. 1987; 42:265-73.
12. Henderly DE, **Freeman WR**, Causey DM, Rao NA: Cytomegalovirus retinitis and response to therapy with ganciclovir. Ophthalmology. 1987;94:425-34.

13. Henderly DE, **Freeman WR**, Smith RE, Causey D, Rao NA: Cytomegalovirus retinitis as the initial manifestation of the acquired immune deficiency syndrome. American Journal of Ophthalmology. 1987;103:316-20.
14. **Freeman WR**: Diagnosis and treatment of ophthalmologic manifestations of acquired adult immune deficiency disease (AIDS). Audio Journal Review Ophthalmology. 1987;13:5.
15. Weinreb R, Lipson B, Ryder M, **Freeman WR**: Diagnostic testing in ophthalmic sarcoidosis. Seminars in Ophthalmology. 1987;2257-72.
16. **Freeman WR**, Green RL, Smith RE: Echographic localization of corticosteroids after periocular injection. American Journal of Ophthalmology. 1987;103:281-288.
17. **Freeman WR**, Henderly DE, Wan WL, Causey D, Tousdale M, Green RL, Rao NA: Prevalence, pathophysiology and treatment of rhegmatogenous retinal detachment in treated cytomegalovirus retinitis. American Journal of Ophthalmology. 1987;103:527-36.
18. **Freeman WR**, Henderly DE, Wan WL, Causey D, Trousdale M, Green RL, Rao NA: Prevalence, pathophysiology and treatment of rhegmatogenous retinal detachment in treated cytomegalovirus retinitis: [Editorial reply]. American Journal of Ophthalmology. 1987;104:313-4.
19. **Freeman WR**: AIDS and the eye. Science Writers Seminar in Ophthalmology. 1988;36-9.
20. Fay MT, **Freeman WR**, Wiley CA, Hardy D, Bozzette S: A typical retinitis in patients with the acquired immunodeficiency syndrome. American Journal of Ophthalmology. 1988;105:483-90.
21. Henderly DE, Atalla LR, **Freeman WR**, Rao NA: Demonstration of cytomegalovirus retinitis by in situ DNA hybridization. Retina. 1988;177-8.
22. **Freeman WR**, Green RL, Smith RE: Echographic localization of corticosteroid after periocular injection. 1988 The Year Book of Ophthalmology. 1988;139-41.
23. Coden DJ, **Freeman WR**, Weinreb RN: Intraocular pressure response after pneumatic retinopexy. Ophthalmic Surgery. 1988;19:667-9.
24. **Freeman WR**, Gross J: Management of ocular disease in AIDS patients. AIDS and the Eye. Ophthalmology Clinics of North America. 1988;1:91-100.
25. **Freeman WR**: New developments in AIDS related retinal disease. 1988 Transactions of the Pacific Coast Ophthalmologic Society. 1988;69:24-6.
26. **Freeman WR**, Henderly DE, Wan WL, Causey D, Trousdale M, Green RL, Rao NA: Prevalence, pathophysiology and treatment of rhegmatogenous retinal detachment in treated cytomegalovirus retinitis. 1988 The Year Book of Ophthalmology. 1988;184-5.

27. **Freeman WR**, Lipson B, Morgan CM, Liggett PE: New posteriorly located retinal breaks after pneumatic retinopathy. Ophthalmology. 1988;95:14-18.
28. **Freeman WR**: Vitreoretinal surgical techniques in uveitis: Diagnostic and therapeutic modalities. Proceedings of the First World Uveitis Symposium: ROCA, Guaruja, São Paulo, Brazil. 1988; 83:717-25.
29. Schneiderman TE, Faber DW, Gross JG, Wiley CA, **Freeman WR**: The agar-albumin sandwich technique for processing retinal biopsy specimens. American Journal of Ophthalmology. 1989; 108:567-71.
30. **Freeman WR**: Clinical experience. Pneumatic Retinopathy: A Clinical Symposium. 1989; 157-60.
31. Bartsch D-U, Intaglietta M, Bille JF, Dreher AW, Gharib M, **Freeman WR**: Confocal laser tomographic analysis of the retina in eyes with macular hole formation and other focal macular diseases. American Journal of Ophthalmology. 1989;108:277-87.
32. O'Day DM, Sommer A, Dawson C, MacRae S, Allen JR, Chandler J, **Freeman WR**, Fujikawa L, Kaufman H, McManus E, Nesburn A, Polk F, Worthen D: Controlling risks of the possible transmission of human immuno-deficiency virus. Ophthalmology. 1989;96:1-8.
33. **Freeman WR**, Wiley CA, Gross JG, Thomas EL, Rao NA, Liggett PE: Endoretinal biopsy in immunosuppressed and healthy patients with retinitis; indications, utility and techniques. Ophthalmology. 1989;96:1559-65.
34. **Freeman WR**, Wiley CA: In situ nucleic acid hybridization. Survey of Ophthalmology. 1989; 34:187-92.
35. **Freeman WR**: Intraocular antiviral therapy. Archives of Ophthalmology. 1989;107:1737-9.
36. **Freeman WR**, Schneiderman T: Invasive posterior segment diagnostic procedures in immunosuppressed patients. International Ophthalmology Clinics. 1989;29:119-26.
37. **Freeman WR**: Management of intraocular pressure. Pneumatic Retinopathy: A Clinical Symposium. 1989;42-5.
38. Lipson BK, **Freeman WR**, Beniz JB, Goldbaum MH, Hesselink JR, Weinreb RN, Sadun AA: Optic neuropathy associated with cryptococcal arachnoiditis in AIDS patients. American Journal of Ophthalmology. 1989;107:523-7.
39. **Freeman WR**: Pneumatic retinopathy: A logical approach. Transactions of the Pacific Coast to Ophthalmologic Society 1989. 1989;70:26-30.

40. **Freeman WR**, Gross JG, Labelle J, Oteken K, Katz B, Wiley CA: Pneumocystis carinii choroidopathy: A new clinical entity. Archives of Ophthalmology. 1989;107:863-7.
41. **Freeman WR**: Posterior Breaks. Pneumatic Retinopathy: A Clinical Symposium. 1989;79-86.
42. **Freeman WR**, Chen A, Henderly DE, Levine AM, Luttrull JK, Urrea PT, Arthur J, Rasheed S, Cohen JL, Neuberger D, Leung RJ: Prevalence and significance of acquired immunodeficiency syndrome-related retinal microvasculopathy. American Journal of Ophthalmology. 1989;107:229-35.
43. **Freeman WR**, Helm M: Retinal and ophthalmologic manifestations of AIDS. Retina. 1989;93:597-615.
44. **Freeman WR**, Henderly DE, Lipson BK, Rao NA, Levine AM: Retinopathy before the diagnosis of AIDS. Annals of Ophthalmology. 1989;21:468-74.
45. Gross JG, Sadun A, Wiley CA, **Freeman WR**: Severe visual loss related to isolated peripapillary retinal and optic nerve head cytomegalovirus infection. American Journal of Ophthalmology. 1989; 108:691-8.
46. Gross JG, **Freeman WR**, Goldbaum MH, Mendez TL: Useful adjuncts for vitreoretinal surgery. British Journal of Ophthalmology. 1989;3:435-9.
47. Weinreb RN, **Freeman WR**, Selezinka W: Vision impairment in geriatrics. Geriatric Rehabilitation. pp. 223-34, Little, Brown and Company, Boston, MA, 1989.
48. **Freeman WR**, Stern W: Advances in retinal detachment repair. New Developments in Retinal Disease, and Ophthalmology Clinics of North America. 1990;3:495-506.
49. **Freeman WR**: AIDS and the management of cytomegalovirus retinitis. Western Journal of Medicine. 1990;153-189.
50. Bartsch D-U, Bille JF, Dreher AW, Intaglietta M, Gharib M, **Freeman WR**: Analysis of the human macula by confocal laser tomography. Scanning Laser Ophthalmoscopy and Tomography. 1990; 215-23.
51. Gross JG, Feldman S, **Freeman WR**: Combined penetrating keratoplasty and vitreoretinal surgery with the eckhardt temporary keratoprosthesis. Ophthalmic Surgery. 1990;21:67-71.
52. Gross JG, Schneiderman TE, Wiley CA, Bergeron-Lynn G, Faber DW, **Freeman WR**: Experimental endorectal biopsy. American Journal of Ophthalmology. 1990; 10:619-29.
53. Listhaus AD, **Freeman WR**: Fluorescein angiography in patients with posterior uveitis. International Ophthalmology Clinics. 1990;30:297-308.

54. Gross JG, Bozzette SA, Mathews WC, Spector SA, Abramson IS, McCutchan JA, Mendez T, Munguia D, **Freeman WR**: Longitudinal study of cytomegalovirus retinitis in acquired immune deficiency syndrome. Ophthalmology. 1990;97:681-6.
55. Gross JG, Hesselink JR, Press GA, Goldbaum MH, **Freeman WR**: Magnetic resonance imaging in the evaluation of vitreoretinal disease in eyes with intraocular silicone oil. American Journal of Ophthalmology. 1990;110:366-70.
56. Ai E, **Freeman WR**: New developments in retinal disease. Ophthalmology Clinics of North America, 1990; Vol. 3.
57. **Freeman WR**, Stern WH, Gross JG, Taylor PB, Nadel AJ, Wiley CA: Pathologic observations made by retinal biopsy. Retina. 1990;10:195-204.
58. Gross JG, **Freeman WR**: Posttraumatic yellow maculopathy. Retina. 1990;10:37-41.
59. Gross JG, **Freeman WR**: The 30-degree curved endolaser probe. Annals of Ophthalmology. 1990;22:382-4.
60. Hardy WD, Spector SA, Dankner W, Polsky B, Crumpacker C, Holland G, **Freeman WR**, Heinemann MH, Sharuk G, Avramis V, Connor J, Feinberg J: Combined ganciclovir and granulocyte-macrophage colony-stimulating factor in the treatment of cytomegalovirus retinitis in AIDS patients: Rationale for and preliminary results from a phase II randomized trial (ACTG 073). Ganciclovir Therapy for Cytomegalovirus Infection. 1991;197-213.
61. **Freeman WR**, Schneiderman TE, Weinreb RN, Baerveldt G: Hemorrhagic choroidal detachment with anterior vitreoretinal adhesions. Ophthalmic Surgery. 1991;22:670-5.
62. Gross JG, **Freeman WR**, Goldbaum MH, Mendez TL: An inexpensive, pressure-regulated air pump for fluid-air exchange during pars plana vitrectomy. Archives of Ophthalmology. 1991;109:1492.
63. Shami MJ, **Freeman WR**, Friedberg D, Siderides E, Listhaus A, Ai E: A multicenter study of pneumocystis choroidopathy. American Journal of Ophthalmology. 1991;112:15-22.
64. **Freeman WR**: Application of vitreoretinal surgery to inflammatory and infectious diseases of the posterior segment. International Ophthalmology Clinics. 1992;32:15-33.
65. Keefe KS, **Freeman WR**, Peterson TJ, Wiley CA, Crapotta JA, Quiceno JJ, Listhaus AD: A typical healing of cmv retinitis: Significance of persistent border opacification. Ophthalmology. 1992;99:1377-84.
66. **Freeman WR**: Controversies and new developments in infectious retinitis. The Proctor Bulletin. 1992;15:4-11.

67. Clark TM, **Freeman WR**, Goldbaum MH: Digital overlay of fluorescein angiograms and fundus images for treatment of subretinal neovascularization. Retina. 1992;12:118-26.
68. Cannon CS, Gross JG, Abramson I, Mazzei WJ, **Freeman WR**: Evaluation of outpatient experience with vitreoretinal surgery. British Journal of Ophthalmology. 1992;76:68-71.
69. **Freeman WR**, Wiley CA, Assil K, Gariano R, Listhaus A, Munguia D, Schneiderman T, Svendsen P: Experimental intravitreal drug delivery for retinal disease. Pharmakotherapie am Auge. 1992;231-42.
70. **Freeman WR**: Intravitreal drug delivery for retinal infections, inflammation and proliferative disease. The Vitreoretinal Frontier. 1992;285-92.
71. Dolnak DR, Munguia D, Wiley CA, De Clercq E, Bergeron-Lynn GL, Boscher C, Connor JD, Sherwood C, Capparelli E, Amani R, **Freeman WR**: Lack of retinal toxicity of the anti-cmv drug (S-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine (HPMPC). Investigative Ophthalmology and Visual Science. 1992;33:1557-63.
72. Tenhula WN, Shizao X, Madigan MC, Heller K, **Freeman WR**, Sadun AA: Morphometric comparisons of optic nerve axon loss in AIDS: Morphometric comparisons. American Journal of Ophthalmology. 1992;113:14-20.
73. **Freeman WR**, Feldman ST, Munguia D, Mendez T, Wiley CA: The pre-threaded (torpedo) pupillary dilating suture for phakic and aphakic eyes. Archives of Ophthalmology. 1992;110:564-7.
74. Faber DW, Wiley CA, Bergeron-Lynn G, Gross JG, **Freeman WR**: Role of human immunodeficiency virus and cytomegalovirus in the pathogenesis of retinitis and retinal vasculopathy in AIDS patients. Investigative Ophthalmology and Visual Science. 1992;33:2345-53.
75. Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG): Studies of ocular complications of AIDS foscarnet-ganciclovir cytomegalovirus retinitis trial: 1. Rationale, designs, and methods. Controlled Clinical Trials. 1992;13:22-39.
76. Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG): Studies of ocular complications of AIDS: Mortality in patients with the AIDS treated with either foscarnet or ganciclovir for CMV retinitis. New England Journal of Medicine. 1992;326:213-220.
77. **Freeman WR**, Quiceno JI, Crapotta JA, Listhaus A, Munguia D, Flores-Aguilar M: surgical repair of rhegmatogenous retinal detachment in patients with cytomegalovirus retinitis. Ophthalmology. 1992;99:466-74.



78. Quiceno JI, Capparelli E, Sadun AA, Munguia D, Grant I, Listhaus A, Crapotta J, Lambert B, **Freeman WR**: Visual dysfunction without retinitis in patients with the acquired immunodeficiency syndrome. American Journal of Ophthalmology. 1992;113:8-13.
79. **Freeman WR**, Schneiderman TE, Wiley CA, Listhaus AD, Svendsen P, Munguia D, Bergeron-Lynn G.: An animal model of focal subacute viral retinitis. Retina. 1993;13:214-21.
80. Kuppermann BD, Flores-Aguilar M, Quiceno JI, Rickman LS, **Freeman WR**: Combination ganciclovir and foscarnet therapy for the treatment of clinically resistant cytomegalovirus retinitis in patients with the acquired immune deficiency syndrome. Archives of Ophthalmology. 1993;111:1359-66.
81. Kuppermann BD, Petty JG, Richman DD, Mathews WC, Fullerton SC, Rickman, LS, **Freeman WR**: Correlation between cd4+ counts and prevalence of cytomegalovirus retinitis and human immunodeficiency virus-related noninfectious retinal vasculopathy in patients with acquired immunodeficiency syndrome. American Journal of Ophthalmology. 1993;115:575-82.
82. Huang JS, Russack V, Flores-Aguilar M, Gharib M, **Freeman WR**: Evaluation of cytologic specimens obtained during experimental vitreous biopsy. Retina. 1993;13:160-5.
83. Shakiba S, Assil KK, Listhaus AD, Munguia D, Flores-Aguilar M, Vuong C, Wiley CA, Tolman RL, Karkas JD, Bergeron-Lynn G, **Freeman WR**: Evaluation of retinal toxicity and liposome encapsulation of the anti-cmv drug 2'-nor-cyclic gmp. Investigative Ophthalmology and Visual Science. 1993;34:2903-10.
84. **Freeman WR**: Infectious retinitis. Duane's Clinical Ophthalmology, J.B. Lippincott Company, Philadelphia, PA. 1993;45:1-29.
85. Kuppermann BD, Quiceno JI, Flores-Aguilar M, Connor JD, Capparelli EV, Sherwood CH, **Freeman WR**: Intravitreal ganciclovir concentration after intravenous administration in AIDS patients with cytomegalovirus retinitis: Implications for therapy. Journal of Infectious Diseases. 1993;168:1506-9.
86. Bartsch D-U, **Freeman WR**: Laser-tissue interaction and artifacts in confocal scanning laser ophthalmoscopy and tomography. Neuroscience and Biobehavioral Reviews. 1993;17:459-67.
87. Berger BB, Egwuagu CE, **Freeman WR**, Wiley CA: Miliary toxoplasmic retinitis in AIDS, a previously undescribed entity. Archives of Ophthalmology. 1993;111:373-6.
88. **Freeman WR**, Bartsch D-U: New ophthalmic lasers for the evaluation and treatment of retinal disease. Australian and New Zealand Journal of Ophthalmology. 1993;21:139-46.

89. Gariano RF, Rickman LS, **Freeman WR**: Ocular examination and diagnosis in patients with the acquired immunodeficiency syndrome. Western Journal of Medicine. 1993;158:254-62.
90. Helm ML, **Freeman WR**: Ophthalmologic manifestations of AIDS. Diseases Affecting the Eye and Kidney. 1993;364-71.
91. Flores-Aguilar M, Kuppermann BD, Quiceno JI, Dankner WM, Wolf DG, Caparelli EV, Connor, JD, Sherwood CH, Fullerton S, Gambertoglio JG, Spector SA, **Freeman WR**: Pathophysiology and treatment of clinically resistant cytomegalovirus retinitis. Ophthalmology. 1993;100:1022-31.
92. **Freeman WR**: Pneumatic retinopexy. Practical Atlas of Retinal Disease and Therapy, First Edition. Freeman, W.R. Ed., Chapter 14, Raven Press Ltd., New York, NY, 1993.
93. **Freeman WR** (editor): Practical Atlas of Retinal Disease and Therapy. Raven Press Ltd., New York, NY, 1993. (18 Chapters, 900 illustrations, 400 pages).
94. Spector SA, Weingeist T, Pollard R B, Dieterich DT, Samo T, Benson CA, Busch DF, **Freeman WR**, Montague P, Kaplan HJ, Kellerman L, Crager M, De Armond B, Buhles W, Feinberg J, AIDS Clinical Trials Group, Cytomegalovirus Cooperative Study Group: A randomized, controlled study of intravenous ganciclovir therapy for peripheral retinitis in patients with AIDS. Journal of Infectious Diseases. 1993;168:557-63.
95. Faber D, Wiley CA, **Freeman WR**: Retinal calcifications in cytomegalovirus retinitis. Retina. 1993;13:46-9.
96. **Freeman WR**: Retinal disease associated with AIDS. Australian and New Zealand Journal of Ophthalmology. 1993;21:71-8.
97. **Freeman WR**, Friedberg DN, Berry C, Quiceno JI, Behette M, Fullerton SC, Munguia D: Risk factors for development of rhegmatogenous retinal detachment in patients with cytomegalovirus retinitis. American Journal of Ophthalmology. 1993;116:713-20.
98. Crapotta JA, **Freeman WR**, Feldman RM, Lowder CY, Ambler JS, Fraco F, Parker CE, Meisler DM: Visual outcome in acute retinal necrosis. Retina. 1993;13:208-13.
99. **Freeman WR**: Vitrectomy surgery for full thickness macular holes. American Journal of Ophthalmology. 1993;116:233-5.
100. Kuppermann BD, Flores-Aguilar M, Quiceno JI, Capparelli EV, Levi L, Munguia D, **Freeman WR**: A masked prospective evaluation of outcome parameters for CMV-related retinal detachment surgery in AIDS patients. Ophthalmology. 1994;101:46-55.

101. Flores-Aguilar M, Huang JS, Wiley CA, De Clercq E, Vuong C, Bergeron-Lynn G, Chandler B, Munguia D, **Freeman WR**: Long acting therapy of viral retinitis with (s)-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine (HPMPC). Journal of Infectious Diseases. 1994;169:642-7.
102. Gangan PA, Besen G, Munguia D, **Freeman WR**: Macular serous exudation in acquired immunodeficiency syndrome in patients with cytomegalovirus retinitis. American Journal of Ophthalmology. 1994;118:212-9.
103. Kuppermann BD, Quiceno JI, Wiley C, Hesselink J, Hamilton R, Keefe K, Garcia R, **Freeman WR**: Clinical and histopathological study of varicella zoster virus retinitis in patients with the acquired immunodeficiency syndrome. American Journal of Ophthalmology. 1994;118:589-600.
104. Rickman L, **Freeman WR**: Retinal disease in HIV infected patients. The Retina. Ryan, Ed. Mosby, St. Louis. 1994;2:1571-1596.
105. Gariano RF, Assil KK, Wiley CA, Munguia D, Weinreb RN, **Freeman WR**: Retinal toxicity of the antimetabolite 5-fluorouridine 5'-monophosphate administered intravitreally using multivesicular liposomes. Retina. 1994;14:75-80.
106. Bartsch D-U, **Freeman WR**: Axial intensity distribution analysis of the human retina with the confocal laser tomographic scanner. Experimental Eye Research. 1994;58:161-73.
107. Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG): Foscarnet-Ganciclovir CMV Retinitis trial: 4. Visual outcomes. Ophthalmology. 1994;101:1250-61.
108. Jacobson MA, Wulfsohn M, Feinberg JE, Davis R, Power M, Owens S, Causey D, Heath-Chiozzi ME, Murphy RL, Cheung GF, Parenti DM, Crumacker C, **Freeman WR**, the AIDS Clinical Trials Group of the National Institute of Allergy and Infectious Diseases: Phase II dose-ranging trial of foscarnet salvage therapy for cytomegalovirus retinitis in AIDS patients intolerant of or resistant to ganciclovir (ACTG Protocol 093). AIDS. 1994;8:451-9.
109. **Freeman WR**, Friedberg DN, Berry C, Quinceno JI, Behette M, Fullerton SC, Munguia D: Risk factors for development of rhegmatogenous retinal detachment in patients with cytomegalovirus retinitis. [Editorial Reply]. American Journal of Ophthalmology. 1994;117:820-1.
110. Schrier RD, **Freeman WR**, Wiley CA, McCutchan JA, HNRC Group: CMV specific immune responses and HLA phenotypes of AIDS patients who develop CMV retinitis. Advances in Neuroimmunology. 1994;4:327-36.
111. De Bustros S, **Freeman WR**, The Vitrectomy for Prevention of Macular Hole Study Group: Vitrectomy for prevention of macular trial: Results of a randomized multicenter clinical trial. Ophthalmology. 1994;101:1055-60.

112. Crapotta JA, **Freeman WR**, Feldman RM, Lowder CY, Ambler JS, Parker CE, Meisler, DM: Visual outcome in acute retinal necrosis (Letter). Retina. 1994;14:282-4.
113. Weinreb RN, Bartsch DU, **Freeman WR**: Angiography of the glaucomatous optic nerve head. Journal of Glaucoma. 1994;3(Suppl):55-60.
114. Flores-Aguilar M, Munguia D, Loeb E, Crapotta JA, Vuong C, Shakiba S, Bergeron-Lynn G, Wiley CA, **Freeman WR**: Intraocular tolerance of perfluorooctylbromide (Perflubron). Retina. 1995;15:3-13.
115. Bylsma SS, Achim CL, Wiley CA, Gonzalez C, Kuppermann BD, Berry C, **Freeman WR**: The predictive value of cytomegalovirus retinitis for cytomegalovirus encephalitis in AIDS. Archives of Ophthalmology. 1995;113:89-95.
116. Besen G, Flores-Aguilar M, Assil KK, Kupperman BD, Gangan P, Pursley M, Munguia D, Vuong C, De Clercq E, Bergeron-Lynn G, Azen SP, **Freeman WR**: Long term therapy of herpes retinitis in an animal model with high concentrated liposome encapsulated (s)-1-(3-hydroxy-2-phosphonyl methoxypropyl) cytosine (HPMPC). Archives of Ophthalmology. 1995;113:661-8.
117. Garcia RF, Flores-Aguilar M, Quiceno JI, Capparelli EV, Munguia D, Kuppermann BD, Arévalo JF, **Freeman WR**: Results of rhegmatogenous retinal detachment repair in cytomegalovirus retinitis with and without scleral buckling. Ophthalmology. 1995;102:236-45.
118. Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG): Foscarnet-ganciclovir cytomegalovirus retinitis trial 3: Morbidity and toxic effects associated with ganciclovir or foscarnet therapy in a randomized cytomegalovirus retinitis trial. Archives of Internal Medicine. 1995;155:65-74.
119. Rickman LS, **Freeman WR**: Medical and virologic aspects of ocular HIV infection for the ophthalmologist. Seminars in Ophthalmology. 1995;91-110.
120. Arévalo JF, **Freeman WR**: Rhegmatogenous retinal detachment in patients with the acquired immunodeficiency syndrome. Seminars in Ophthalmology. 1995;183-91.
121. **Freeman WR** (Editor): Seminars in AIDS. Seminars in Ophthalmology. W.B. Saunders Company. Philadelphia, PA. (10 Chapters). 1995;89-191.
122. Wolf DD, Smith IL, Lee DJ, **Freeman WR**, Flores-Aguilar M, Spector SA: Mutations in human cytomegalovirus UL97 gene confer clinical resistance to ganciclovir and can be detected directly in patient plasma. Journal of Clinical Investigation. 1995;95:257-63.

123. Kirsch LS, Arévalo JF, De Clercq E, Chavez de la Paz E, Munguia D, Garcia R, **Freeman WR**: A phase I/II study of intravitreal cidofovir (HPMPC) for the treatment of cytomegalovirus retinitis in patients with the acquired immune deficiency syndrome. American Journal of Ophthalmology. 1995;119(4):466-76.
124. Rickman LS, **Freeman WR**, Green R, Feldman ST, Sullivan J, Russack V, Relman DA: Brief report: Uveitis caused by tropheryma whippelii (Whipple's Bacillus). New England Journal of Medicine. 1995;332:363-6.
125. Tatebayashi M, Neyts J, Besen G, Flores-Aguilar M, Smith IL, Wiley CA, Spector SA, Bergeron-Lynn G, Maudal PC, De Clercq E, Gangon PA, Chavez E, Russack V, **Freeman WR**: Absence of infectious retinitis after injection of human cytomegalovirus into rabbit eyes. The Journal of Infectious Diseases. 1995;171:782-7.
126. Schrier RD, **Freeman WR**, Wiley CA, McCutchan JA, the HNRC Group. Immune predispositions for CMV retinitis in AIDS. Journal of Clinical Investigation. 1995;95:1723-34.
127. Sadun AA, Pepose JS, Madigan MC, Laycock KA, Tenhula WN, **Freeman WR**: AIDS-related optic neuropathy: A histological, virological and ultrastructural study. Graefe's Archive for Clinical and Experimental Ophthalmology. 1995;233:387-98.
128. Ahn DSH, Flores-Aguilar M, Kirsch L, Munguia D, Gangan P, **Freeman WR**: Evaluation of retinal toxicity of acetylcholine in rabbit eyes. Retina. 1995;15:327-31.
129. Shakiba S, **Freeman WR**, Flores-Aguilar M, Munguia D, Tatebayashi M, Besen G, Amani R, Wiley CA, Vuong C, Aldern KA, Gardner MF, Hostetler KY: Antiviral effect in human cytomegalovirus-infected cells, pharmacokinetics, and intravitreal toxicology in rabbits of acyclovir diphosphate dimyristoylglycerol. Antimicrobial Agents and Chemotherapy. 1995;39:1383-5.
130. Kirsch LS, Arévalo JF, Chavez de la Paz E, Munguia D, De Clercq E, **Freeman WR**: Intravitreal cidofovir (HPMPC) treatment of cytomegalovirus retinitis in patients with acquired immune deficiency syndrome. Ophthalmology. 1995;102:533-43.
131. Bartsch D-U, Weinreb RN, Zinser G, Frambach D, **Freeman WR**: Confocal scanning infrared laser ophthalmoscopy for indocyanine green angiography: Preliminary results. American Journal of Ophthalmology. 1995 120:642-51.
132. Besen G, Chavez de la Paz E, Tatebayashi M, Flores-Aguilar M, Gangan PA, Munguia D, Wiley CA, Jähne G, Winkler I, Helsing M, Bergeron-Lynn G, **Freeman WR**: Evaluation of retinal toxicity and efficacy of the anti-CMV compound 2-amino-7-[(1,3-dihydroxy-2-propoxy)methyl] Purine. Antimicrobial Agents and Chemotherapy. 1995;39:1485-8.

133. Studies of Ocular Complications of AIDS (SOCA) Research Group in collaboration with the AIDS Clinical Trials Group (ACTG): Antiviral effects of foscarnet and ganciclovir therapy on human immunodeficiency virus p24 antigen in patients with AIDS and cytomegalovirus retinitis. Journal of Infectious Disease. 1995;172:613-621.

134. Arévalo JF, González C, Caparelli EV, Kirsch LS, Garcia RF, Quiceno JI, Connor JD, Gambertoglio J, Sherwood CH, Bergeron-Lynn G, **Freeman WR**: Intravitreal and plasma concentrations after intravenous ganciclovir and foscarnet in patients with acquired immunodeficiency syndrome. The Journal of Infectious Diseases. 1995;172:451-6.

135. Kokame GT, de Bustros S, **Freeman WR**, The Vitrectomy for Prevention of Macular Hole Study Group: Visual acuity as a prognostic indicator in stage I macular holes. American Journal of Ophthalmology. 1995;120:112-4.

136. Spector SA, Busch DF, Follansbee S, Squires K, Lalezari JP, Jacobson MA, Connor JD, Jung D, Shadman A, Mastre B, Buhles W, Drew WL, Dankner WM, Meixner L, **Freeman WR**, Dyner TS, Freeman E, Mortillaro G, Glutzer E, Bush T, Coleman R: Pharmacokinetic, safety, and antiviral profiles of oral ganciclovir in persons infected with human immunodeficiency virus: A phase I/II study. Journal of Infectious Diseases. 1995;171:1438-47.

137. Kim JW, **Freeman WR**, El-Haig W, Macguire AM, Arévalo JF, Azen SP, the Vitrectomy for Macular Hole Study Group: Baseline characteristics, natural history, and risk factors to progression in eyes with stage 2 macular holes (Results from a prospective randomized clinical trial). Ophthalmology. 1995;102:1818-29.

138. **Freeman WR**: Intraocular Tolerance to Perflubron. Retina. 1995;15:446-7. (Editorial Reply).

139. Kim JW, El-Haig W, Capparelli EV, Besen G, Connor J, **Freeman WR**: Effect of partial retinal destruction and gliosis on the intravitreal pharmacokinetics of HPMPC. Retina. 1995;15:513-17.

140. Arévalo JF, **Freeman WR**: Chorioretinal biopsy. AIDS and Ophthalmology. Diaz-Llopis M, Spanish Society of Ophthalmology. MAC LINE Spain. 1996;493-501.

141. Kuppermann BD, Assil AK, Voung C, Besen G, Wiley C, De Clercq E, Bergeron-Lynn G, Connor JD, Munguia D, Pursley M, **Freeman WR**: Liposome-encapsulated (s)-1-(3-hydroxy-2 phosphonyl methoxypropyl) cytosine (HPMPC, cidofovir) for long-acting therapy of viral retinitis. Journal of Infectious Diseases. 1996;173:18-23.

142. Feldman ST, **Freeman WR**, Rickman L: Ocular manifestations of whipple's disease. Ocular Infections & Immunology. Edited by Pepose JS, Holland GN, Wilhelmus KR, Section V, Part 4. Mosby-Year Book, Inc., St. Louis 1996 pp.1398-1403.

143. Arévalo JF, Munguia D, Faber D, Friedlander SM, Quiceno JI, Rahhal FM, Kirsch LS, **Freeman WR**: Correlation between intraocular pressure and cd4+ t-lymphocyte counts in patients with human immunodeficiency virus with and without cytomegalovirus retinitis. American Journal of Ophthalmology. 1996;122:91-96.
144. Plummer D, Arévalo JF, Fram N, Sample P, **Freeman WR**: Effectiveness of entopic perimetry for locating peripheral scotomas due to CMV retinitis. Archives of Ophthalmology. 1996;114:828 - 831.
145. Lewis RA, Carr LM, Doyle K, Fainstein V, Gross R, Paskell H, Samo TC, Shigley JW, Jabs DA, Bartlett J, Becker R, Coleson LC, Dunn JP, Feinberg J, Tay-Kearny ML, Leslie J, Miller T, Neisser LG, Semba RD, Barron B, Jarrott C, LeCount C, Peyman G, Swenie D, Heinemann MH, O'Leary C, Polsky B, Squires K, Wise-Campbell S, Friedman AH, Cheung TW, Justin N, Sacks H, Severin C, Teich S, Wallach F, Friedberg DN, Addressi A, Dieterich D, Frost K, Hutt R, Pei M, Powers T, Scoppe C, Weinberg DV, Jampol L, Lyon A, Muñana A, Murphy R, Naughton K, Palella F, Richine, L, Valadez G, Squires K, Kimble JA, Weingarten J, Holland GN, Chafey S, Hardy WD, Johiro AK, Kimbrell C, Levinson RD, MacArthur LJ, Martin M, Tufail A, **Freeman WR**, Arévalo-Colina JF, Spector SA, Jarman CL, Meixner L, Chiang Meng T, Simanello MA, Spector SA, The Studies of Ocular Complications of AIDS Research Group in Collaboration with the AIDS Clinical Trials Group et al.: Combination foscarnet and ganciclovir therapy vs. monotherapy for the treatment of relapsed cytomegalovirus retinitis in patient with AIDS. The Cytomegalovirus Retreatment Trial. Archives of Ophthalmology. 1996;114:23-33.
146. **Freeman WR**: New developments in the treatment of CMV retinitis: Ophthalmology. 1996; 103:999-1000.
147. Chu TG, Lopez PF, Cano MR, **Freeman WR**, Lean JS, Ligget PE, Thomas EL, Green LR: Posterior vitreoschisis: An echographic finding in proliferative diabetic retinopathy. Ophthalmology. 1996;315-322.
148. Rahhal FM, Arévalo JF, Munguia D, Taskintuna I, Chavez de la Paz E, Azen S, **Freeman WR**: Intravitreal cidofovir (HPMPC) for the maintenance of cytomegalovirus retinitis. Ophthalmology. 1996;103:1078-1083.
149. González CR, Wiley CA, Arévalo JF, Garcia RF, Baruch D, Kuppermann D, Berry C, **Freeman WR**: Polymerase chain reaction detection of cytomegalovirus and human immunodeficiency virus-1 in the retina of patients with acquired immune deficiency syndrome with and without cotton-wool spots. Retina. 1996;16:305-311.
150. Lewis RA, Clogston P, Fainstein V, Gross R, Samo TC, Tuttle C, Jabs DA, Apuzzo L, Bartlett J, Coleson L, Squires K, Wisecampbell S, Friedman AH, Cheung TW, Justin N, Teich S, Sacks H, Severin C, Holland DN, Chafey S, Fall H, Hardy WD, Kimbrell C, Mcarthurchang L, **Freeman WR**, Meinert L, Peterson TJ, Quiceno JI, Rickman L, Simanello MA, et al.: Assessment of cytomegalovirus retinitis: Clinical evaluation vs. centralized grading of fundus photographs. Archives of Ophthalmology. 1996;114:791-805.

151. Lewis RA, Clogston P, Fainstein V, Gross R, Samo TC, Tuttle C, Jabs DA, Apuzzo L, Bartlett J, Coleson L, Dunn JP, Eldred L, Feinberg J, Flynn T, King R, Leslie J, Barron B, Greenspan D, Lecount C, Peyman G, Franklin G, Heinemann MH, Polsky B, Squires K, Wisecampbell S, Friedman AH, Cheung TW, Justin N, Teich S, Sacks H, Severin C, Addressi A, Dieterich D, Frost K, Weinberg D, Jampol L, Murphy R, Naughton K, Henderly D, Holland GN, Chafey S, Fall H, Hardy WD, Kimbrell C, Macarthurchang L, **Freeman WR**, Meinert L, Peterson TJ, Quiceno JI, Studies of Ocular Complications of AIDS Group et al.: Clinical vs. photographic assessment of treatment of cytomegalovirus retinitis. Foscarnet-ganciclovir cytomegalovirus retinitis trial report 8. Archives of Ophthalmology. 1996;114:848-855.
152. Wu AW, Coleson LC, Holbrook JT, Jabs DA, Lewis RA, Clogston P, Fainstein V, Gross R, Samo T, Tuttle C, Apuzzo L, Bartlett J, Dunn JP, Eldred L, Feinberg J, Flynn T, King R, Leslie J, Barron B, Greenspan D, Cheung C, Justin N, Teich S, Sacks H, Severin C, Friedberg DN, Addressi A, Dieterich D, Frost K, Weinberg D, Jampol L, Murphy R, Naughton K, Henderly D, Holland GN, Chafey S, Fall H, Hardy WD, Kimbrell C, Macarthur LJ, **Freeman WR**, Studies of Ocular Complication of AIDS (SOCA) Research Group: Measuring visual function and quality of life in patients with cytomegalovirus retinitis. Development of a questionnaire. Archives of Ophthalmology. 1996;114:841-847.
153. Smith IL, Shinkal M, **Freeman WR**, Spector SA: Polyradiculopathy associated with ganciclovir resistant cytomegalovirus in an AIDS patient: Phenotypic and genotypic characterization of sequential viral isolates. Journal of Infectious Diseases. 1996;173:1481-1484.
154. Rahhal FM, Arévalo JF, Munguia DI, Chavez de la Paz E, Azen SP, **Freeman WR**: Treatment of CMV retinitis with intravitreal cidofovir (HPMPC) in patients with AIDS. Annals of Internal Medicine. 1996;125:98-103.
155. Plummer DJ, Sample PA, Arévalo JF, Grant I, Quiceno JI, Dua R, **Freeman WR**: Visual field loss in HIV-positive patients without infectious retinopathy. American Journal of Ophthalmology. 1996;122:542-549.
156. Arévalo JF, **Freeman WR**: Choroiditis from pneumocystis carinii. AIDS and Ophthalmology. Diaz-Llopis M, Mac Line 1996 pp. 427-432.
157. Arévalo JF, **Freeman WR**: Intravitreal ganciclovir implants for treatment of cytomegalovirus retinitis. AIDS and Ophthalmology. Diaz-Llopis M, Spanish Society of Ophthalmology. MAC LINE 1996; pp. 325-331.
158. Kim JW, **Freeman WR**, Azen SP, Wael EH, Klein DJ, Bailey IL, and the Vitrectomy for Macular Hole Study Group: Prospective randomized trial of vitrectomy or observation for stage II macular holes. American Journal of Ophthalmology. 1996;121:605-614.



159. Williams JK, Kirsch LS, Russack V, **Freeman WR**: Rhegmatogenous retinal detachments in HIV positive patients with ocular syphilis. Ophthalmic Sugery and Lasers. 1996;8:699-705.
160. Rahhal FM, Siegel LM, Russak V, Wiley C, Tedder DG, Weinberg A, Rickman L, **Freeman WR**: Clinicopathologic correlations in acute retinal necrosis caused by herpes simplex virus, Type 2. Archives of Ophthalmology. 1996;114:1416-1419.
161. Banker AS, **Freeman WR**, Vander JF, Flores-Aguilar M, Munguia D, the Wills Eye Hospital Perflubron Study Group: Use of perflubron as a new temporary vitreous substitute and manipulation agent for vitreoretinal surgery. Retina. 1996;16:285-291.
162. Friedlander SM, Rahhal FM, Ericson L, Arévalo JF, Hughes JD, Levi L, Wiley C, Graham EM, **Freeman WR**: Optic neuropathy preceding acute retinal necrosis in AIDS syndrome. Archives of Ophthalmology. 1996;114:1481-1485.
163. Flores-Aguilar M, Munguia D, Besen G, Gangan P, Arévalo JF, **Freeman WR**: Clinical versus fundus photographic evaluation of the status of cytomegalovirus retinitis in AIDS patients. Retina, 1996;16:363-372.
164. Iragui VJ, Kalmijn J, Plummer DJ, Sample PA, Trick GL, **Freeman WR**: Pattern electroretinograms and visual evoked potentials in HIV infection: Evidence of asymptomatic retinal and postretinal impairment in the absence of infectious retinopathy. Neurology. 1996;47:1452-1456.
165. Banker AS, González C, Wiley CA, Bergeron-Lynn G, **Freeman WR**: The agar sandwich technique for retinal biopsy proceeding. Retina. 1996;16:530-534.
166. Besen G, **Freeman WR**: Intraoperative recognition of retinal vasculitits in a patient with early lens induced uveitis. Ophthalmic Surgery and Lasers. 1997;28:67-68.
167. Mueller AJ, Jacobson MA, Hurwitz S, Chuang EL, Friedberg DN, Haidt SJ, Heinemann MH, Jabs DA, Kaplan HJ, **Freeman WR**: Reevaluation of time to progression of foscarnet salvage therapy for cytomegalovirus retinitis in AIDS patients clinically resistant to ganciclovir. AIDS. 1997;11(3)17-18.
168. **Freeman WR**, Kim JW, Azen SP, El-Haig W, Mishell D, Bailey I, the Vitrectomy for Macular Hole Study Group: Vitrectomy for the treatment of full-thickness stage III or IV macular holes: Results of a multicentered randomized clinical trial. Archives of Ophthalmology. 1997;115:11-21.
169. **Freeman WR**, Studies of Ocular Complications of AIDS (SOCA) Research Group, et al.: Parenteral cidofovir for the treatment of cytomegalovirus retinitis in patients with AIDS: The HPMPC peripheral cytomegalovirus retinitis trial. Annals of International Medicine. 1997;126: 264-274.

170. Taskintuna I, Banker AS, Flores-Aguilar M, Bergeron-Lynn G, Aldern KA, Hostetler, KY, **Freeman WR**: Evaluation of a novel lipid prodrug for intraocular drug delivery; effect of acyclovir diphosphate dimyristoylglycerol in a rabbit model with herpes simplex virus - 1 retinitis. Retina. 1997;17:57-64.
171. Arévalo JF, Quiceno JI, Garcia RF, McCutchan A, Munguia D, Nelson JA, **Freeman WR**: Retinal findings and characteristics in AIDS patients with systemic mycobacterium avium complex and toxoplasmic encephalitis. Ophthalmic Surgery and Lasers. 1997;28:50-54.
172. Bartsch D-U, Weinreb RN, **Freeman WR**: Special techniques using scanning laser ophthalmoscopes: Confocal ICG imaging of fundus lesions. Indocyanine Green Angiography. Editor: Yanuzzi, Chapter 7. Mosby Publishing, St. Louis, 1997.
173. O'Brart DPS, Lima MDS, Bartsch D-U, **Freeman WR**, Weinreb RN: Indocyanine green angiography of the peripapillary region in glaucomatous eyes by confocal scanning laser ophthalmoscope. American Journal of Ophthalmology. 1997;123:657-666.
174. Taskintuna I, Rahhal FM, Arévalo JF, Munguia D, Banker AS, De Clercq E, **Freeman WR**: Low dose intravitreal HPMPC (cidofovir) therapy of cytomegalovirus retinitis in patients with the acquired immunodeficiency syndrome. Ophthalmology. 1997;104:1049-1057.
175. **Freeman WR**: Diagnostic and therapeutic challenges; VHK syndrome. Retina. 1997;248-250.
176. Davis JL, Taskintuna I, **Freeman WR**, Weinberg DV, Feuer WJ, Leonard RE: Iritis and hypotony after treatment with intravenous cidofovir for cytomegalovirus retinitis. Archives of Ophthalmology. 1997; 115:733-737.
177. Lewis RA, Clogston P, Fainstein V, Gross R, Samo T, Tuttle C, Jabs DA, Apuzzo L, Bartlett J, Coleson L, Dunn JP, Eldred L, Feinberg J, Flynn T, King R, J Leslie, Barron B, Greenspan D, LeCount C, Peyman G, Franklin R, Heinemann MH, Polsky B, WiseCampbell S, Friedman AH, Cheung AW, Justin N, Teich S, Sacks H, Severin C, Freidberg DN, Addressi A, Dieterich D, Frost K, Weinberg D, Jampol L, Murphy R, Naughton K, Henderly D, Holland GN, Chafey S, Fall H, Hardy WD, Kimbrell C, MacArthurChang L, **Freeman WR**, Meixnert L, Peterson TJ, et al.: Cytomegalovirus (CMV) culture results, drug resistance, and clinical outcome in patients with AIDS and CMV retinitis treated with foscarnet and ganciclovir. Journal of Infectious Diseases. 1997;176:50-58.
178. Flores-Aguilar M, Besen G, Vuong C, Tatebayashi M, Munguia D, Gangan P, Wiley CA, **Freeman WR**: Evaluation of retinal toxicity and efficacy of anti-CMV and anti-herpes simplex virus antiviral phosphorothioate oligonucleotides ISIS 2922 and ISIS 4015. Journal of Infectious Diseases. 1997;175:1308-1316.

179. Taskintuna I, Banker AS, Rao NA, Wiley CA, Aguilar MS, Munguia D, Bergeron-Lynn G, De Clercq E, Keefe K, **Freeman WR**: An animal model for cidofovir (HPMPC) toxicity: Intraocular pressure and histopathologic effects. Experimental Eye Research. 1997;64:795-806.
180. **Freeman WR**, Davis J, Davis MD, Heinemann H, Jabs DA, Van Natta MC, Studies of Ocular Complications of AIDS (SOCA) Research Group in Collaboration with the AIDS Clinical Trials Group (ACTG) et al.: Rhegmatogenous retinal detachment in patients with CMV retinitis: The foscarnet-ganciclovir CMV retinitis trial. American Journal of Ophthalmology. 1997;124:61-70.
181. Musch DC, Martin DF, Gordon JF, Davis MD, Kuppermann BD, Heinemann MH, Campbell S, Boddice S, Duker JS, Naughton K, McGeary J, Chong LP, Walonker F, Levin L, Lopez K, Gomes A, Davis JL, Simmons T, Vandenbrook R, Fish RH, Hutchison C, Ai E, Luckie A, Tashayyod D, Anand R, Chuang EL, Lawrence B, Robinson MR, Champagne K, Cantrill HL, Brallier A, **Freeman WR**, Jarman C, Wieland MR, Coverstone V, Ligh JK, Hutt R, Norman BC, Cristiano J, Neger R, Crawford K, Weinberg DV, Munana A, Murphy FP, Pace B, Duh YJ, Gordon JE, Johnson PJ, Lee JA, et al.: Treatment of cytomegalovirus retinitis with a sustained-release ganciclovir implant. New England Journal of Medicine. 1997;337:83-90.
182. Mueller AJ, Plummer DJ, Dua R, Taskintuna I, Sample PA, Grant I, **Freeman WR**: Analysis of visual dysfunctions in HIV-positive patients without retinitis. American Journal of Ophthalmology. 1997;124:158-167.
183. Banker AS, Arévalo JF, Rahhal FM, Ishimoto B, Munguia D, Berry C, De Clercq E, Ochabski R, Taskintuna I, **Freeman WR**: Intraocular pressure and aqueous humor dynamics in AIDS patients treated with intravitreal cidofovir (HPMPC) for cytomegalovirus retinitis. American Journal of Ophthalmology. 1997;124:168-180.
184. Arévalo JF, Kirsch LS, Russack V, **Freeman WR**: New ophthalmic manifestations of presumed rifabutin-related uveitis. Ophthalmic Surgery and Lasers. 1997;28:321-324.
185. **Freeman WR**, Banker AS, Azen SP, de Bustros S, and the Vitrectomy for Macular Hole Study Group: Retinal pigment epithelial changes after macular hole surgery. (Response to "Letter to the Editor") Archives of Ophthalmology. 1997;115:1214-1215.
186. Banker AS, **Freeman WR**, Kim JW, Azen SP, Munguia D, the Vitrectomy for Macular Hole Study Group: Vision threatening complications of surgery for full-thickness of macular holes. Ophthalmology. 1997;104:1442-1453.
187. Studies of Ocular Complications of AIDS Research Group (SOCA) in collaboration with the AIDS Clinical Trials Group: Foscarnet-ganciclovir cytomegalovirus retinitis trial 5: Clinical features of cytomegalovirus retinitis at diagnosis. American Journal of Ophthalmology. 1997;124:141-157.

188. Chavez de la Paz E, Arévalo JF, Kirsch LS, Munguia D, Rahhal FM, De Clercq E, **Freeman WR**: Anterior nongranulomatous uveitis following intravitreal HPMPC (Cidofovir) for the treatment of cytomegalovirus retinitis: Analysis and prevention. Ophthalmology. 1997;104:539-544.

189. Studies of Ocular Complications of AIDS Research Group in Collaboration with the Clinical Trials Group: MSL-109 adjuvant therapy for cytomegalovirus retinitis in patients with acquired immunodeficiency syndrome: The Monoclonal Antibody Cytomegalovirus Retinitis Trial, **Freeman WR**:. Archives of Ophthalmology. 1997;115:1528-1536.

190. Taskintuna I, Rahhal FM, Arévalo J, Banker AS, De Clercq E, **Freeman WR**: Adverse events and autopsy findings after intravitreal cidofovir (HPMPC) therapy. Ophthalmology. 1997;104:1827-1837.

191. **Freeman WR**: Pneumatic retinopexy for retinal reattachment. A Practical Atlas of Retinal Disease, Second Edition. 1997;261-266.

192. Smith IL, Cherrington JM, Jiles RE, Fuller MD, **Freeman WR**, Spector SA: High-level resistance of cytomegalovirus to ganciclovir is associated with alterations in both the UL97 and DNA polymerase genes. Journal of Infectious Diseases. 1997;176:69-77 en erratum 1998;177:1140-1141.

193. Mueller AJ, Bartsch D-U, Folberg R, Mehaffey MG, Boldt HC, Meyer M, Gardner LM, Goldbaum MH, Pe'er J, **Freeman WR**: Imaging the Microvasculature of Choroidal Melanomas With Confocal Indocyanine Green Scanning Laser Ophthalmoscopy. Archives of Ophthalmology. 1998;116(1):31- 39.

194. Mueller AJ, Jian G, Banker AS, Rahhal FM, Capparelli E, **Freeman WR**: The Effect of Deep Posterior Subtenon Injection of Corticosteroids on Intraocular Pressure. American Journal of Ophthalmology. 1998;125(2):158-163.

195. Karavellas M, Lowder CY, Macdonald JC, Avila CP, **Freeman WR**: Immune Recovery Vitritis Associated With Inactive Cytomegalovirus Retinitis, A New Syndrome. Archives of Ophthalmology. 1998;116(2):169-175.

196. Smith IL, Taskintuna I, Rahhal FM, Powell HC, Everett Ai, Mueller AJ, Spector SA, **Freeman WR**: Clinical Failure of CMV Retinitis With Intravitreal Cidofovir Is Associated With Antiviral Resistance. Archives of Ophthalmology. 1998;116(2):178-185.

197. Plummer DJ, Sample PA, **Freeman WR**: Visual dysfunction in HIV-positive patients without infectious retinopathy. AIDS Patient Care and STDs. 1998;12(3):171-179.

198. Taskintuna I, Rahhal FM, Capparelli EV, Cundy KC, **Freeman WR**: Intravitreal and Plasma Cidofovir Concentrations After Intravitreal and Intravenous Administration in AIDS Patients with Cytomegalovirus Retinitis. Journal of Ocular Pharmacology and Therapeutics. 1998;14(2):147-151.

199. O' Connor NJ, Bartsch D-U, **Freeman WR**, Mueller AJ, Holmes TJ: Fluorescent infrared scanning laser ophthalmoscope 3d visualization: Automatic random eye motion correction and deconvolution. Applied Optics. 1998;2021-2033.
200. Banker AS, **Freeman WR**, Kim JW, Munguia D, Azen SP, and the Vitrectomy for Macular Hole Study Group: Vision threatening complications of surgery for full-thickness of macular hole. (Editorial reply). Ophthalmology. 1998;105(5):762.
201. Banker AS, Bergeron-Lynn G, Keefe KS, De Clercq E, Taskintuna I, **Freeman WR**: Effects of topical and subconjunctival cidofovir (HPMPC) in an animal model. Current Eye Research. 1998;17(6):560-566.
202. **Freeman WR**, Bartsch D-U, Mueller AJ, Banker AS, Weinreb RN: Simultaneous Indocyanine Green and Fluorescein Angiography Using a Confocal Scanning Laser Ophthalmoscope. Archives of Ophthalmology. 1998;116(4):455-463.
203. Macdonald JC, Torriani FJ, Morse LS, Karavellas MP, Reed JB, **Freeman WR**: Lack of Reactivation of Cytomegalovirus (CMV) Retinitis after Stopping CMV Maintenance Therapy in AIDS Patients with Sustained Elevations in CD4 T Cells in Response to Highly Active Antiretroviral Therapy. Journal of Infectious Diseases. 1998;177(5):1182-1187.
204. Banker AS, De Clercq E, Taskintuna I, Keefe KS, Bergeron-Lynn G, **Freeman WR**: Influence of Intravitreal Injections of HPMPC and Related Nucleoside Analogues on Intraocular Pressure in Guinea Pig Eyes. Investigative Ophthalmology & Visual Science. 1998;39(7):1233-1242.
205. Young S, Morlet N, Besen G, Wiley CA, Jones P, Gold J, Li Y, **Freeman WR**, Coroneo M: High-dose (  $\mu\text{g}$ ) Intravitreal Ganciclovir in the Treatment of Cytomegalovirus Retinitis. Ophthalmology. 1998;105(8):1404-1410.
206. Avila CP, Bartsch D-U, Bitner DG, Cheng L, Mueller AJ, Karavellas MP, **Freeman WR**: Retinal Blood Flow Measurements in Branch Retinal Vein Occlusion Using Scanning Laser Doppler Flowmetry. American Journal of Ophthalmology. 1998;126(5):683-690.
207. **Freeman WR** (editor): Practical Atlas for Retinal Disease and Therapy, Second Edition. Raven Press Ltd., New York, NY. 1998. (22 chapters 392 pages)
208. **Freeman WR**, Blumenkranz MS: Age related macular degeneration: Is help on the way? [Guest Editorial] Ophthalmology. 1998;105(9):1585-86.
209. Garcia CR, Torriani FJ, **Freeman WR**: Cidofovir in the treatment of CMV retinitis. Ocular Immunology and Inflammation. 1998;6(3):195-203.

210. Flynn HW, Kaplan HJ, **Freeman WR**, Jabs DA: Round Table: Cataract Surgery Complications. Vitreoretinal and Uveitis Update. JB Saer Ed. Kugler Publications, Netherlands. 1998;pp.211-219.
211. **Freeman WR**, Banker AS, Azen, SP: Tips and recent improvements in the surgical treatment of macular holes. Vitreoretinal and Uveitis Update. JB Saer Ed. Kugler Publications, Netherlands. 1998;pp. 235-238.
212. **Freeman WR**, Macdonald JM, Azen SP: Intravitreal cidofovir (HPMPC) tips and caveats. Vitreoretinal and Uveitis Update. JB Saer Ed. Kugler Publications, Netherlands. 1998;pp.307-310.
213. **Freeman WR**, Azen SP, The Vitrectomy for Macular Hole Study Group: Vitrectomy for macular hole surgery: Results of a randomized trial comparing the observation to macular hole surgery for stage II, III, IV, macular holes. Vitreoretinal and Uveitis Update. JB Saer Ed. Kugler Publications, Netherlands. 1998;pp. 223-226.
214. Jabs DS, **Freeman WR**: Diagnostic evaluation of the patients with iritis and uveitis. Vitreoretinal and Uveitis Update. JB Saer Ed. Kugler Publications, Netherlands. 1998;pp. 245-255.
215. **Freeman WR**: Ophthalmologic Management of AIDS related Eye Disease. The HOYA Vision Care Asia-Pacific International Symposium: The Hoya Vision Care Advisory Committee Publications, Ed. S. Mishima, Tokyo, Japan. April 15-18. Tokyo, Japan. Tokyo University Press. 1998;112-118. (Sessions 3 pgs. 112-118).
216. Zhu L, Bartsch D-U, **Freeman WR**, Sun PC, Fainman Y: Modeling Human Eye Aberrations and Their Compensation for High-Resolution Retinal Imaging. Optometry and Vision Science. 1998;75(11):827-839.
217. Tabbara KF, Chavis PS, **Freeman WR**: Vogt-Koyanagi-Harada syndrome in children compared to adults. Acta Ophthalmologica Scandinavica. 1998;76(6):723-726.
218. Cheng L, Rao NA, Keefe K, Avila CP, Macdonald JC, **Freeman WR**: Cytomegalovirus Iritis; A case report. Ophthalmic Surgery and Lasers. 1998;29(11):930-932.
219. Plummer DJ, Marcotte TD, Sample PA, Wolfson T, Heaton RK, Grant I, **Freeman WR** and the HNRC Group: Neuropsychological Impairment Associated Visual Field Deficits in HIV Infection. Investigative Ophthalmology & Visual Science. 1999;40(2):435-442.
220. Plummer DJ, Banker AS, Taskintuna I, Azen SP, Sample PA, LaBree L, **Freeman WR**: The Utility of Entoptic Perimetry as a Screening Test for Cytomegalovirus Retinitis. Archives of Ophthalmology. 1999;117(2):202-207.

221. Zhu L, Sun PC, Bartsch D-U, **Freeman WR**, Fainman Y: Adaptive Control of a Micromachined Continuous-Membrane Deformable Mirror for Aberration Compensation. Applied Optics. 1999;38(1):168-176.
222. Karavellas MP, Plummer DJ, Macdonald JC, Torriani F, Shufelt CL, Azen SP, **Freeman WR**: Incidence of Immune Recovery Vitritis in Cytomegalovirus Retinitis Patients following Institution of Successful Highly Active Antiretroviral Therapy. Journal of Infectious Diseases. (Concise Communication) 1999;179:697-700.
223. Smith I, Macdonald JC, **Freeman WR**, Shapiro AM, Spector SA: Cytomegalovirus (CMV) Retinitis Activity Is Accurately Reflected by the Presence and Level of CMV DNA in Vitreous and Aqueous Humor. Journal of Infectious Diseases. (Concise Communication) 1999;179(5):1249-1253.
224. Rivero ME, Kupperman BD, Wiley CA, Garcia CR, Smith MD, Dreilinger A, **Freeman WR**: Acquired Immunodeficiency Syndrome-Related Intraocular B-Cell Lymphoma. Archives of Ophthalmology. 1999;117(5):616-622.
225. Cheng L, Hostetler KY, Gardner MF, Avila Jr. CP, Bergeron-Lynn G, Severson GM, **Freeman WR**: Intravitreal pharmacokinetics in rabbits of the foscarnet lipid prodrug: 1-0-octadecyl-sn-glycerol-3-phosphonoformate (ODG-PFA). Current Eye Research. 1999;18(3):161-167.
226. Banker, AS, Arévalo JF, Azen SP, Munguia D, Ishimoto B, Rahhal FM, Xiang M, **Freeman WR**: Fluorophotometry in Patients with Human Immunodeficiency Virus with and without Cytomegalovirus Retinitis. Ophthalmology. 1999;106(3):590-593.
227. **Freeman WR**, Azen SP: Evaluation of New Techniques of Macular Surgery. (Guest Editorial). Ophthalmology. 1999;106(5):861-862.
228. Mueller AJ, **Freeman WR**, Folberg R, Bartsch D-U, Schneider A, Schaller U, Kampik A: Evaluation of microvascularization pattern visibility in human choroidal melanomas: Comparison of confocal fluorescein with Indocyanine Green Angiography. Graefes Archives of Ophthalmology. 1999;237:448-456.
229. Banker AS, **Freeman WR**, Azen SP, Lai MY, the Vitrectomy for Macular Hole Study Group. A multicentered clinical study of serum as adjuvant therapy for surgical treatment of macular holes. Archives of Ophthalmology. 1999;117(11):1499-1502.
230. Cheng L, Hostetler KY, Gardner MF, Avila CP, Bergeron-Lynn G, Keefe KS, Wiley CA, **Freeman WR**: Intravitreal Toxicology in Rabbits of Two Preparations of 1-0-Octadecyl-sn-glycerol-3-phosphonoformate, a Sustained Delivery Anti-CMV Drug. Investigative Ophthalmology & Visual Science. 1999;40(7):1487-95.

231. Sample PA, Plummer DJ, Mueller AJ, Matsubara KI, Sadun A, Grant I, **Freeman WR**: Pattern of Early Visual Field Loss in HIV-Infected Patients. Archives of Ophthalmology. 1999;117(6):755-60.
232. Aphinyanaphongs Y, Wang CL, Tasciyan T, O'Conner N, Bartsch D-U, **Freeman WR**, Holmes T: Deconvolution for sub-pixel resolution of indocyanine green scanning laser ophthalmoscope imagery. Proceedings of Optical Society of America. Technical Digest of Vision Science and It's Applications, Optical Society of America. Santa Fe, NM. 1999; Feb. 19-22:272-275.
233. Garcia CR, Rivero ME, Bartsch D-U, Ishiko S, Takamiya A, Fukui K, Hirokawa H, Clark T, Yoshida A, **Freeman WR**: Oral Fluorescein Angiography with the Confocal Scanning Laser Ophthalmoscope. Ophthalmology. 1999;106(6):1114-8.
234. Mueller AJ, Folberg R, **Freeman WR**, Bartsch D-U, Bergeron-Lynn G, Mehaffey MG, Kan-Mitchell J, Huang X, Jian G, Avila C, Taskintuna I, Cheng L, Wang J: Evaluation of the Human Choroidal Melanoma Rabbit Model for Studying Microcirculation Patterns with Confocal ICG and Histology. Experimental Eye Research. 1999; 68(6):671-678.
235. Cheng L, Hostetler KY, Gardner MF, Avila Jr. CP, Bergeron-Lynn G, Keefe KS, Beadle JR, Wiley CA, **Freeman WR**: Intravitreal toxicology and therapeutic efficacy of the carboxymethyl ester of the 1-*o*-octadecyl-*sn*-glycerol-3-phosphonoformate (ODG-PFA-O-Me), a novel lipid anti-viral prodrug for intraocular drug delivery. Journal of Ocular Pharmacology. 1999;15(4):363-377.
236. **Freeman WR**, Bartsch D-U, Mueller AJ, Banker AS: Innovation and Clinical Trials. (Letter to the editor). Archives of Ophthalmology. 1999;117(6):846-847.
237. Cheng L, Hostetler KY, Chaidhawangul S, Gardner MF, Ozerdem U, Bergeron-Lynn G, Mach-Hofacre B, Mueller AJ, Severson GM, **Freeman WR**: Treatment of Herpes Retinitis in an Animal Model with a Sustained Delivery Antiviral Drug, Liposomal 1-*o*-octadecyl-*sn*-glycerol-3-phosphonoformate. Retina. 1999;19(4):325-331.
238. Akduman L, Karavellas MP, Macdonald JC, Olk JR, **Freeman WR**: Macular translocation with retinotomy and retinal rotation for exudative age-related macular degeneration. Retina. 1999;19:418-423.
239. Schaller U, Macdonald JC, Mueller AJ, Karavellas MP, Volker Klauß V, Scheider A, Kampik A, **Freeman WR**: Removal of silicone oil with vision improvement after rhegmatogenous retinal detachment following CMV retinitis in patients with AIDS. Retina. 1999;19:495-498.
240. **Freeman WR**: Retinal Detachment in CMV Retinitis: Should our approach be changed? (Editorial) Retina. 1999;19(4):271-3.



241. Rivero ME, Bartsch D-U, Otto T, **Freeman WR**: Automated Scanning Laser Ophthalmoscope Image Montages of Retinal Diseases. Ophthalmology. 1999;106:2296-2300.
242. Zhu L, Sun P-C, Bartsch D-U, **Freeman WR**, Fainman Y: Wave-front generation of Zernike polynomial modes with a micromachined membrane deformable mirror. Applied Optics. 1999;38(28):6019-6026.
243. Cheng L, **Freeman WR**, Ozerdem U, Song M-K, Azen SP, the Vitrectomy for Macular Hole Study Group: Prevalence, Correlates and Natural History of Epiretinal Membranes Surrounding Idiopathic Macular Hole. Ophthalmology. 2000;107:853-859.
244. Torriani FJ, **Freeman WR**, Macdonald JC, Karavellas MP, Durand D, Jeffrey D, Meylan P, Schrier R: CMV Retinitis Recurs After Stopping CMV Treatment in Virologic and Immunologic Failures of Potent Antiretroviral Therapy. AIDS. 2000;14:173-180.
245. **Freeman WR**, Rickman LS: Medical Retina: Retinal disease in the HIV-Infected Patient. Retina, S. J. Ryan and A. P. Schachat, 3<sup>rd</sup> Ed. Mosby St. Louis, MO 2000:Vol.2:1576-1622.
246. Song MK, Karavellas M, Macdonald JC, Plummer DJ, **Freeman WR**: Characterization of Reactivation of CMV Retinitis in Patients Healed With Highly Active Antiretroviral Therapy. Retina. 2000;20:151-155.
247. Cheng L, Hostetler KY, Chaidhawangul S, Gardner MF, Beadle JR, Keefe KS, Bergeron-Lynn G, Severson GM, Soules KA, Mueller AJ, **Freeman WR**: Intravitreal Toxicology and Duration of Efficacy of a Novel Anti-Viral Lipid Prodrug of Ganciclovir in Liposome Formulation. Investigative Ophthalmology & Visual Science. 2000;41:1523-1532.
248. Macdonald JC, Karavellas, MP, Torriani FJ, Morse LS, Smith IL, Reed JB, **Freeman WR**: Highly active Antiretroviral Therapy-Related Immune Recovery in AIDS Patients with Cytomegalovirus Retinitis. Ophthalmology. 2000;107:877-883.
249. Plummer DJ, Azen SP, **Freeman WR**: Scanning Laser Entoptic Perimetry for the Screening of Macular and Peripheral Retinal Disease. Archives of Ophthalmology. 2000;118:1205-1210.
250. Ozerdem U, Levi L, Cheng L, Song M-K, Linarelli LG, Scher C, Szer S, **Freeman WR**: Systemic Toxicity of Topical and Periocular Corticosteroid Therapy in an 11-Year-Old Male with Posterior Uveitis. American Journal of Ophthalmology. 2000;130:240-241.
251. Karavellas, MP, Song, MK, Macdonald, JC, **Freeman, WR**: Long Term Posterior and Anterior Segment Complications of Immune Recovery Uveitis Associated with CMV Retinitis. American Journal of Ophthalmology. 2000;130(1):57-64.
252. Schaller UC, Mueller AJ, Bartsch D-U, **Freeman WR**, Kampik A: Choroidal melanoma microcirculation with confocal indocyanine green angiography before and one year after radiation brachytherapy. Retina. 2000;20:627-632.

253. Lewis RA, Carr LM, Doyle K, ...**Freeman WR**,...JabsS DR, Marco M, Studies of Ocular Complications of AIDS Research Group in collaboration with the AIDS Clinical Trials Group: Long-Term Followup of Patients with AIDS Treated with Parenteral Cidofovir for Cytomegalovirus Retinitis: The HPMPC Peripheral cytomegalovirus Retinitis Trial. AIDS. 2000;14:1571-1581.
254. Plummer DJ, Lopez A, Azen SP, LaBree L, Bartsch DUG, Sadun AA, **Freeman WR**: Correlation between static automated and scanning laser entoptic perimetry in normal subjects and glaucoma patients. Ophthalmology. 2000;107(9):1693-1701.
255. Ozerdem U, Mach-Hofacre B, Cheng L, Chaidhawangul S, Keefe K, McDermott CD, Bergeron-Lynn G, Appelt K and **Freeman WR**: The effect of prinomastat (AG3340), a potent inhibitor of matrix metalloproteinases, on a subacute model of proliferative vitreoretinopathy. Current Eye Research. 2000;20:6:447-53.
256. Arevalo JF, **Freeman WR**: Corneal Endothelial Deposits in Children Positive for Human Immunodeficiency Virus Receiving Rifabutin Prophylaxis for *Mycobacterium avium* Complex Bacteremia. [Correspondence] Am. J. Ophthalmology. 2000;129:410-412.
257. Holbrook, JT, Davis MD, Hubbard LD, Martin BK, Holland GN, Jabs DA, Kaplan-Gilman A, Meinert C, Reshef DS; for the Studies of Ocular Complications of AIDS Research Group: Risk Factors for Advancement of Cytomegalovirus Retinitis in Patients with Acquired Immunodeficiency Syndrome. Arch. Ophthalmol. 2000;118:1196-1204.
258. Aurora A, Bartsch D-U, **Freeman WR**: Recent Advances in Ophthalmic Imaging. Delhi Journal of Ophthalmology. 2000;8(4):3-15.
259. Arévalo JF, **Freeman WR**: Retinal and choroidal manifestations of AIDS. Proceedings of the Pan-American Association of Ophthalmology (PAAO). 2000.
260. Ozerdem U, Mach-Hofacre B, Keefe K, Pham T, Soules K, Appelt K, **Freeman WR**: The Effect of Prinomastat (AG3340), a Synthetic Inhibitor of Matrix Metalloproteinases, on Post-traumatic Proliferative Vitreoretinopathy. Ophthalmic Research. 2001;33(1):20-23.
261. Ozerdem U, **Freeman, WR**: Exudative Retinal Detachment following Grid Laser Photocoagulation in a Patient with Hemiretinal Vein Occlusion. Eur J Ophthalmol. 2001;11(1):89-92.
262. Plummer DJ, Bartsch D-U, Azen SP, Max S, Sadun AA, **Freeman WR**: Retinal Nerve Fiber Layer Evaluation in HIV-positive Patients. Am J Ophthalmol. 2001;131:216-222.
263. Holbrook JT, Meinert CL, Van Natta ML, Davis M, Hubbard L, Jabs DA for the Study of Ocular Complications of AIDS Research Group: Photographic Measures of Cytomegalovirus Retinitis as Surrogates for Visual Outcomes in Treated Patients. Arch Ophthalmol. 2001;119:554-563.

264. Martin BK, Kaplan Gilpin AM, Jabs DA, Wu AW for the Studies of Ocular Complications of AIDS Research Group: Reliability, validity, and responsiveness of general and disease-specific quality of life measures in a clinical trial for cytomegalovirus retinitis. J Clin Epidemiol. 2001;54(4):376-386.
265. Arevalo JF, **Freeman WR**, Gomez L: Retina and Vitreous Pathology After Laser-assisted In Situ Keratomileusis (LASIK): Is there a Cause-effect Relationship? Ophthalmology. [Guest Editorial] 2001;108(5):839-840.
266. Ozerdem U, **Freeman WR**, Bartsch D-U, Clark TM: A Simple Non-Contact Wide-Angle Fundus Photography Procedure for Clinical and Research Use. Retina. 2001;21(2):189-190.
267. Karavellas MP, Azen SP, Macdonald JC, Shufelt CL, Lowder CY, Plummer DJ, Glasgow B, Torriani FJ, **Freeman WR**: Immune recovery vitritis and uveitis in AIDS: Clinical predictors, sequelae, and treatment outcomes. Retina. 2001;21:1-9.
268. Cheng L, Rivero ME, Garcia CR, McDermott CD, Keefe KS, Wiley CA, Soules KA, Bergeron-Lynn G, Vekich S, Zhang K, Appelt K, **Freeman WR**: Evaluation of Intraocular Pharmacokinetics and Toxicity of Prinomastat (AG3340) in the Rabbit. J Ocul Pharmacol Ther. 2001;17(3):295-304.
269. **Freeman WR**: Retinal Toxic Effects Associated with Intravitreal Fomirvirsen. Arch Ophthalmol. [Correspondence] 2001;119(3):458. (Corrected Version: 2001;19(6):927).
270. Cheng L, Azen SP, El-Baradie MH, Scholz BM, Chaidhawangul S, Toyoguchi M, **Freeman WR**: Duration of Vitrectomy and Post Operative Cataract in the Vitrectomy for Macular Hole Surgery. Am. J. Ophthalmol. 2001;132(6):881-887.
271. Studies of Ocular Complications of AIDS Research Group (SOCA) in collaboration with the AIDS Clinical Trials Group: The Ganciclovir Implant Plus Oral Ganciclovir Versus Parenteral Cidofovir for the Treatment of Cytomegalovirus Retinitis in Patients with Acquired Immunodeficiency Syndrome: The Ganciclovir Cidofovir Cytomegalovirus Retinitis Trial. Am. J. Ophthalmol. 2001;131:457-467.
272. Banker AS, **Freeman WR**: Retinal Detachment. Ophthalmol Clin North Am. 2001;14(4): 695-704.
273. Jacobson MA, Schrier R, McCune JM, Torriani FT, Holland GN, O'Donnell JJ, **Freeman WR**, Brecht BM: Cytomegalovirus (CMV)-Specific CD4+T Lymphocyte Immune Function in Long-Term Survivors of AIDS-Related CMV End-Organ Disease Receiving Potent, Antiretroviral Therapy. [Concise Communications] J Infect Dis. 2001;183:1399-404.

274. Holbrook JT, Meinert CL, and Jabs DA, for the Studies of Ocular Complications of AIDS Research Group: Patient Notification and Follow-up after Suspension of Treatment Protocols: Experience from Four Clinical Trials of Treatments for AIDS-Related CMV Retinitis. Controlled Clin Trials. 2001;22(1):62-68.
275. Bechmann M, Mueller AJ, Gandorfer A, Thiel MJ, **Freeman WR**, Kampik A: Macular Hole Surgery in an Eye with an Optic Pit. [Brief Report] Am J Ophthalmol. 2001;132(2):263-364.
276. Reed JB, Briggs JW, McDonald CJ, **Freeman WR**, Morse LS: Highly Active Antiretroviral Therapy-Associated Regression of Cytomegalovirus Retinitis (Long-term Results in a Small Case Series). Retina. 2001;21(4):339-343.
277. Aurora A, **Freeman WR**: Pharmacological modulation of Angiogenesis in ARMD. Delhi Ophthalmol Soc. 2001;7(N4):26-29.
278. Arevalo JF, **Freeman WR**, Gomez L: Retina and Vitreous Pathology After Laser-assisted In Situ Keratomileusis (LASIK): Is there a Cause-effect Relationship? [Letters to the Editors/ Editorial Reply] Ophthalmology. 2001;108(12):2157-2158.
279. Schrier, RD, Song MK, Karavellas M, **Freeman WR**, Durand D, and Torriani FJ: Pathogenesis of CMV immune recovery uveitis. Conf Retroviruses Opportunistic Infect. 2001;Feb 4-8;8:52 (abstract no. 31).
280. Mueller AJ, **Freeman W**, Folberg R, Schaller U, Kampik A, for the Munich/San Diego/San Diego/Iowa City Collaboration (MUSIC). The Munich/San Diego/Iowa City Collaboration (MUSIC): Design, characteristics of the collective and initial results. MuSIC-Report I. Ophthalmologe. 2002;99(3):193-199.
281. Mueller A J, **Freeman WR**, Schaller U, Kampik A, Folberg R: For The Munich/San Diego/Iowa City Collaboration (MuSIC). Complex Microcirculation Patterns Detected by Confocal Indocyanine Green Angiography Predict Time to Growth of Small Choroidal Melanocytic Tumors. MuSIC-Report II. Ophthalmology. 2002;109(12):2207-14.
282. Cheng L, Hostetler K, Chaidhawangul S, Gardner MF, Beadle JR, Bergeron-Lynn G, **Freeman WR**: Treatment or Prevention of Herpes Simplex Virus Retinitis with Intravitreally Injectable Crystalline 1-*O*-Hexadecylpropanediol-3-Phospho-Ganciclovir. Invest Ophthalmol Vis Sci. 2002;43(2):515-21.
283. Cheng L, Azen SP, El-Bradey MH, Toyoguchi M, Chaidhawangul S, Rivero ME, Scholz BM, **Freeman WR**, The Vitrectomy for Macular Hole Study Group: Effects of Preoperative and Postoperative Epiretinal Membranes on Macular Hole Closure and Visual Restoration. Ophthalmology. 2002;109:1514-1520.

284. Arevalo JF, **Freeman WR**, Gomez L: Retina and Vitreous Pathology After Laser-assisted In Situ Keratomileusis (LASIK): Is there a Cause-effect Relationship? [Editorial Reply] LASIK and Vitreous Pathology after LASIK. Ophthalmology. 2002;109(4):624-625.
285. Garcia RC, Rivero ME, Hagedorn M, McDermott C, Bergeron-Lynn G, Appelt K, **Freeman WR**: Efficacy of Prinomastat (AG3340), a Matrix Metalloproteinase Inhibitor in Treatment of Retinal Neovascularization. Curr Eye Res. 2002;24(1):33-38.
286. Goldberg D, **Freeman WR**: Uveitic Angle Closure Glaucoma in a Patient with inactive cytomegalovirus retinitis and immune recovery uveitis. Ophthalmic Surg Lasers. 2002;33(5):421-425.
287. Song MK, Schrier RD, Smith IL, Plummer DJ, **Freeman WR**: Paradoxical Activity of CMV Retinitis in Patients Receiving Highly Active Antiretroviral Therapy. Retina. 2002;22(3):262-267.
288. Jabs DA, Van Natta ML, Kempen JH, Pavan PR, Lim J, Murphy R, Hubbard L, **Freeman WR**: The Studies of Ocular Complications of AIDS Research Group: Characteristics of patients with cytomegalovirus retinitis in the era of highly active antiretroviral therapy (HAART). Am J Ophthalmol. 2002;133(1):48-61.
- s
289. Davidson M, Min Y, Holbrook JT, Quinn T, Murphy R, Welch W, Jabs DA, Meinert CL...**Freeman WR**...for the Studies of Ocular Complications of AIDS Research Group (SOCA). Influence of filgrastim (Granulocyte Colony-Stimulating Factor) on Human Immunodeficiency Virus Type 1 RNA in Patients with CMV Retinitis. [Concise Communication] (MACRT) JID. 2002;186:1013-1018.
290. Jabs DA, Gilpin AMK, Min Y, Erice A, Kempen JH, Quinn TC...**Freeman WR**...for the Studies of Ocular Complications of AIDS Research Group: HIV and CMV viral load and clinical outcomes in patients with AIDS and CMV retinitis: Monoclonal Antibody Cytomegalovirus Retinitis Trial. AIDS. 2002;16(16):877-87.
291. El-Bradey M, **Freeman WR**...for Infectious Retinitis. Duane's Clinical Ophthalmology, Tasman WR, Jaeger E, Editors. Lippincott. Philadelphia 2002.
292. El-Bradey, M, Bartsch, DU, **Freeman WR**. Evaluation of Metalloproteinase Inhibitors in the Treatment of Intraocular Angiogenesis and Proliferation. Doctoral thesis published; Faculty of Medicine, Tanta University, Egypt. 2002.
293. Mueller AJ, Maniotis AJ, **Freeman WR**, Bartsch DU, Schaller UC, Bergeron-Lynn G, Cheng L, Taskintuna I, Chen X, Kan-Mitchell J, Folberg R: An Orthotopic Model for Human Uveal Melanoma in SCID Mice. Microvasc Res. 2002;64(2):207-13.
294. Arevalo JF, **Freeman WR**, Gomez L: Retina and Vitreous Pathology After Laser-assisted In Situ Keratomileusis (LASIK): Is there a Cause-effect Relationship? Ophthalmology. [Author Reply] 2002;109(4):624-625.

295. Ozerdem U, Mach-Hofacre B, Varki N, Folberg R, Mueller AJ, Ochabski R, Pham T, Appelt K, **Freeman WR**. The Effect of Prinomastat (AG3340), a Synthetic Inhibitor of Matrix Metallo- proteinases, on Uveal Melanoma Rabbit Model. Curr Eye Res. 2002;24(2);86-91.
296. Rodanant N, Friberg TR, Cheng L, Aurora A, Bartsch DU, Toyoguchi M, Corbin P, El-Bradey M, **Freeman WR**: Predictors of Drusen Reduction after Subthreshold Infrared (810-nm) Diode Laser Macular Grid Photocoagulation for Nonexudative Age-related Macular Degeneration. Am J Ophthalmol, 2002;134:577-585.
297. Seaberg R, Freeman WR, Goldbaum M, Manecke GR: Permanent Postoperative Vision Loss Associated with Expansion of Intraocular Gas in the Presence of a Nitrous Oxide-Containing Anesthetic. Anesthesiology. 2002;97(5):1309-10.
298. Haritoglou C, Neubauer AS, Herzum H, Freeman WR, Mueller AJ: Inter- observer and intraobserver variability of measurements of uveal melanomas using standardized echography. Br J Ophthalmol. 2002;86(12):1390-4.
299. Cheng L, Chaidhawangul S, Wong-Staal F, Gilbert J, Poeschla E, Toyoguchi M, El-Bradey MH, Bergeron-Lynn G, Soules KA, **Freeman WR**: Human immunodeficiency virus type 2 (HIV-2) vector-mediated *in vivo* gene transfer into adult rabbit retina. Curr Eye Res. 2002;24(3):196-201.
300. Schaller UC, Mueller AJ, Bartsch DU, Schaumberger M, **Freeman WR**, Kampik A: Correlation between ICG angiography verified networks in uveal melanomas and rate of tumor regression after brachytherapy. Ophthalmologe. 2002;99(7):545-548.
301. Bartsch DU, Zhu L, Sun PC, Fainman S, **Freeman WR**: Retinal Imaging with low-cost micromachined membrane deformable mirror. J. Biomed. Opt. 2002;7(3):451-6.
302. Rodanant N, Thompson C, **Freeman WR**: A Compact Inexpensive Face Down Positioning Device. Retina. 2002;22(2):242-4.
303. Davidson M, Min Y, Holbrook JT, Van Natta ML, Murphy R, Jabs DA, Welch W, and Meinert CL, ...Freeman W for the Studies of Ocular Complications of AIDS Research Group: Use of filgrastim (G-CSF) as adjuvant therapy in patients with AIDS-related cytomegalovirus retinitis. AIDS. 2002;16:757-765.
304. Bartsch D; Elmusharaf A; El-Bradey M; **Freeman WR**: Oral Fluorescein Angiography in Patients with Choroidal Neovascularization Macular Degeneration. Ophthalmic Surg Lasers. [Clinical Science] 2003;34(1):17-24.
305. Holbrook JT, Jabs DA, Davis MD, Friedberg D, Lewis RA, Weinberg D, and **Freeman WR** for the Studies of Ocular Complications of AIDS Research Group: Visual loss in patients with CMV Retinitis and AIDS in the pre-HAART era. (FGCRT, CRRT, MACRT) Arch Ophthalmol. 2003;121(1)99-107.

306. Blanchard JN, Powell HC, **Freeman WR**, Letendre S, Blanchard D, Shimizu C and Bruns JC: Recurrent Kawasaki disease-like syndrome in an AIDS patient. [Brief Report] Clin Infect Dis. 2003;36(1):105-11.
307. Bartsch DU, **Freeman WR**: Scanning Laser Ophthalmoscopy. Retinal and Optic Nerve Imaging. Chapter 6. Part III. Clinical Assessment: 3-Dimensional Imaging Techniques. Ciulla Regillo and Harris. Philadelphia (PA): Lippincott Williams & Wilkins. 2003. P.59-76.
308. Kempen JH, **Freeman WR** ...for the Studies of Ocular Complications of AIDS Research Group: The Effect of Cytomegalovirus Retinitis on the Quality of Life of Patients with AIDS in the Era of Highly Active Antiretroviral Therapy(HAART). (LSOCA) Ophthalmology. 2003;110:987-995.
309. Goldberg DE, Wang H, Azen SP, **Freeman WR**: Long Term Visual Outcome of Patients with Cytomegalovirus Retinitis Treated with Highly Active Antiretroviral Therapy (HAART). Br J Ophthalmol. 2003;87:0-3.
310. Rodanant N, Bartsch D-U, Bessho K and **Freeman WR**: Autofluorescence Image in Ocular Albinism. Retina. 2003;23(2):265-266.
311. Cheng L, Hostetler KY, Toyoguchi M, Beadle JR, Rodanant N, Gardner MF, Aldern KA, Bergeron-Lynn G and **Freeman WR**: Ganciclovir Release Rates in Vitreous from Different Formulations of 1-0-Hexadecylpropanediol-3-Phospho-Ganciclovir. Journal of Ocular Pharmacol and Therapeutics. J. Ocul. Pharmacol Ther. 2003. Apr; 9(2):161-9.
312. Laut S, Bartsch D-U, **Freeman WR**: Experimental approach to the characterization of a micr-machined continuous-membrane deformable mirror. Proceedings of the SPIE 48<sup>th</sup> annual meeting-“Optical Science and Technology” for the conference on “Astronomical Adaptive Optics Systems and Applications.” August 3-8, 2003, San Diego, CA.
313. Shane JS, Martin DF...**Freeman WR** et al. Endothalmitis-Ganciclovir Implant Study Group: Endothalmitis following Ganciclovir Implant in Patients with AIDS and Cytomegalovirus Retinitis. Am J Ophthalmol. 2003;136:649-654.
314. Song MK, Azen S, Buley A, Torriani F, Cheng L, Chaidhawangul S, Ozerdem U, Scholz B **Freeman WR**: Effect of Anti-CMV Therapy on the Incidence of Immune Recovery Uveitis in Aids Patients with Healed CMV Retinitis. Am J Ophthalmol. 2003;136:696-702.
315. Bartsch DU, Aurora A, Rodanant N, Cheng L, **Freeman WR**: Volumetric Analysis of Macular Edema by Scanning Laser Tomography in Immune Recovery Uveitis. Arch of Ophthalmol. 2003;121:1246-1251.
316. Mueller A, Folberg R, **Freeman WR**: Icg and time to growth of tumors. Author reply. Ophthalmology. 2003 Oct;110(10):2068-9.

317. Galpin AM, Holbrook JT .....for the Studies of Ocular Complications Research Group (**Freeman, WR**); Data and safety monitoring board deliberations resulting in the early termination of the Monoclonal Antibody Cytomegalovirus Retinitis Trial. *Controlled Clinical Trials*. 2003;24:92-98.
318. Holbrook JT, Jabsw Da, Lewis RA, **Freeman WR**,...for the Studies of Ocular Complications of AIDS Research Group; Visual loss in patients with cytomegalovirus retinitis and AIDS before widespread availability of highly active antiretroviral therapy. *Arch Ophthalmol*. 2003;121:99-107.
319. Kempen JH, Maartin BK, Wu A, Barron, B, thorne JE, Jabs DA... Freeman WR.. and the Studies of Ocular Complications of AIDS research Group: The effect of cytomegalovirus retinitis on the quality of life of patients with acquired immune deficiency s yndrome in the era of highly active anti-retroviral therapy. *Ophthalmology*. 2003;110:987-995.
320. Kosobucki BR, Goldberg DE, Bessho K, Koh HJ, Rodanant N, LaBree L, Cheng L, Schrier RD, Azen SP, **Freeman WR**: Valganciclovir Therapy for Immune Recovery Uveitis Complicated by Macular Edema. *Am J Ophthalmol*. 2004;137(4):636-8.
321. **Freeman WR**, McCutchan JA, Arevalo J F, Wolfson T, Marcotte DT, Heaton RK, Grant I, HNRC Group. The Relationship between AIDS Retinal Cotton Wool Spots and Neuropsychological Impairment in HIV-Positive Individuals in the Pre-HAART Era. *Ocul Immunol Inflamm*. 2004;12(1):25-33.
322. Dunn JP, Van Natta M, Foster G, Kupperman BD, Martin DF, Zang A, Jabs DA and **Freeman WR** for the Studies of Ocular Complications of AIDS Research Group. Complications of Ganciclovir implant surgery in patients with cytomegalovirus retinitis: The Ganciclovir Cidofovir Cytomegalovirus Retinitis Trial. *Retina*. 2004; 24:41-50.
323. El-Bradey M, Cheng L, Song MK, O R, and Freeman WR: Long Term Results of Treatment of Macular Complications in Eyes with Immune Recovery Vitritis using a Graded Treatment Paradigm. *Retina*. 2004;24(3):376-82.
324. Koh HJ, Bessho K, Cheng L, Bartsch DU, Jones TR, Bergeron-Lynn G, Freeman WR: Inhibition of Choroidal Neovascularization in Rats by the Urokinase-derived Peptide A6. *Invest Ophthalmol Vis Sci*. 2004;45(2):635-40.
325. El bradey M, Cheng L, Bartsch DU, Appelt K, Rodanant N, Bergeron-Lynn G, Freeman WR: Preventive versus Treatment Effect of AG3340, A Potent Matrix Metalloproteinase Inhibitor in a Rat Model of Choroidal Neovascularization. *J. Ocular Pharm & Therap*. 2004;20(3):217-36.
326. Freeman WR, Rickman LS: Medical Retina: Retinal disease in the HIV-Infected Patient. *Retina*, 4<sup>th</sup> Ed., S. J. Ryan Editor. Mosby St. Louis, MO. 2004.



327. Freeman WR: Retinal Detachment Repair; Outlook for the future in Kreisig Editor, Retinal Detachment. Springer Verlag, Munich 2004.
328. Arevalo, JF and Freeman WR: Management of retinal detachment in patients with AIDS. In ocular Manifestations of AIDS in the New Millenium; Text and Atlas. Arevalo, FJ, Editor, Highlights of Ophthalmology, El Dorado, Panama, 2004.
329. Arevalo, FJ and Freeman WR: Retino-choroidal biopsies in patients with AIDS. In ocular Manifestations of AIDS in the New Millenium; Text and Atlas. Arevalo, FJ, Editor, Highlights of Ophthalmology, El Dorado, Panama, 2004.
330. Arevalo FJ and Freeman WR: Ganciclovir implant for the management of CMV retinitis. In ocular Manifestations of AIDS in the New Millenium; Text and Atlas. Arevalo, FJ, Editor. Highlights of Ophthalmology, El Dorado, Panama, 2004.
331. Marshall BC, Jacobson MA, Adler SP in collaboration with the Studies of Ocular Complications of AIDS Research Group, Freeman WR: Avidity of antibodies to cytomegalovirus in HIV-seropositive patients with and without CMV retinitis. *Viral Immunol.* 2004;17:101-108.
332. Jacobson MA, Maecker HT, Orr PL, D'Amico R, Van Natta M, Li XD, Pollarde RB, Bredt BM...Freeman WR... for the Adult AIDS clinical Trials Group and Studies of Ocular Complications of AIDS Research Group: Results of a CMV-specific CD8+/INF y+ cytokine flow cytometry assay correlate with clinical evidence of protective immunity of AIDS patients with CMV retinitis. *J. Infe. Dis.* 2004;189:1362-73.
333. Cheng L, Hostetler K, Koh HJ, Lee J, Beadle JR, Kenichiro B, Toyoguchi M, Aldern K, Freeman WR: Characterization of a Novel Intraocular Drug Delivery System Using Crystalline Lipid Antiviral and Antiproliferative Prodrugs. *Invest Ophthalmol Vis Sci.* 2004;45:4138-4144.
334. Freeman WR, El-Bradey M, Plummer DJ: Scanning Laser Entoptic Perimetry for the Detection of Age-Related Macular Degeneration. *Archives of Ophthalmology.* 2004 122:1647-1651.
335. Cheng L, Toyoguchi M, Looney DJ, Freeman WR: Efficient Gene Transfer to Retinal Pigment Epithelium Cells with Long term Expression. *Retina.* 2005;25:193-201.
336. Bartsch DU, Schmit-erfurth U, and Freeman WR: New imaging modalities in Age Related Macular Degeneration. In Alfaro Edotor; *Age Related Macular Degeneration: a Comprehensive Textbook.* Lippincott, Philadelphia, 2005.
337. El-Bradey M; Cheng L; Bartsch D; Niessman M; El-Musharaf A; Freeman WR: The Effect of Prinomastat (AG3340), a Potent Inhibitor of Matrix Metalloproteinases, on a New Animal Model of Epiretinal Membrane. *Retina.* 2004; 24(5):783-9.

338. Goldberg DE, Smithen LM, Angelilli A, R, Freeman WR. HIV associated retinopathy in the HAART Era. *Retina* 2005; 25:633-49.

339. Koh HJ, Cheng L, Bessho K, Jones TR, Davidson MC, Freeman WR: Intraocular Properties of Urokinase-derived anti-angiogenic A6 peptide in rabbits. *J. Ocular Pharm & Therap* 2004;20(5):439-49.

340. Bartsch DU, Gong X, Ly, C and Freeman, WR: Interpretation Artifacts and New Algorithm. *Medical Imaging 2004: Image Processing*, edited by J. Michael Fitzpatrick, Milan Sonka, Proceedings of SPIE Vol. 5370 (SPIE, Bellingham, WA, 2004).

341. Tabandeh H, Smiddy W, Sullivan P, Monshizadeh R, Cheng L, Freeman WR: Characteristics and Outcomes of Choroidal Neovascularization Occuring After Macular Hole Surgery. *Retina*. *Retina*. 2004;24(5):714-20.

342. Jabs DA, Van Natta ML, Thorne JE, Weinberg DV, Meredith TA, Kuppermann BD, Sepkowitz K, Li HK... (Freeman WR) for the Studies of Ocular Complications of AIDS Research Group: Course of cytomegalovirus retinitis in the era of highly active antiretroviral therapy: 1. Retinitis progression. *Ophthalmology* 2004; 111:2224-31

343. Jabs DA, Van Natta ML, Thorne JE, Weinberg DV, Meredith TA, Kuppermann BD, Sepkowitz K, Li HK... (Freeman WR), for the Studies of Ocular Complications of AIDS Research Group: Course of cytomegalovirus retinitis in the era of highly active antiretroviral therapy: 2. Second eye involvement and retinal detachment. *Ophthalmology* 2004;111:2232-2239.

344. Freeman WR. Valganciclovir therapy for immune recovery uveitis complicated by macular edema. Editorial Reply. *Am J Ophthalmol*. 2005;139:216-217.

345. Weinberg DV, Holbrook JT, Hubbard, LD.... Freeman WR.....SOCA research Group. Clinician versus Reading Center Assessment of Cytomegalovirus Retinitis Lesion Size. *Ophthalmology*. 2005;112:559-566.

346. Kozak I, Bartsch D-U, Cheng L, Kosobuki BR, Freeman WR. Objective analysis of vision loss in HIV-positive patients in the HAART era using OCT. *Am J Ophthalmol*. 2005;139(2):295-30.

347. Jabs DA, Holbrook JT, Van Natta, ML.....Murphy RL, Freeman WR..... and the Studies of Ocular Complications of AIDS Research Group; Risk Factors for Mortality in Patients with AIDS in the Era of Highly Active Antiretroviral therapy. *Ophthalmology*. 2005;112:771-779.

348. Lu S, Cheng L, Hostetler KY, Koh HJ, Davidson MC and Freeman WR: Intraocular properties of 1-O-hexadecyloxypropyl-cyclic-cidofovir in guinea pigs. *Journal of Ocular Pharmacology and Therapeutics*. 2005;21:205-209.

349. Bartsch DU, El-Baradi M, El-Musharaf A, Freeman WR: Improved Visualization of Choroidal Neovascularization by Scanning Laser Ophthalmoscope Using Image Averaging. *British Journal of Ophthalmology*. 2005;89:1026-1030.
350. Bessho K, Rodanant N, Bartsch D-U, Cheng L, Freeman WR: The Effect of Subthreshold infrared Laser Treatment for Drusen Regression on Macular Autofluorescence in Patients with Age Related Macular Degeneration. *Retina*. 2005;25:981- 988.
351. Freeman WR: Control of Data, Authorship and Responsibility for Clinical Trials Publications. Editorial. *Ophthalmology*. 2005;112:1485-1486.
352. Morrison VL, LaBree LD, Azen SP, Goldberg DE, Freeman WR: Results of Silicone Oil Removal in Patients with Cytomegalovirus Retinitis Related Retinal Detachments. *American Journal of Ophthalmology*. 2005;140:786-793.
353. Kozak, IK, Cheng LC and Freeman WR: Lidocaine Gel Anesthesia for Intravitreal Drug Administration. *Retina* 2005;25; 994-998.
354. Semba RD, Martin BK, Kempen JH, Thorne JE, Wu AW... Freeman WR....and the Ocular Complications of AIDS Research Group. The impact of anemia on energy and physical functioning in individuals with AIDS. *Arch Intern Med*. 2005;24 165(19):2229-2236.
355. Freeman WR: Diagnostic and Therapeutic Challenges; Choroidal Infiltrates. *Retina*. 2006;26:96-101.
356. Schrier RD, Song MK, Smith I, Karavellas MP, Torriani FJ, Garcia CR, Freeman WR: Intraocular Viral and Immune Pathogenesis of Immune Recovery Uveitis in Patients with healed Cytomegalovirus Retinitis. *Retina*. 2006;26:165-169.
357. Koh HJ, Freeman WR, Azen SP, Flaxel CJ, LaBree LD, Wills M, Jones TR: Effect of a Novel Octapeptide Urokinase Fragment, Å6, on Experimental Choroidal Neovascularization in the Monkey. *Retina*. 2006;26:202-209.
358. Kempen JH, Min Y-I, Freeman WR, Holland GN, Friedberg DN, Dieterich DT, Jabs DA for the Studies of Ocular Complications of AIDS Research Group. Risk of Immune Recovery Uveitis in Patients with AIDS and Cytomegalovirus Retinitis. *Ophthalmology*. 2006;113:684-94.
359. Wohl DA, Kendall MA, Owens S, Holland G, Nokta M Spector SA, Schrier R, Fiscus S Meinert K, Davis M, Van Natta M, Jacobson MA, Curriet JS, Squires K, Alston-Smith B, Andersen J, Freeman WR, Higgins WR, Torriani FJ for the ACTG 379 Study Team: The Safety of Discontinuation of Maintenance Therapy for Cytomegalovirus (CMV) Retinitis and Incidence of Immune Recovery Uveitis Following Potent Antiretroviral Therapy. *HIV Clin Trials*. 2005;6(3):136-46.

360. Friberg, TR, Musch DC, Lim JI, Morse L, Freeman WR, Sinclair S and the PTAMD study Group: Prophylactic Treatment of Age Related Macular Degeneration Report Number 1: 810-Nanometer Laser to Eyes with Drusen. Unilaterally Eligible Patients. Ophthalmology. 2006;622-32.
361. Kosobuki BR, Lowder CY and Freeman WR: Retinal Imaging in CMV Retinitis.; In Retinal Imaging, Kaiser and Lowder, Editors, Elsevir Press, Philadelphia. Pgs 413-419. 2006.
362. Kozak I, Bartsch DU, Cheng L, Freeman WR: In vivo histology of cotton wool spots using high resolution optical coherence tomography. American Journal of Ophthalmology. 2006;141:748-750.
363. Kozak I, Freeman WR: Non-progressive extrafoveal retinal hole after foveal epiretinal membrane removal. American Journal of Ophthalmology. 2006;141:769-771.
364. Kozak I, LaBree L, Azen SP, Cheng L, Regan NL and Freeman WR: Long term study of intraocular pressure changes in patients with human immunodeficiency virus treated with highly active anti-retroviral therapy. Ophthalmology. 2006; 113:451-455.
365. Kayikcioglu OR, Falkenstein I, Cheng LC, Kozak I MD,<sup>1</sup>La Bree L, Azen SP PhD<sup>3</sup>, Wong-Staal F, Paoni NF PhD<sup>2</sup>, Freeman WR. Therapy with Ribozyme to the Proliferating Cell Nuclear Antigen (PCNA-Rz) and 5-Fluoruracil (5FU) of Experimental Choroidal Neovascularization in Rats. Journal of Ocular Pharmacology and Therapeutics. 2006; 22:1-9.
366. El-Bradey M, Plummer D, Freeman WR, Uwe-Bartsch D: Scanning Laser Entoptic Perimetry for the Detection of Diabetic Retinopathy. British Journal of Ophthalmology. 2006; 90:17-19.
367. Kosobucki BR, Freeman WR, Cheng, L: Photographic Estimation of the Duration of High Dose Intravitreal Triamcinolone in the Vitrectomized Eye Ophthalmology. British Journal of Ophthalmology. 2006; 90:705-708.
368. Kayikcioglu OR, Cheng L, Kozak I, Bergeron-Lynn G, Wong' Staal F, Paoni NF and Freeman WR: Toxicity of Subretinal ribozyme to the proliferating cell nuclear antigen and 5-fluorouracil in rat eyes. Current Eye Research. 2006; 31:435-40.
369. Kozak IK, Dean A, Clark TM, Falkenstein I and Freeman WR: Pre-filled syringe needles versus standard removable needles for intravitreal injection. Retina. 2006;26:679-683.
370. Thorne JE, Jabs DA, Kenpen JH, Holbrook JT, Nichols C, Meinert CL...Freeman WR and the SOCA Research Group: Incidence of and Risk Factors for Visual Acuity Loss among Patients with AIDS and Cytomegalovirus Retinitis in the Era of Highly Active Antiretroviral Therapy. Ophthalmology. 2006;113:1432-1440.

371. Thorne JE, Jabs DA, Kempen JH, Holbrook JT, Nichols C, Meinert CL... Freeman WR...and the Studies of Ocular Complications of AIDS (SOCA) Research Group: Causes of visual acuity loss among patients with AIDS and CMV in the era of HAART. Ophthalmology. 2006;113:1441-1445.
372. Morrison VL, Koh HJ, Cheng L, Bessho K, Davidson MC, Freeman WR: Intravitreal toxicity of the kenalog vehicle (benzyl alcohol) in rabbits. Retina. 2006;26:339-44.
373. Kozak, IK, Freeman WR: Phase I clinical trial results of verteporfin enhanced feeder vessel therapy in subfoveal choroidal neovascularization in age related macular degeneration. British Journal of Ophthalmology. 2006;90;1152-56.
374. Kozak I, Cheng L, Mendez T, Davidson MC and Freeman WR: Evaluation of the toxicity of subretinal triamcinolone acetonide in the rabbit. Retina. 2006;26:811-817.
375. Kayikcioglu OR, Mendez T, Morrison V and Freeman WR: A new technique for the subretinal injection of small volumes by using a modified viscous fluid injector system. Retina. 2006;26:1089-1090.
376. Falkenstein I, Kozak I, Kayikcioglu O, Cheng L, Bartsch SPO, LaBree LD and Freeman WR: Assessment of Retinal Function in HIV patients without Infectious Retinitis by Multifocal Electroretinogram and Automated Perimetry. Retina. 2006;26:928-34.
377. Heier JS, Boyer DS, Cuilla TA, Ferrone PJ, Jumper JM...Freeman WR: Focus Study Group: Ranibizumab Combined with Verteporfin Photodynamic Therapy in Neovascular Age-Related Macular Degeneration. Arch Ophthalmol. 2006;124:1532-1542.
378. Brown DM, Thorne JE, Foster GL, Duncan JL, Brune LM, Mūnana A, Meinert CL, Jabs DA...Freeman WR...and the Studies of Ocular Complications of AIDS Research Group: Factors affecting attrition of patients with AIDS. AIDS Care. 2006;18(7):821-829.
379. Kozak I, Cheng LC, Falkenstein I, Silva GA, Yu DX and Freeman WR: The effect of recombinant human hyaluronidase on dexamethasone penetration into the posterior segment of the eye after sub-Tenon's injection. Journal of Ocular Pharmacology and Therapeutics. 2006;22:362-369.
380. Freeman WR, Falkenstein I: Avastin and new treatments for AMD; Where are we? Retina. 2006;26:853-858.
381. Rosenfeld PH, Brown DM, Heier JS, Boyer DS, Kaiser PK, Chung CY, Kim RY...Freeman WR and the MARINA study group. Ranibizumab for neovascular age-related macular degeneration. New England Journal of Medicine. 2006;355:1419-31.
382. Sinclair E, Tan QX...Freeman WR...Studies of Ocular Complications of AIDS Resaearch Group. Protective immunity to cytomegalovirus (CMV) retinitis in AIDS is associated with CMV-spsecific T cells that express interferon-gamma and interleukiin-2 and

have a CD8+ cellular maturational phenotype. Journal of Infectious Diseases. 2006;194:1537-46.

383. Morrison VM, Kozak I, Cheng LC, Freeman WR: Intravitreal Triamcinolone Acetonide for the Treatment of Immune Recovery Uveitis Macular Edema. Ophthalmology. 2007;114:334-339.

384. Kozak I, Cheng LC, Falkenstein I, Tammewar AM and Freeman WR: Evaluation of subretinal triamcinolone acetonide in patients with exudative age-related macular degeneration. Journal of Ocular Pharmacology and Therapeutics. 2007;23:46-53.

385. Boyer DS, Antoszyk AN, Awh CC, Bhistitkul RB, Shapiro H, Acharya NR...Freeman WR...and the MARINA Study Group: Subgroup analysis of the MARINA study of ranibizumab in neovascular age-related macular degeneration. Ophthalmology. 2007;114:246-52.

386. Jabs DA, Van Natta ML, Holbrook JT, Kempen JH, Meinert CL, Davis MD,...Freeman WR and the Studies of the Ocular Complications of AIDS Research Group: The Longitudinal Study of the Ocular Complications of AIDS: 2. Ocular examination results at enrollment. Ophthalmology. 2007;114:787-93.

387. Bessho K, Schrier RD, Freeman WR: Immune Recovery Uveitis in a CMV Retinitis Patient Without HIV Infection. Retinal Cases and Brief Reports. 2007;1:52-53.

388. Jabs DA, Van Natta ML, Holbrook JT, Kempen JH, Meinert CL, Davis MD,...Freeman WR and the Studies of the Ocular Complications of AIDS Research Group: The Longitudinal Study of the Ocular Complications of AIDS: 1. Ocular diagnoses at enrollment. Ophthalmology. 2007;114:780-6.

389. Thorne JE, Holbrook JT, Jabs DA, Kempen JH, Nichols C, Meinert CL,...Freeman WR and the Ocular Complications of AIDS Research Group: The effect of cytomegalovirus (CMV) retinitis on the risk of visual acuity loss among patients with AIDS. Ophthalmology. 2007;114:591-98.

390. Shah KH, Holland GN, Yu F, Van Natta M, Nusinowitz S....Freeman WR: and the Studies of Ocular Complications of AIDS (SOCA) Research Group: Contrast sensitivity and color vision in HIV-infected individuals without infectious retinopathy. Am J Ophthalmol. 2006;142:284-92.

391. Morrison, VL, and Freeman, WR: Endophthalmitis and Intravitreal Triamcinolone. Letter to the Editor. Retina. 2006;26:1100-1101.

392. Kozak I, Bartsch D-U, Cheng L, and Freeman WR: Hyper-reflective sign in resolved cotton wool spots using high resolution optical coherence tomography and OCT ophthalmoscope. Ophthalmology. 2007;114:537-43.

393. Kaiser PC, Blodi RA, Shapiro H, Acharya NR and the MARINA study group (Freeman WR): Angiographic and Optical Coherence Tomographic Results of the MARINA Study of Ranibizumab in Neovascular Age Related Macular Degeneration. Ophthalmology. 2007;114:1868-1875.
394. Falkenstein I, Cheng L, Morrison VL, Kozak I, Tammewar AM and Freeman WR: Standardized Visual Acuity Results of Primary Avastin versus Secondary Avastin for Choroidal Neovascularization in Age-Related Macular Degeneration. Retina. 2007;27:701-706.
395. Koh, HJ, Cheng, L, Kosobucki B and Freeman WR: Prophylactic Intraoperative 360° Laser Retinopexy for Prevention of Retinal Detachment. Retina. 2007;744-749.
396. Tammewar AM, Cheng LC, Hostetler KY, Flakenstein I, Beadle JR, Barron EC, Kozak I and Freeman WR: Intraocular Properties Of An Alkoxyalkyl Derivative Of Cyclic 9-(S)-(3-Hydroxyl-2-Phosphonomehoxypropyl) Adenine, an Intravitreally Injectable Anti-HCMV Drug in Rabbit and Guinea Pig. Journal of Ocular Pharmacology and Therapeutics. 2007;25:433-444.
397. Tammewar AM, Aurora A, Freeman WR: Newer Treatments of AMD: Dilemmas and Decisions. Delhi Journal of Ophthalmology. 2007;12:47-56.
398. Kozak, I, Silva G, Freeman WR: Testing of Intraocular Drugs for Clinical Use. Investigative Ophthalmology and Visual Science. 2007;48:4861-4863.
399. Falkenstein I, Cheng LC, and Freeman WR: Changes of Intraocular Pressure after Intravitreal Injection of Bevacizumab (Avastin). Retina. 2007;27:1044-1047.
400. Lee J, Freeman WR, Azen SP, Chung EJ and Koh, HJ: Prospective Randomized Clinical Trial of Intravitreal Triamcinolone for Neovascular Age Related Macular Degeneration: One Year Result. Retina. 2007;27:1205-1213.
401. Bessho K, Gomez L, Bartsch DU, Chayet AS, Freeman WR: Comparison of laser ray-tracing and skiascopic ocular wavefront sensing devices for enhanced retinal imaging. Eye. 2007;10:1-7.
402. Kozak I, Bartsch, D-U, Cheng, LC, McCutchan A, Weinreb RN and Freeman, WR: Scanning laser polarimetry demonstrates retinal nerve fiber layer damage in human immunodeficiency virus positive patients without infectious retinitis. Retina. 2007;27:1267-1273.
403. Kozak I, Robbins S, Freeman WR: Bilateral papillitis associated with bilateral anterior uveitis in a child. Journal of Pediatric Ophthalmology and Strabismus. 2007;44:374-376.

404. Chung EJ, Freeman WR and Koh HJ: Changes in multifocal electroretinograms after arterio-venous crossing sheathotomy for macular edema associated with branch retinal vein occlusion. *Retina*. 2008;28: 220-225.
405. Antoszyk AN, Tuomi L, Chung CY, Singh A; FOCUS Study Group (Freeman WR): Ranibizumab combined with verteporfin photodynamic therapy in neovascular age-related macular degeneration (FOCUS): year 2 results. *Am J Ophthalmol*. 2008;145(5):862-867.
406. Freeman WR, Van Natta ML, Jabs D, Sample PA, Sadun AA, Thorne J, Holland GN, Shah KH for the SOCA Research group. Vision Function in HIV Patients without Retinitis; Report of the Studies of Ocular Complications of AIDS Study Group. *American Journal of Ophthalmology*. 2008;145:453-464.
407. Kozak I, Morrison VL, Clark TM, Lee BR, Falkenstein I and Freeman WR: Discrepancy between fluorescein angiography and optical coherence tomography in detection of macular disease. *Retina*. 2008;28:538-544.
408. Kozak I, Freeman WR: Use of Coronal Simultaneous OCT/SLO to Demonstrate Cystoid Macular Edema Secondary to Extrafoveal Retinal Hole. *Retinal Cases and Brief Reports*. 2008;2:91-93.
409. Jabs DA, ...Freeman WR...For the Studies of Ocular Complications of AIDS Research Group: *AIDS and Ophthalmology*. *Arch Ophthalmology*. 2008;126:1143-1146.
410. Falkenstein I, Cochran DE, Azen SP, Dustin L, Tammewar A, Kozak I, Freeman WR: Comparison of Visual Acuity in Macular Degeneration Patients Measured with Snellen and Early Treatment Diabetic Retinopathy Study (ETDRS) Charts. *Ophthalmology*. 2008;115:319-23.
411. Jacobson MA, Tan QX, Girling V, Poon C, Van Natta, M, Jabs DA, Inokuma M, Maecker HT, ...Freeman WR...and the SOCA Research Group: Poor Predictive Value of Cytomegalovirus Specific T Cell Assays for the Development of CMV Retinitis in Patients with AIDS. *Clinical Infectious Diseases*. 2008;46:458-66.
412. Kozak I, Goldbaum MH, Sample PA, Hao J, Lee TW, Weinreb RN and Freeman WR: Machine learning classifiers are able to detect visual field defects in eyes of HIV subjects. *Transactions of the Am. Ophthalmol Soc*. 2007;105:111-120.
413. Nigam N, Hedaya J and Freeman WR: Non-responders to bevacizumab (Avastin) therapy of choroidal neovascular lesions. Letter to the Editor. *British Journal of Ophthalmology*. 2008:864-865.
414. Falkenstein IA, Cheng L, Morrison VL, Kozak I, Tammewar AM, Freeman WR: Comments on Standardized visual acuity results associated with primary versus secondary



bevacizumab (Avastin) treatment for choroidal neovascularization in age related macular degeneration. *Retina*. 2008;28(3):527-8.

415. Falkenstein IA, Cheng L, Wong-Staal F, Tammewar AM, Barron EC, Silva GA, Li QX, Yu D, Hysell M, Liu G, Ke N, Macdonald JE, Freeman WR: Toxicity and intraocular properties of a novel long- acting anti-proliferative and anti-angiogenic compound IMS 2186. *Current Eye Research*. 2008;33(7):599-609.

416. Tammewar AJ, Cheng LC, Kayikcioglu OR, Falkenstein IA, Kozak I, Goldbaum MH and Freeman WR: Comparison of 4 versus 20 mg Intravitreal Triamcinolone Acetonide Injections. *British Journal of Ophthalmology*. 2008;92(6):810-813.

417. Anglin EJ, Cheng L, Freeman WR, Sailor MJ: Porous silicon in drug delivery devices and materials. *Advanced Drug Delivery Reviews*. 2008;60(11):1266-77.

418. Cheng L, Anglin E, Cunin F, Kim D, Sailor MJ, Falkenstein I, Tammewar A, Freeman WR: Intravitreal properties of porous silicon photonic crystals: a potential self-reporting intraocular drug-delivery vehicle. *British Journal of Ophthalmology*. 2008;92(5):705-11.

419. Arevalo, JF, Sanchez, JG, Freeman WR and Hagemann, L: 25-gauge Transconjunctival Sutureless Vitrectomy for Vitreous and Retinal/Choroidal Biopsy. In: Chow, D and Patelli, P. Vitreoretinal Surgery, Williams and Wilkins, Philadelphia 2008.

420. Mojana F, Cheng L, Bartsch DU, Silva G, Kozak I, Nigam N and Freeman WR: The Role of Abnormal Vitreomacular Adhesion in Age-Related Macular Degeneration; Spectral OCT and Surgical Results. *American Journal of Ophthalmology*. 2008;146:218-227.

421. Edelhauser HJ, Boatright JH...Freeman WR...and Third ARVO Pfizer Research Working Group: Drug Delivery to Posterior Intraocular Tissues: Third Annual ARVO/Pfizer Ophthalmics Research Institute Conference. *Invest Ophthalmol Vis Sc*. 2008;49:4712-4720.

422. Chung EJ, Freeman WR, Azen SP, Lee H and Koh, HJ: Comparison of Combination Posterior Sub-Tenon triamcinolone and modified Grid Laser Treatment with Intravitreal Triamcinolone versus intravitreal Triamcinolone Treatment in Patients with diffuse diabetic macular edema. *Yonsei Medical Journal*. 2008;49:955-64.

423. Nigam N, Freeman WR: Interferon Induced Sarcoid Uveitis with Papillitis and Macular Edema. *Retina Cases and Brief Reports*. 2009;3:102-104.

424. Kozak I and Freeman WR: Discrepancy between Fluorescein Angiography and Optical Coherence Tomography in Detection of Macular Disease. Editorial Reply. *Retina*. 2009;29:121.

425. Pathak S, Tolentino R, Nguyen K, D'Amico, Barron E, Cheng L, Freeman WR, and Silva GA: Quantum Dot Labeling and Imaging of GFAP Intermediate Filaments and Gliosis in the

- Rat Neural Retina and Dissociated Astrocytes. *Journal of Nanoscience and Nanotechnology*. 2009;9:5047-5054.
426. Bessho K, Gomez ML, Bartsch DU, Cheng L, Koh HJ, Freeman WR: Ocular wavefront aberrations in patients with macular diseases. *Retina*. 2009;29:1356-63.
427. Falkenstein IR, Bartsch Du, Azen SP, Dustin L, Sadun AA and Freeman WR: Multifocal Electroretinogram in HIV positive patients with out Infectious Retinitis. *American Journal of Ophthalmology*. 2008;146:579-88.
428. Hedaya, J, Nigam N and Freeman WR: Scleral Buckling versus Primary Vitrectomy in Rhegmatogenous Retinal Detachment. Letter to the Editor. *Ophthalmology*. 2008;115:16345.
429. Hedaya J and Freeman WR: The effect of treatments given to patients before initiation of anti-vascular endothelial growth factor treatment. *Retina*. 2008;28:911-912.
430. Tammewar AM, Bartsch DU, Kozak I, Rosen R, Falkenstein I, Garcia P and Freeman WR: Imaging Vitreomacular Interface Abnormalities in the Coronal Plane Using Simultaneous Combined Scanning Laser and Optical Coherence Tomography. *British Journal of Ophthalmology*. 2009;93:366-372.
431. Oster S, Mojana F and Freeman WR: Visualization of Retinal Emboli with High Resolution Optical Coherence Tomography (OCT). *Archives of Ophthalmology*. 2009;127:218.
432. Mojana F, Freeman WR: The Role of Abnormal Vitreomacular Adhesion in Age-Related Macular Degeneration. Editorial Reply. *American Journal of Ophthalmology*. 2009;14:375-376.
433. Brar M, Bartsch DU, Nigam N, Mojana F, Gomez L, Cheng L, Hedaya J and Freeman WR: Color versus Gray scale display of images on High Resolution Spectral OCT. *British Journal of Ophthalmology*. 2009;93(5):597-602.
434. Cheng LC, Banker AS, Martin M, Kozak I and Freeman WR: Triamcinolone acetonide concentration of aqueous humor following decanted 20mg intravitreal injection. *Ophthalmology*. 2009;16:1356-1359.
435. Brar M, Kozak I, Cheng L, Bartsch DU, Yuson R, Nigam N, Oster S, Mojana F and Freeman WR: Correlation Between Spectral OCT and Fundus Autofluorescence at the Margins of Geographic Atrophy. *American Journal of Ophthalmology*. 2009;148:439-444.
436. Yuson RS, Nigam N, Mojana F, Brar M, Oster SF, Freeman WR: The use of Intraoperative ICG dye to assist in epiretinal membrane removal; a novel application of ICG surgical use. *Retina*. 2009;29:1367-1370.

437. Lee BR, Kozak I, Bartsch DU, Cheng L and Freeman WR: Comparison Of A Novel Confocal Scanning Laser algorithm With Optical Coherence Tomography In Measurement Of Macular Thickness and Volume. *Retina*. 2009;29:1328-1334.
438. Brar M, Kozak I, Freeman WR, Oster SF, Mojana F and Yuson RM: Vitreoretinal interface abnormalities in healed cytomegalovirus retinitis. *Retina*. 2010;30(8):1262-1266.
439. Gomez ML, Mojana F, Bartsch DU, Freeman WR: Imaging of long-term retinal damage after resolved cotton wool spots. *Ophthalmology*. 2009;116:2407-2414.
440. Friberg TR, Brennen PM, Freeman WR, Musch DC and the PTAMD Study Group: Prophylactic Treatment of Age-Related Macular Degeneration Report Number 2: 810-Nanometer Laser to Eyes with Drusen. Bilaterally Eligible Patients. *Ophthalmic Surg Lasers Imaging*. 2009;40:530-538.
441. Nigam N, Bartsch D-U, Mojana F, Kozak I, Tammewar A, Freeman WR: Spectral OCT for Imaging ERM, Retinal Edema and Vitreomacular Interface. *Retina*. 2010;30:246-253.
442. Cheng LC, Hostetler K, Valiaeva N, Tammewar AM, Falkenstein I, Beadle J, Aldern K and Freeman WR: Intravitreal crystalline drug delivery for intraocular proliferation diseases. *Investigative Ophthalmology*. 2010;51:474-481.
443. Multicenter Uveitis Steroid Treatment Trial Research Group, Kempen JH, Altaweel MM, Holbrook JT, Jabs DA, Sugar EA. The Multicenter Uveitis Steroid Treatment (MUST) Trial: Rationale, Design and Baseline Characteristics. *American Journal of Ophthalmology*. 2010;149:550-561.
444. Bressler NM, Chang TS, Suñer IJ, Fine JT, Dolan CM, Ward J, Ianchulev T; MARINA (Freeman WR) and ANCHOR Research Groups. Vision-related function after ranibizumab treatment by better- or worse-seeing eye: clinical trial results from MARINA and ANCHOR. *Ophthalmology*. 2010;117(4):747-56.
445. Mojana F, Kozak I, Cheng L, Bartsch D-U, Oster SF, Brar M, Yuson RM, Freeman WR: Observations by Spectral OCT/SLO: Imaging of the Vitreous. *American Journal of Ophthalmology*. 2010;149:641-650.
446. Shah AM, Oster S, Freeman WR: Viral Retinitis Following Intravitreal Triamcinolone Injection in Patients with Predisposing Medical Comorbidities. *American Journal of Ophthalmology*. 2010;149:433-40.
447. Holland GN, Kappel PJ, Van Natta ML, Palella FJ, Lyon AT, Shah KH, Pavan PR, Jabs DA, ...Freeman WR: (SOCA Research Group): Association between abnormal contrast sensitivity and mortality among people with acquired Immunodeficiency Syndrome. *American Journal of Ophthalmology*. 2010;149:807-816.

448. Kozak, I, Cheng LC, Rought S, Woelk C, Barron EC, Schrier RD, Corbeil J and Freeman WR: Characterization of cytokine gene expression associated with non-infectious HIV retinopathy in human autopsy eyes. *Retina*. 2010; epub ahead of print.
449. Maheshwary AS, Oster SF, Mojana F, Yuson RM, Cheng L, Freeman WR: The association between percent disruption of the photoreceptor inner segment/outer segment and visual acuity in diabetic macular edema. *American Journal of Ophthalmology*. 2010;150:63-67.
450. Oster SF, Mojana F, Brar M, Yuson R, Cheng L and Freeman WR: Disruption of the Photoreceptor Inner Segment/Outer Segment Layer on Spectral Domain Optical Coherence Tomography is a Predictor of Poor Visual Acuity in Patients with Epiretinal Membranes. *Retina*. 2010;30;713-718.
451. Oster SF, Mojana F, Bartsch DU, Goldbaum M, Freeman WR: Dynamics of the Macular Hole-Silicone Oil Tamponade Interface with Patient Positioning as Imaged by Spectral Domain Optical Coherence Tomography. *Retina*. 2010;30:924-929.
452. Brar M, Yuson R, Kozak I, Mojane F, Cheng L, Bartsch DU, Oster SF and Freeman WR: Correlation between morphologic features on spectral domain optical coherence tomography and angiographic leakage patterns in macular edema. *Retina*. 2010;30:383-389.
453. Puhan MA, Van Natta ML, Palella FJ, Addessi A, Meinert C. Ocular Complications of AIDS Research Group (Freeman WR): Excess mortality in patients with AIDS in the era of highly active antiretroviral therapy: temporal changes and risk factors. *Clin Infect Dis*. 2010;15;51:947-945.
454. Jabs DA, Ahuja A, Van Natta M....SOCA Study Group (Freeman WR): Course of Cytomegalovirus Retinitis in the Era of Highly Active Antiretroviral Therapy; Five-year outcomes. *Ophthalmology*. 2010;117:2152-2161.
455. Chen Y, Zeng J, Zhao C, Wang K, Trood E,...Freeman WR, Kozak I and Zhang K: Assessing Susceptibility to Age-Related Macular Degeneration with Genetic Markers and Environmental Factors. *Archives of Ophthalmology*. 2011;129:344-351.
456. Brar M, Cheng L, Yuson RMS, Mojana F, Freeman WR and Gill PS: Ocular Safety Profile and Intraocular Pharmacokinetics of an Antagonist of EphB4/EphrinB2 Signalling. *British Journal of Ophthalmology*. 2010;94:1668-1673.
457. Oster SF, Mojana F and Freeman WR: Spectral-Domain Optical Coherence Tomography Imaging of Postoperative Scleral Buckles. *Retina*. 2011;31:1493-1499.
458. Kim J, Maheshwary AS, Bartsch D-U, Cheng L, Gomez ML, Hartmann K and Freeman, WR: The Microperimetry of Resolved Cotton Wool Spots in the Eyes of Patients with Hypertension and Diabetic. *Archives of Ophthalmology*. 2011;129:879-884.

459. Freeman SR, Kozak I, Cheng L, Bartsch DU, Mojana F, Nigam N, Brar M, Yuson R, Freeman WR: Optical coherence tomography-raster scanning and manual segmentation in determining drusen volume in age-related macular degeneration. *Retina*. 2010;30:431-435.
460. Cheng LC, Hostetler K, Beadle J, Hoh C and Freeman WR: Intraocular pharmacokinetics of a crystalline lipid prodrug, octadecyloxyethyl cyclic cidofovir (ODE-cCDV), for CMV retinitis. *Journal of Ocular Pharmacology and Therapeutics*. 2011;27:157-162.
461. Thorne JE, Van Natta, M, Jabs DA, Duncan JL, Srinivastava SK...Freeman WR...SOCA Research Group: Visual Field Loss in Patients with Cytomagalovirus Retinitis. *Ophthalmology*. 2011;118:895-901.
462. Kozak I, Oster, SF, Cortes MA, Dowell DM, Hartmann K, Kim JS, Freeman WR: Clinical evaluation and treatment accuracy in diabetic macular edema using navigated laser photocoagulator NAVILAS. *Ophthalmology*. 2011;118:119-1124.
463. Heier JS, Boyer D, Nguyen Q...(Freeman WR) (Clear-It Investigators) The 1-year Results of CLEAR-IT 2, a Phase 2 Study of Vascular Endothelial Growth Factor Trap-Eye Dosed as-needed after 12-week fixed Dosing. *Ophthalmology*. 2011;118:1098-1106.
464. Brown DM, Heier JS, Cuilla T,....(Freeman WR)-(Clear-It Investigators): Primary endpoint Results of a Phase II Study of Vascular Endothelial Growth Factor Trap-Eye in Wet Age-related Macular Degeneration. *Ophthalmology*. 2011;118:1089-1097.
465. Hartmann K, Bartsch D-U, Cheng L, Kim J, Gomez ML and Freeman WR: Scanning Laser Ophthalmoscope imaging stabilized Microperimetry in dry Age Related Macular Degeneration. *Retina*. 2011;31(7):1323-1331.
466. Falkenstein I, Cheng L, Jones TR, Freeman WR, Babson B, Kozak I, Tammewar AM, Barron EC: Intraocular Properties of a Repository Urokinase Receptor Antagonist A36 Peptide in Rabbits. *Current Eye Research*. 2010;35:742-750.
467. Mojana F, Brar M, Cheng LC, Bartsch D-U and Freeman WR: Long-term SD-OCT/SLO Imaging of Neuroretina and Retinal Pigment Epithelium after Sub-threshold Infrared Laser Treatment of Drusen. *Retina*. 2011;31:235-242.
468. Goldbaum MH, Kozak I, Hao J, Sample PA, Lee T, Grant I, Freeman WR: Freeman WR: Pattern recognition can detect subtle field defects in eyes of HIV individuals without retinitis: Graefe's Archive for Clinical and Experimental Ophthalmology. 2011;249:491-498.
469. Hou J, Li Y, Zhou Z, Valiaeva N, Hostetler K Freeman WR, Cheng LC: Antiproliferative property of Hexadecyloxypropyl 9-[2-(phosphonomethoxy) ethyl] guanine (HDP-PMEG) for unwanted ocular proliferation. *Molecular Vision*. 2011;17:627-637.

470. Wu EC, Andrew JS, Cheng L, Freeman WR, Pearson L, Sailor MJ: Real-time monitoring of sustained drug release using the optical properties of porous silicon photonic crystal particles. *Biomaterials*. 2011;32:1957-1966.
471. Andrew JS, Anglin EJ, Wu EC, Cheng LC, Freeman WR, Sailor M: Sustained Release of a Monoclonal Antibody from Electrochemically Prepared Mesoporous Silicon Oxide. *Advanced Functional Materials*. 2010;20:4168-4174.
472. Gangaputra SS, Altaweel MM, Peng Q, Friedman DS, Rao PK, Foster CS, Kim RY, Reed SB, Srivastava SK, Wong IG, Kempen JH....Freeman WR....MUST Trial Research Group: Morphologic assessment for glaucoma in the Multicenter Uveitis Steroid Treatment (MUST) trial. *Ocular Immunology and Inflammation*. 2011;19(4):267-274.
473. Sezgin E, van Natta ML, Ahuja A, Lyon A, Srivastava S, Troyer JL, O'Brien SJ, Jabs DA... Freeman WR....Studies of the Ocular Complications of AIDS Research Group: Association of host genetic risk factors with the course of cytomegalovirus retinitis in patients infected with human immunodeficiency virus. *American Journal of Ophthalmology*. 2011;151(6):999-1006.
474. Freeman WR, Kozak, I, Yuson RMS, Nigam N, Cheng L, Mojana F: Prognostic Implications of Pigment Epithelial Detachment in Bevacizumab (Avastin)-treated eyes with Age-related Macular Degeneration and Choroidal Neovascularization. *Retina*. 2011;31:1812-1818.
475. Vosganian, Hartmann, Prabkhar, and Freeman WR: Primary Intraocular Lymphoma: A Review. *Journal of Neurooncology*. 2011;105(2)127-134.
476. Kempen JH, Altaweel MM, Holbrook J, Jabs DA...Freeman WR...and the MUST Trial Research Group. Randomized Comparison of Systemic Anti-inflammatory Therapy Versus Fluocinolone Acetonide Implant for Intermediate, Posterior and Panuveitis: The Multicenter Uveitis Steroid Treatment Trial. *Ophthalmology*. 2011;118:1916-1926. Erratum in: *Ophthalmology*. 2012;119(2):212.
477. Chhablani J, Freeman WR: Predictors of Visual Acuity in Macular Edema. *Investigative Ophthalmology & Visual Science*. Letter to the Editor. 2011;52(12):9287.
478. Kozak I, Kim JS, Chhablani J, Hartmann K, Bartsch DU, Cheng L and Freeman WR: Clinical evaluation of clinical efficacy in diabetic macular edema using navigated laser photocoagulator NAVILAS. *Ophthalmology*. 2011;118(6):1119-1124.
479. Cheng S, Klein H, Kozak I, Bartsch DU, Marcotte TD and Freeman WR: Relationship between Retinal Nerve Fiber Layer Thickness and Driving Ability in Patients with Human Immunodeficiency Virus Infection. *Graefe's Archives for Clinical and Experimental Ophthalmology*. 2011;249:1643-1647.

480. Wang H, Chhablani J, Freeman WR, Beadle JR, Hostetler KY, Hartmann K, Conner L, Aldern KA, Pearson L and Cheng L: Intraocular Safety and Pharmacokinetics of Hexadecyloxypropyl-Cidofovir (HDP-CDV) as a Long-lasting Intravitreal Antiviral Drug. *Retina*. 2011;52:9391-9396.
481. Chhablani J, Bartsch DU, Freeman WR: Association Between the Macular Volume and Visual Acuity was found to be Weak. *Retina*. Author Reply. 2011;31(4):815-816.
482. Kozak I, Freeman WR: Infectious Retinitis and Retinal Disease in Human Immunodeficiency Virus-infected individuals: A Photographic Atlas. *Retina*. 2011;31(7s):S1-S35.
483. Holbrook JT, Colvin R, Van Natta ML, Thorne JE, Bardsley M, Jab DA...Freeman WR.... Studies of the Ocular Complications of AIDS (SOCA) Research Group: Evaluation of the United States Public Health Service Guidelines for Discontinuation of Anticytomegalovirus Therapy after Immune Recovery in Patients with Cytomegalovirus Retinitis. *American Journal of Ophthalmology*. 2011;152:628-637.
484. Sugar EA, Jabs DA, Altaweel MM, Lightman S, Acharya N, Vitale AT and Thorne JE ...WR Freeman...The Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group: Identifying a Clinically Meaningful Threshold for Change in Uveitic Macular Edema Evaluated by Optical Coherence Tomography. *American Journal of Ophthalmology*. 2011;152:1044-1052.
485. Khraiche ML, Lo Y, Wang D, Cauwenberghs G, Freeman W and Silva GA: Ultra-High Photosensitivity Silicon Nanophotonics for Retinal Prosthesis: Electrical Characteristics. Conf Proc IEEE Eng Med Biol Soc. 2011;2011:2933-6.
486. Kim JS, Beadle JR, Hostetler KY, Hartman K, Valiaeva N, Kozak I, Connor L, Trahan J, Aldern KA and Cheng L: A novel cytarabine crystalline lipid prodrug: hexadecyloxypropyl cytarabine 3',5'-cyclic monophosphate (HDP-cP-Ara-C) for proliferative vitreoretinopathy. *Molecular Vision*. 2012;18:1907-1917.
487. Kim J, Chhablani J, Chan CK, Cheng L, Kozak I, Hartmann K and Freeman WR: Retinal Adherence and Fibrillary Surface Changes Correlate with Surgical Difficulty of Epiretinal Membrane Removal. *American Journal of Ophthalmology*. 2012;153(4):692-697, 697 e1-2.
488. Chan C, Chhablani J, Freeman WR: Vitreoretinal surgery for no light perception after open-globe injury: eye injury vitrectomy study. *American Journal of Ophthalmology*. 2012;153(4):777.
489. Kozak I, Kim JS, Oster SF, Chhablani J and Freeman WR: Focal Navigated Laser Photocoagulation in Retinovascular Disease - Clinical Results in Initial Case Series. *Retina*. 2012;32:930-935.
490. Chhablani J, Barteselli G, Wang H, El-Emam S, Kozak I, Doede A, Bartsch DU, Cheng L, Freeman WR: Repeatability and reproducibility of manual chooidal volume measurements

using enhanced depth imaging optical coherence tomography. *Investigative Ophthalmology and Visual Science*. 2012;53(4):2274-2280.

491. Wang, H, Chhablani J, Freeman WR, Chan CK, Kozak I, Bartsch DU and Cheng L: Characterization of diabetic microaneurysms by simultaneous fluorescein angiography and spectral-domain optical coherence tomography. *American Journal of Ophthalmology*. 2012;153(5):861-867.

492. Nguyen QD, Brown DM, Marcus DM, Boyer DS, Patel S, Feiner L, Gibson A, Sy J, Rundle AC, Hopkins JJ, Rubio RG, Ehrlich JS; RISE and RIDE Research Group. Ranibizumab for Diabetic Macular Edema: Results from 2 Phase III Randomized Trials: RISE and RIDE. *Ophthalmology*. 2012;119(4):789-801.

493. Hartmann KI, Gomez ML, Bartsch DU, 14 AK and Freeman WR: Effect of change in drusen evolution on photoreceptor inner segment/outer segment junction. *Retina*. 2012;32(8):1492-1499.

494. Chhablani J, Kozak, I Mojana F, Morrison VL, Wang H, Kim JS, Dustin L, Azen S and Freeman WR: Fundus autofluorescence not predictive of treatment response to intravitreal bevacizumab in exudative age-related macular degeneration. *Retina*. 2012;32(8):1465-1470.

495. Witkin AJ, Alshareef RA, Rezeq SS, Sampat KM, Chhablani J, Bartsch DU, Freeman WR, Haller JA, Garg SJ: Comparative analysis of the retial microvasculature visualized with fluorescein angio- graphy and the retinal function imager. *American Journal of Ophthalmology*. 2012;154(5):901-907.

496. Grob S, Luo J, Hughes G, Lee C, Zhou X, Lee J, Du H, Ferreyra H, Freeman WR, Kozak I and Zhang K: Genetic analysis of simultaneous geographic atrophy and choroidal neovascularization. *Eye*. 2012;26:1106-1113.

497. Singer MA, Awh CC, Sadda S, Freeman WR, Antoszyk AN, Wong P and Tuomi L: HORIZON: An Open-Label Extension Trial of Ranibizumab for Choroidal Neovascularization Secondary to Age-Related Macular Degeneration. *Ophthalmology*. 2012;119(6):1175-1183.

498. Chhablani J, Kim JS, Cheng L, Kozak I, Freeman WR: External limiting membrane as a predictor of visual improvement in diabetic macular edema after pars plana vitrectomy. *Graefes Arch Clin Exp Ophthalmol*. 2012;250(10):1415-1420.

499. Kozak I, Ahuja A, Gangaputra S, Van Natta ML, Thorne JE, Freeman WR: Optic nerve head morphology and visual field function in patients with AIDS and without infectious retinitis. *Ocular Immunology and Inflammation*. 2012;20(5):342-348.

500. Sen HN, Drye LT, Goldstein DA, Larson TA, Merrill PT, Pavan PR, Sheppard JD, Burke A, Srivastava SK, Jabs DA; Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group: Hypotony in patients with uveitis: The Multicenter Uveitis Steroid Treatment (MUST) Trial. *Ocular Immunology and Inflammation*. 2012;20(2):104-112.



501. Frick KD, Drye LT, Kempen JH, Dunn JP, Holland GN, Latkany P, Rao NA, Sen HN, Sugar EA, Thorne JE, Wang RC, Holbrook JT; Multicenter Uveitis Steroid Treatment-MUST Trial Research Group: Associations among visual acuity and vision- and health-related quality of life among patients in the multicenter uveitis steroid treatment trial. *Investigative Ophthalmology & Visual Science*. 2012;53(3):1169-1176.
502. Taylor SR, Lightman S, Sugar EA, Jaffe GJ, Freeman WR, Altaweel MM, Kozak I, Holbrook JT, Jabs DA, Kempen JH: The Impact of Macular Edema on Visual Function in Intermediate, Posterior and Panuveitis. *Ocular Immunology and Inflammation*. 2012;20(3):171-181.
503. Barteselli G, Chhablani J, El-Emam S, Wang H, Chuang J, Kozak I, Cheng L, Bartsch DU, Freeman WR: Choroidal volume variations with age, axial length, and sex in healthy subjects: a three-dimensional analysis. *Ophthalmology*. 2012;119(12):2572-2578.
504. Taylor SR, Lightman S, Sugar EA, Jaffe GJ, Freeman WR, Altaweel MM, Kozak I, Holbrook JT, Jabs DA, Kempen JH: The Impact of Macular Edema on Visual Function in Uveitis. *Ocular Immunology and Inflammation*. 2012;20(3):171-181.
505. Kalyani PS, Holland GN, Fawzi AA, Arantes TE, Yu F, Sadun AA....Studies of the Ocular Complications of AIDS Research Group: Association between retinal nerve fiber thickness and abnormalities of vision in people with human immunodeficiency virus infection. *American Journal of Ophthalmology*. 2012;153(4):734-742.
506. Kempen JH, Sugar EA, Lyon AT, Lewis RA, Jabs DA, Heinemann MH, Dunn JP; Studies of Ocular Complications of AIDS Research Group: Risk of cataract in persons with cytomegalovirus retinitis and the acquired immune deficiency syndrome. *Ophthalmology*. 2012;119(11):2343-2350.
507. Chhablani J, Barteselli G, Bartsch DU, Kozak I, Wang H, El Emam S, Doede AL, Cheng L, Freeman WR: Influence of scanning density on macular choroidal volume measurement using spectral-domain optical coherence tomography. *Graefes Archive for Clinical and Experimental Ophthalmology*. 2013;251(5):1303-1309.
508. Barteselli G, Bartsch DU, El Emam S, Gomez ML, Chhablani J, Lee SN, Conner L, Freeman WR: Combined Depth Imaging Technique on Spectral-Domain Optical Coherence Tomography. *American Journal of Ophthalmology*. 2013;155(4):727-732.
509. Barteselli G, Bartsch DU, Freeman WR: Combined depth imaging using optical coherence tomography as a novel imaging technique to visualize vitreoretinal choroidal structures. *Retina*. 2013;33(1) 247-248.
510. Arévalo JF, García RA, London NJS, Cunningham Jr. ET, Belfort Jr R, Freeman WR: Chapter 1: Retinal and Choroidal Manifestations of HIV/AIDS. *Retinal and Choroidal*

Manifestations of Selected Systemic Diseases. Arevalo JF, Ed., Springer Science Business Media, New York, 2013.

511. Chhablani J, Nieto A, Hou H, Wu EC, Freeman WR, Sailor MJ, Cheng L: Oxidized Porous Silicon Particles Covalently Grafted with Daunorubicin as a Sustained Intraocular Drug Delivery System. *Investigative Ophthalmology & Visual Science*. 2013;54:1268-1279.
512. Chhablani J, Barteselli G, Bartsch DU, Kozak I, Wang H, El Emam S, Doede AL, Cheng L, Freeman WR: Influence of scanning density on macular choroidal volume measurement using spectral-domain optical coherence tomography. *Graefes Archive for Clinical and Experimental Ophthalmology*. 2013;251(5):1303-1309.
513. Neubauer AS, Langer J, Liegl R, Haritoglou C, Wolf A, Kozak I, Seidensticker F, Ulbig M, Freeman WR, Kampik A, Kernt M: Navigated macular laser decreases retreatment rate for diabetic macular edema: a comparison with conventional macular laser. *Clinical Ophthalmology*. 2013;7:121-128.
514. El Emam S, Chhablani J, Barteselli G, Wang H, Lee SN, Kozak I, Cheng L, Freeman WR: Correlation of spectral domain optical coherence tomography characteristics with visual acuity in eyes with subfoveal scarring after treatment for wet age-related macular degeneration. *Retina*. 2013. 33:1249-57.
515. Kempen JH, Sugar EA, Jaffe GJ, Acharya NR, Dunn JP, Elnor SG, Lightman SL, Thorne JE, Vitale AT, Altaweel MM; Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group. Fluorescein angiography versus optical coherence tomography for diagnosis of uveitic macular edema. *Ophthalmology*. 2013 Sep;120(9):1852-1859.
516. Lee SN, Chhablani J, Chan CK, Wang H, Barteselli G, El Emam S, Gomez ML, Kozak I, Cheng L, Freeman WR: Characterization of microaneurysm closure after focal laser photocoagulation in diabetic macular edema. *American Journal of Ophthalmology*. 2013;155:905-912.
517. Barteselli G, Chhablani J, Lee SN, Wang H, El Emam S, Kozak I, Cheng L, Bartsch DU, Azen S, Freeman WR: Safety and Efficacy of Oral Fluorescein Angiography in Detecting Macular Edema in Comparison with Spectral-Domain Optical Coherence Tomography. *Retina*. 2013;33(8):1574-1583.
518. Hartmann KI, Nieto A, Wu EC, Freeman WR, Kim J, Chhablani J, Sailor MJ, Cheng L: Hydrosilylated Porous Silicon Particles Function as an Intravitreal Drug Delivery System for Daunorubicin. *Journal of Ocular Pharmacology and Therapeutics*. 2013. [Epub ahead of print]
519. Barteselli G, Bartsch DU, Viiola F, Mojana F, Pellegrini M, Hartmann KI, Benatti E, Leicht S, Ratiglia R, Staurengi G, Weinreb RN and Freeman WR: Accuracy of the Heidelberg Spectralis in the Alignment Between Near-Infrared Image and Tomographic Scan: A Multicenter Study. *American Journal of Ophthalmology*. 2013;156:588-592.

520. Jabs DA, Ahuja A, Van Natta MV.... (Freeman WR) and the SOCA research Group.; Comparison of Treatment regimens for Cytomegalovirus Retinitis in Patients with AIDS in the Era of Highly Active Antiretroviral Therapy. *Ophthalmology*. 2013;120: 1262-1270.
521. Chhablani J, Kim JS, Freeman WR, Kozak I, Wang HY, Cheng L. Predictors of visual outcome in eyes with choroidal neovascularization secondary to age related macular degeneration treated with intravitreal bevacizumab monotherapy. *International Journal of Ophthalmology*. 2013;6(1):62-6.
522. Chhablani J, Bartsch DU, Cheng L, Gomez L, Alshareef RA, Rezeq SS, Garg SJ, Burgansky-Eliash Z, Freeman WR. Segmental reproducibility of retinal blood flow velocity measurements using retinal function imager. *Graefes Arch Clin Exp Ophthalmol*. 2013;251(12):2665-2670.
523. Kozak I, Sasik R, Freeman WR, Sprague L, Gomez ML, Cheng L, ElEmam S, Mojana F, Bartsch DU, Bosten, J, Ayyagari R, Hardiman G: A degenerative retinal process in HIV-associated non-infectious retinopathy. *PLOS One*. 2013;8(9):e74712.
524. Brown DM, Nguyen QD, Marcus DM,.....Freeman WR (Ride and RISE Research Group): Long term outcomes of ranibizumab therapy for diabetic macular edema: The 36-month results from two Phase III trials. *Ophthalmology*. 2013;120:2013-2022.
525. Khraiche ML, El Emam S, Akinin A, Cauwenberghs G, Freeman WR and Silva GA: Visual evoked potential characterization of rabbit animal model for retina prosthesis research. *Conference Proceedings of the IEEE Engineering in Medicine and Biology Society*. 2013;2013:3539-3542 .
526. Wang H, Barteselli G, Freeman WR, Lee SN, Chhablani J, EL-Emam S, Cheng L: Temporal pattern of resolution/recurrence of choroidal neovascularization during bevacizumab therapy for wet age-related macular degeneration. *International Journal of Ophthalmology*. 2013;18;6(5):600-605.
527. Friedman DS, Holbrook JT, Ansari H, Alexander J, Burke A, Reed SB, Katz J, Thorne JE, Lightman SL, Kempen JH; MUST Research Group: Risk of elevated intraocular pressure and glaucoma in patients with uveitis: results of the multicenter uveitis steroid treatment trial. *Ophthalmology*. 2013;120(8):1571-1579.
528. Ma F, Arcinue C, Barteselli G, Cheng L, Ezon I, Lee SN, Freeman WR: Optical coherence tomography findings of the vitreoretinal interface in asymptomatic fellow eyes of patients with acute posterior vitreous detachment. *Retina*. 2014;34:447-454.
529. Barteselli G, Lee SN, El Emam S, Hou H, Ma F, Chhablani J, Conner L, Cheng L, Bartsch DU and Freeman WR: Macular variations in highly myopic eyes with myopic traction maculopathy and choroidal neovascularization. *Retina*. 2014;34(05):880-889.

530. Korobelnik JF, Do DV.....(Freeman WR)....Brown DM: Intravitreal Aflibercept for Diabetic Macular Edema (Vista and Vivid trials). *Ophthalmology*. 2014;121:2247-2254.

531. Nieto A, Hou H, Sailor MJ, Freeman WR and Cheng L: Ocular silicon distribution and clearance following intravitreal injection of porous silicon microparticles. *Experimental Eye Research*. 2013;116:161-168.

532. Kempen JH, Sugar EA, Jaffe GJ, Acharya NR, Dunn JP, Elner SG, Lightman SL, Thorne JE, Vitale AT, Altaweel MM; Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group: Fluorescein angiography versus optical coherence tomography for diagnosis of uveitic macular edema. *Ophthalmology*. 2013;120(9):1852-1859.

533. Schmidt-Erfurth U, Kaiser PK...Sandbrink R. ...(Freeman WR): Intravitreal Aflibercept Injection for neovascular age-related macular degeneration. 96-week results of VIEW studies. *Ophthalmology*. 2014;121:193-201.

534. Khraiche ML, El Emam S, Akinin A, Cauwenberghs G, Freeman WR and Silva GA: Visual evoked potential characterization of rabbit animal model for retina prosthesis research. *Conference Proceedings of the IEEE Engineering in Medicine and Biology Society*. 2013;2013:3539-3542 .

535. Barteselli G, Kozak I, El Emam S, Chhablani J, Cortes M and Freeman WR: 12- month results of the standardized combination therapy for diabetic macular edema: Intravitreal Bevacizumab and Navigated Retinal Photocoagulation. *British Journal of Ophthalmology*. 2014;98(8):1036-1041.

536. Ezon IC, Barteselli G, Rosenberg J, Freeman WR:. Concurrent primary vitreoretinal and spinal cord lymphoma: a unique entity. *JAMA Ophthalmology*. 2014;132(7):902-904.

537. Barteselli G, Chhablani J, Gomez ML, Doede A, Dustin L, Kozak I, Bartsch DU, Azen S and Freeman WR: Visual function assessment in real-life situations in HIV-infected subjects. *PLoS One*. 2014;9(5):e97023.

538. Nan K, Ma F, H, Freeman WR, Sailor MJ, Cheng L: Porous silicon oxide-PLGA composite microspheres for sustained ocular delivery of daunorubicin. *Acta Biomaterialia*. 2014;19(8):3505-3512.

539. Nieto A, Hou H, Sailor MJ, Freeman WR and Cheng L: Tunable sustained intravitreal drug delivery system for daunorubicin. *Journal of Controlled Release*. 2014;178:46-54.

540. Arevalo JF, Sánchez JG, Freeman WR. Vitrectomía Transconjuntival sin Sutura 25 Gauge para Biopsia Vítrea Retiniana y Coroidea. In: Alezzandrini A, Arévalo JF, Berrocal MH, Rodríguez FJ, Wu L, eds. *Cirugía Vitreoretinal Minimamente Invasiva*. Panama, Republic de Panama: Jaypee-Highlights Medical Publishers, Inc. 2014.

541. Hartmann K, Schuster A, Bartsch DU, Kim J, Chhablani J, Freeman WR: Restoration

of retinal layers after epiretinal membrane peeling. *Retina*. 2014;34(4):647-654.

542. Kozak I, Vaidya V, Van Natta ML, Pak JW, May KP, Thorne JE; Studies of the Ocular Complications of AIDS Research Group: The prevalence and incidence of epiretinal membranes in eyes with inactive extramacular CMV retinitis. *Investigative Ophthalmology and Visual Science*. 2014;55(7):4304-4312.

543. Ezon I, Barteselli G, Rosenberg J, Freeman WR: Concurrent primary vitreoretinal and spinal cord lymphoma: a unique entity. *JAMA Ophthalmol*. 2014;132(7):902-904.

544. Kempen JH, Sugar EA, Varma R, Dunn JP, Heinemann MH, Jabs DA, Lyon AT, Lewis RA...Freeman WR: for the Studies of Ocular Complications of AIDS Resarch Group: Risk of Cataract among Subjects with Acquired Immune Deficiency Syndrome Free of Ocular Opportunistic Infections. *Ophthalmology*. 2014;121:2317-2324.

545. Barteselli G, Gomez ML, Doede AL, Chhablani J, Gutstein W, Bartsch DU, Dustin L, Azen SP and Freeman WR: Visual function assessment in simulated real-life situations in patients with age-related macular degeneration compared to normal subjects. *Eye*. 2014;28(10):1231-1238.

546. Wang C, Hou H, Nan K, Sailor MJ, Freeman WR, Cheng L: Intravitreal controlled release of dexamethasone from engineered microparticles of porous silicon dioxide. *Experimental Eye Research*. 2014;129:74-82.

547. Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group, Sugar EA, Holbrook JT, Kempen JH, Burke AE, Drye LT Thorne JE, Louis TA, Jabs DA, Altaweel MM, Frick KD ...Freeman WR: Cost-Effectiveness of fluocinolone acetonide implant versus systemic therapy for noninfectious intermediate, posterior, and panuveitis. *Ophthalmology*. 2014;121(10):1855-1862.

548. Boyer DS, Yoon YH, Belfort R Jr, Bandello F, Maturi RK, Augustin AJ, Li XY, Cuo H, Hashad Y, Whitcup SM.....Freeman WR.....Ozurdex MEAD Study Group: Three-year randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with diabetic macular edema. *Ophthalmology*. 2014;121(10):1904-1914.

549. Kozak I, El-Emam SY, Cheng L, Bartsch DU, Chhablani J, Freeman WR, Arvalo JF: Fluorescein angiography veresus optical coherence tomography-guided planning for macular laser photocoagulation in diabetic macular edema. *Retina*. 2014;34(8):1600-1605.

550. Ma F, Nan K, Lee S, Beadle JR, Hou H, Freeman WR, Hostetler KY and Cheng L: Micelle formulation of hexadecyloxypropyl-cidofovir (HDP-CDV) as an intravitreal long-lasting delivery system. *European Journal of Pharmaceutics and Biopharmaceutics*. 2015;89:271-279.

551. Jabs DA, Drye L, Van Natta ML.SOCA Research Group,...Freeman WR: Incidence

- and long-term outcomes of the HIV-neuroretinal disorder in patients with AIDS. *Ophthalmology*. 2015;122(4):760-768.
552. Barteselli G, Amini P, Ezon IC, Nezgoda JT, Cheng L and Freeman WR: Impact on intraocular pressure after 20-mg decanted triamcinolone acetonide (kenalog) when utilizing prophylactic antiglaucoma therapy. *Retina*. 2015;35(1):75-81.
553. Hou H, Huffman K, Rios S, Freeman WR, Sailor MJ, Cheng L. A Novel Approach of Daunorubicin Application on Formation of Proliferative Retinopathy Using a Porous Silicon Controlled Delivery System: Pharmacodynamics. *Ophthalmology*. 2015; 56(4) 2755-2763.
554. Camacho N, Barteselli G, Nezgoda JT, El Emam S, Cheng L, Bartsch DU, Freeman WR: Significance of the hyperautofluorescent ring associated with choroidal neovascularisation in eyes undergoing anti-VEGF therapy for wet age-related macular degeneration. *British Journal of Ophthalmology*. 2015;99(9):1277-12783.
555. Tsai FF, Freeman WR: Letter to the Editor. Correspondence on "Optical coherence tomography predicts visual outcome in acute central retinal vein occlusion." *Retina*. 2015;35(1):e10-11.
556. Arcinue CA, Ma F, Barteselli G, Sharpstein L, Gomez ML, Freeman WR: One-Year Outcomes of Aflibercept in Recurrent or Persistent Neovascular Age-Related Macular Degeneration. *American Journal of Ophthalmology*. 2015;159(3):426-436.
557. Nieto A, Pena A, Hou H, Freeman WR, Chang LC, Sailor MA: Surface engineering of porous silicon microparticles for intravitreal sustained delivery of rapamycin. *Investigative Ophthalmology*. 2015; 56(2):1070-1080.
558. Arcinue CA, Bartsch DU, El-Emam SY, Ma F, Doede A, Sharpsten L, Gomez ML and Freeman WR: Retinal Thickening and Photoreceptor Loss in HIV Eyes without Retinitis. *PloS one*. 2015;10(8), e0132996.
559. Bartsch D-U, Kozak I, Grant I, Knudsen VL, Weinreb RN, Lee BR and Freeman WR: Retinal nerve fiber and optic disc morphology in patients with human immunodeficiency virus using the Heidelberg Retina Tomography 3. *PloS One*. 2015;10(8):e013314.
560. Kempen JH, Van Natta ML, Altaweel MM, Dunn JP, Jabs DA, Lightman SL, Thorne JE, Holbrook JT, for the Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group: Factors predicting visual acuity outcome in intermediate, posterior, and panuveitis: The Multicenter Uveitis Steroid Treatment (MUST) Trial. *American Journal of Ophthalmology*. 2015;160(6):1133-1141.

561. Ashraf DA, May KP, Holland GN, Van Natta ML, Uw AW, Thorne JE, Jabs DA, for the Studies of the Ocular Complications of AIDS Research Group: Relationship between human immunodeficiency virus neuroretinal disorder and vision-specific quality of life among people with AIDS. *Ophthalmology*. 2015;122:2560-2567.
562. Hartmann K, Oster SF, Amini P, Bartsch DU, Cheng L and Freeman WR: SLO-Microperimetry in Wet Age Related Macular Degeneration During anti-VEGF therapy. *Ophthalmic Surgery, Lasers & Imaging Retina*. 2015;46(8):824-830.
563. Barteselli G, Bartsch DU, Weinreb RN, Camacho N, Nezgoda JT, Marvasti AH, Freeman WR: Real-time full-depth visualization of posterior ocular structures: Comparison between full-depth imaging spectral domain optical coherence tomography and swept-source optical coherence tomography. *Retina*. 2015;36(6):1153-1161.
564. Klingenstein A, Schaumberger MM, Freeman WR, Folberg, Mueller AJ, Schaller UC: MuSIC Report III: Tumor microcirculation patterns and development of metastasis in long-term follow-up of melanocytic uveal tumors. *Acta Ophthalmologica*. 2016;94(2):175-181.
565. Espina M, Arcinue CA, Ma F, Camacho N, Barteselli G, Mendoza N, Ferrara N, Freeman WR: Outer retinal tubulations response to anti-VEGF treatment. *British Journal of Ophthalmology*. 2016;98(1):69-77.
566. Espina M, Arcinue C, Ma F, Camacho N, Bartsch DU and Freeman WR: Analysis of a confocal scanning laser ophthalmoscope noncontact ultra-wide field lens system in retinal and choroidal disease. *Retina*. 2015;35(12):2664-2668.
567. Alam M, Arcinue CA, Mendoza NB, Freeman WR: Recalcitrant cystoid macular edema after pars plana vitrectomy. *Retina*. 2016;36:1244-1251.
568. Kozak I and Freeman WR: HIV – Associated Infections. In Ryan SR editor; *Retina*. Elsevir New York. 2015 In Press.
569. Ha S, Khraiche ML, Akinin A, Jing Y, Damle S, Kuang Y, Bauchner S, Ho YH, Freeman WR, Silva GA and Cauwenberghs G: Towards High-resolution Retinal Prostheses with Direct Optical Addressing and Inductive Telemetry. *Journal of Neuroengineering*. 2016. In Press.
570. Ramkumar H, Khatibi A, Freeman WR, Barteselli G, Ezon I, Amini P, Sharpsten L, Arcinue C, Nezgoda N, Ferrerya H, Goldbaum M: Visual phenomena perceived during pars plana vitrectomy under peribulbar block and monitored anesthesia care. *British Journal of Ophthalmology*. 2016;100(6):777-781.
571. You QS, Bartsch DU, Espina M, Alam M, Camacho N, Mendoza N and Freeman WR: Reproducibility of macular pigment optical density measurement by two-wavelength autofluorescence in a clinical setting. *Retina*. 2015;0:1-7.

572. Hou H, Wang C, Nan K, Freeman WR, Sailor MJ, Cheng L: Controlled release of dexamethasone from an intravitreal delivery system using porous silicon dioxide. *Investigative Ophthalmology and Visual Science*. 2016;57(2):557-566.

573. Muftuoglu IK, Arcinue CA, Tsai FF, Alam M, Gaber R, Camacho N, You Q, Freeman WR: Long term results of pro re nata regimen of aflibercept treatment in persistent neovascular age-related macular degeneration. *American Journal of Ophthalmology*. 2016;167:1-9.

574. Holbrook JT, Sugar EA, Burke AE, Vitale AT, Thorne JE, Davis JL, Jabs DA; Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group: Dissociations of the fluocinolone acetoide implant: The Multicenter Uveitis Steroid Treatment (MUST) trial and follow-up study. *American Journal of Ophthalmology*. 2016;164:29-36.

TO ADD

1. Kilic I, Gaber R, Mendoza N, Alam M, You Q and Freeman WR: Integrity of Outer Retinal Layers After Resolution of Central Involved Diabetic Macular Edema Retina Under Revision 7-31-16.

~~2. Espina M, Tsai F, Goldbaum M and Freeman WR: Sutured versus Sutureless Sclerotomies after 25 Gauge Vitrectomy. Retina submitted 11-2015.~~

3. Tsai F, Freeman WR: High dose decanted triamcinolone for Macular Edema. Submitted retina 3-2-16. Retina-216-0284. By Frank Tsai

~~4. Espina M, Arcinue C, Camacho N, Alam M, Qisheng You Q, M.D., Maria Laura Gomez, ML, Yang Q, Bartsch DU, Cheng L, Afshari N and Freeman WR: Scanning Laser Ophthalmoscope Imaging is a diagnostic predictor of Dry Eye. Eye, Under Revision 3-16 by qishen.~~

5. Kilic I, Maartsch DU and Freeman WR: Laser Pointers Revisited. Editorial Retina, 2016 In Press.

6. Gaber, R You, Q Freeman WR. Characteristics of Epiretinal Membrane Remnant Edge by Optical Coherence Tomography after Pars Plana Vitrectomy. Retina In Press

7. You QS, MD, PhD, William R Freeman, WR, Weinreb RN, Zangwill L, Isabel p, Manalastas C, Sanders LJ and Nudleman E: Reproducibility of vessel density measurement



with Optical Coherence Tomography Angiography in eyes with and without retinopathy.  
Submitted Retina Qi Sheng; Under Revision with nudleman

8. Kilic I, Tsai F, Gaber R, Meshi A, You Q Moragreb, M, Freman WR: High frequency Aflibercept injections in Persistent Choroidal Neovascularization in Age Related Macular degeneration Submitted to BJO ID is 2016-309126. 5-29-2014. Submitted to Retina ilkay 6-5-16

9. You QS, Gaber R, Meshi A, Ramkumar HL, Alam M, ilic I and Freeman WR: The efficacy and safety of high dose high frequency aflibercept for recalcitrant neovascular age-related macular degeneration. Submitted you to ???????????

10. You, QS, Muftuoglu IK, Gaber HL, Mentoza N, Meshi A and Freeman WR: Long-term remission of neovascular age-related macular degeneration with as needed anti-vascular endothelial growth factor therapy R oph bjo ajo **Retina under revision by Ilkay??**

11. Kilic I, .....multicolor

12. Kilic finalizing Sclerotomy paper with luke stats 8.16

Amit multicolor Heidelberg vs Optos

?qisheng OCTA normal diabetics

Ilkay/Amit OCTA diabetics with mild maculopathy

Ilkay AO in EYlea

Amit AO in GA

Consider AO angiography or AO angio vs OCT angio

Amit OCTA confusion matrix

Amit OCTA in pseudoviteliform

**PUBLISHED ABSTRACTS:**

1. **Freeman WR**, Lerner CW, Mines JA, et al.: Retinal findings in the acquired immune deficiency syndrome. American Federation of Clinical Research (A.F.C.R. National), Clinical Epidemiology Section. 1982.
2. **Freeman WR**: The Acquired immune deficiency syndrome. Interscience Conference on Antimicrobial Agents and Chemotherapy. 1983.
3. **Freeman WR**, Char DH, Garovoy MR, Lyon H: Aqueous lymphocyte subtypes in uveitis patients. Investigative Ophthalmology & Visual Science. 1984;25:37.
4. Mines JM, **Freeman WR**, Lerner CW, et al.: A twenty-four month prospective study of the ophthalmologic findings of the acquired immune deficiency syndrome. International Conference on Acquired Immunodeficiency Syndrome (AIDS), 1985.
5. **Freeman WR**, Thomas EL, Nadel AJ, et al.: Acute retinal necrosis; Demonstration of viral etiology in immunosuppressed and normal hosts. Investigative Ophthalmology & Visual Science. 1985;26:29.
6. Henderly DE, **Freeman WR**, Rao NA: CMV retinitis and response to therapy with DHPG. Ophthalmology. 1986;93:84.
7. **Freeman WR**: Echographic evaluation of repository steroid injections for the treatment of inflammatory macular disease. International Symposium on Ocular Circulation and Neovascularization, 1986.
8. Liggett PR, Duel J, **Freeman WR**, Rao NA, Ryan SJ: Platelet-derived growth factor in choroidal melanoma. Investigative Ophthalmology & Visual Science. 1986;(6)27:132.
9. **Freeman WR**, Henderly DH, Rao NA, Wan WL, Liggett PE: Rhegmatogenous retinal detachment in treated cytomegalovirus retinitis: Prevalence, pathophysiology and treatment. Investigative Ophthalmology & Visual Science. 1986;27:260.
10. **Freeman WR**, Henderly DE: Ophthalmologic infections and retinopathy as the initial manifestation of AIDS. Ophthalmology. 1987;94:10:93.
11. **Freeman WR**, Chen A, Henderly D, Luttrell L, Arthur U, et al.: Prognostic and systemic significance of non-infectious AIDS associated retinopathy. Investigative Ophthalmology & Visual Science. 1987;28:9.
12. **Freeman WR**, Wiley CA, Gross J, Rao NA, Thomas EL: Endoretinal biopsy: indications, utility and techniques. Ophthalmology. 1988;95:125.
13. **Freeman WR**: New diagnostic techniques and treatment modalities in viral retinitis. Interscience Conference on Antimicrobial Agents and Chemotherapy. 1988;52.

14. Gross JG, **Freeman WR**, Kennedy C, Richman D, Abramson I: Retinal vascular findings in patients with AIDS related complex and "early" AIDS. Investigative Ophthalmology & Visual Science. 1988;29:42.
15. The American Uveitis Society, Holland GN, **Freeman WR**, Weissman S: The uncertain association between epstein barr virus and ophthalmic disease. Ophthalmology. 1988;95:183.
16. Fay MT, **Freeman WR**, Wiley CA, et al.: A typical retinitis in patients with the acquired immuno- deficiency syndrome. International Synopses. 1989.
17. Gross JG, Schneiderman TE, Bergeron-Lynn G, **Freeman WR**: Endoretinal biopsy in undetached retina. Investigative Ophthalmology & Visual Science. 1989;30:3:272.
18. **Freeman WR**, Schneiderman TE: Invasive posterior segment diagnostic procedures in immunosuppressed patients. Abstracts International. 1989.
19. **Freeman WR**, Bartsch D-U, Dreher A, Reiter K, Bille J: Macular topographic analysis with the laser tomographic scanner, (Its). Investigative Ophthalmology & Visual Science. 1989;30:3:368.
20. Schneiderman TE, Faber D, Gross JG, Wiley CA, **Freeman WR**: New techniques for handling and processing of retinal biopsy tissue. Investigative Ophthalmology & Visual Science. 1989;30:241.
21. Sadun AJ, Ho JN, **Freeman WR**: Optic neuropathy in AIDS. Investigative Ophthalmology & Visual Science. 1989;30:3:233.
22. **Freeman WR**, Chen A, Henderly DE., Levine AM, Luttrull JK, Urrea PT, Arthur J, Rasheed S, Cohen JL, Neuberg D, Leung RJ: Prevalence and significance of acquired immunodeficiency syndrome-related retinal microvasculopathy. Ophthalmology Digest. 1989;6:9-10.
23. Bartsch D-U, Bille JF, Intaglietta M, Dreher AW, **Freeman WR**: Analysis of transfer functions obtained with the laser tomographic scanner in patients with macular diseases. Investigative Ophthalmology & Visual Science. 1990;31:4:129.
24. Schneiderman TE, Listhaus AD, Svendsen P, Wiley CA, Oh JO, **Freeman WR**: An animal model of focal, non-lethal, viral retinitis. Investigative Ophthalmology & Visual Science. 1990;31:4:142.
25. Bartsch DU, Bille JF, Intaglietta M, **Freeman WR**: Analysis of transfer functions obtained with the laser tomographic scanner. Conference on Scanning Laser Ophthalmoscopy, Microscopy and Tomography, Boston, MA. 1990.

26. Cannon C, Gross J, **Freeman WR**: Evaluation of outpatient experience with vitreoretinal surgery. Investigative Ophthalmology & Visual Science. 1990;31:4:25.
27. **Freeman WR**, Assil K, Gariano R, Listhaus A, Munguia D, Schneiderman T, Svendsen P: Intravitreal drug delivery for retinal diseases. International Symposium on the Pharmacotherapy of the Eye, 1990.
28. **Freeman WR**, Schneiderman TE: Invasive posterior segment diagnostic procedures in immunosuppressed patients. Ophthalmology Digest. 1990;1:2-3.
29. Gross JG, Hesselink JR, Press GA, Goldbaum MH, **Freeman WR**: Magnetic resonance imaging in the evaluation of vitreoretinal disease in eyes with intraocular silicone oil. Investigative Ophthalmology & Visual Science. 1990; 31:4:280.
30. Crapotta JA, **Freeman WR**, Lowder CY, Ambler JS, Parker CE, Lee VW, Meisler DM: Prompt treatment of early acute retinal necrosis: A more favorable prognosis. Ophthalmology. 1990; 97: 117.
31. Listhaus AD, Schneiderman T, Munguia D, Svendsen P, Karkas JD, Tolman RL, Wiley CA, Heckenlively J, Bergeron-Lynn G, **Freeman WR**: Retinal pathology and electrophysiology following intravitreal injection with 2'-nor-cGMP. Investigative Ophthalmology & Visual Science. 1990; 31:4:364.
32. Faber DW, Wiley CA, Gross JG, Morey MK, Bergeron-Lynn G., **Freeman WR**: Retinal pathology and neuropathology in patients with HIV infection: A correlative study. Investigative Ophthalmology & Visual Science. 1990; 31:4:365.
33. Gariano RF, Assil KK, Svendsen P, Munguia D, Bergeron-Lynn G, Heckenlively J, Weinreb RN, **Freeman WR**: Retinal toxicity of intravitreal injection of 5-fluorouridine-5'-monophosphate using multivesicular liposomes. Investigative Ophthalmology & Visual Science. 1990;(31):4:306.
34. Hardy D, Spector S, Polsky B, Heath-Chiozzi M, Holland G, **Freeman WR**, Heinemann MH, Sharuk G, Feinberg J, Power M.: Safety and efficacy of combined ganciclovir (GCV) and granulocyte-macrophage stimulating factor (GM-CSF) vs. ganciclovir alone for cytomegalovirus (CMV) retinitis in AIDS (ACTG 073): A preliminary report. Sixth International Conference on AIDS Final Program and Abstracts. 1990; (2):112.
35. Assil K, Schneiderman T, Weinreb RN, **Freeman WR**: Selection of antivirals for sustained ocular delivery to the eye in liposomes by an in vitro dialysis system. Investigative Ophthalmology & Visual Science. 1990; 31(4): 306.
36. Gross JG, **Freeman WR**: The 30-degree curved endolaser probe. Annals of Ophthalmology. 1990; (22): 382-384.

37. **Freeman WR**, Bartsch D-U et al.: The topography of the macula in healthy and diseased eyes. XXVI International Congress of Ophthalmology. 1990; 159.
38. Svendsen PJ, Bille JF, Wiley CA, Listhaus AD, Bartsch D-U, **Freeman WR**: Retinal laser effects in rabbits: A comparative study of three laser types. Investigative Ophthalmology & Visual Science. 1991; 32 (4): 713.
39. Clark TM, **Freeman WR**, Goldbaum MH: Digital overlay of fluorescein angiograms and fundus images: Implications for treatment of subretinal neovascularization. Investigative Ophthalmology & Visual Science. 1991; 32(4): 691.
40. Flores-Aguilar M, Crapotta JA, Munguia D, Bergeron-Lynn G, Long D, Wiley CA, **Freeman WR**: Perfluorooctylbromide (PFOB) as a temporary vitreous substitute. Investigative Ophthalmology & Visual Science. 1991; 32:4 (2724):1225.
41. Quiceno JI, Caparelli E, Munguia D, Sadun A, Sample P, Listhaus A, Crapotta J, Lambertt B, **Freeman WR**: Retinal and optic nerve dysfunction in patients with non-infectious AIDS retinopathy. Investigative Ophthalmology & Visual Science. 1991; 32 (4): 763.
42. Dolnak DR, Munguia D, Bergeron-Lynn G, Wiley CA, De Clercq E, Boscher C, Connor JD, **Freeman WR**: Retinal toxicity of the anti-CMV drug (s)-1-(3-hydroxy-2-phosphorylmethoxypropyl) cytosine (s-HPMPC). Investigative Ophthalmology & Visual Science. 1991;32 (4):883.
43. Munguia D, Svendsen P, Heckenlively J, Wiley CA, **Freeman WR**: Standardization of the rabbit ERG for intraocular drug toxicology testing. Investigative Ophthalmology & Visual Science. 1991; 32(4): 883.
44. **Freeman WR**, Quiceno J, Crapotta J, Listhaus A, Munguia D: Surgical repair and prophylaxis of retinal detachment in eyes with cytomegalovirus retinitis. Ophthalmology. 1991; 98 (Suppl): 158.
45. Keefe KS, **Freeman WR**, Peterson TJ, Crapotta J, Quiceno J, Listhaus A, Wiley CA: A typical healing of CMV retinitis: Significance of persistent border opacification. Ophthalmology. 1991; 98 (Suppl):158.
46. Bartsch D-U, Bille JF, **Freeman WR**: Confocal scanning laser tomography of the human fundus: Some findings on the origin of observed artifacts. Investigative Ophthalmology & Visual Science. 1992;33 (4):722.
47. Kuppermann BD, Petty JG, Richman DD, Matthews WC, Fullerton SC, **Freeman WR**: Cross-sectional prevalence of CMV retinitis in AIDS patients: Correlation with CD4 counts. Investigative Ophthalmology & Visual Science. 1992; 33(4): 750.

48. Tenhula WN, Rao NS, Madigan MC, **Freeman WR**, Sadun AA: Distribution of fiber degeneration in optic nerves from AIDS patients and rabbits treated with tumor necrosis factor. Investigative Ophthalmology & Visual Science. 1992; 33 (4): 1225.
49. Huang JS, Russack V, Flores-Aguilar M, **Freeman WR**: Evaluation of cytologic specimens obtained during experimental vitreous biopsy. Investigative Ophthalmology & Visual Science. 1992; 33 (4): 1309.
50. Quiceno JI, Kuppermann BD, Connor JD, Flores-Aguilar M, Capparelli EV, Sherwood CH, **Freeman WR**: HPLC analysis of intravitreal ganciclovir concentration after intravenous administration in AIDS patients with CMV retinitis. Investigative Ophthalmology & Visual Science. 1992; 33 (4):750.
51. **Freeman WR**, Flores-Aguilar M, Huang JS, Vuong C, Dolnak D, Chandler B, Wiley CA, De Clercq E.: HPMPC for the long acting treatment of experimental herpes simplex retinitis in rabbits. Investigative Ophthalmology & Visual Science. 1992; 33: 4:751, 1992.
52. Schneiderman TE, Munguia D, Polansky JR, Fauss DJ, Listhaus AD, **Freeman WR**: Intraocular corticosteroid penetration after periocular injection in humans and rabbits. Investigative Ophthalmology & Visual Science. 1992; 33:4:728.
53. Bylsma S, Kuppermann BD, Wiley CA, **Freeman WR**: Optic nerve involvement in CMV retinitis. Investigative Ophthalmology & Visual Science. 1992; 33:4:750.
54. Kuppermann BD, Flores-Aguilar M, Quiceno JI, Levi L, **Freeman WR**: A masked prospective evaluation of outcome parameters for CMV-related retinal detachment surgery in AIDS patients. Ophthalmology. 1992; 99 (Suppl): 114.
55. Tabbara KF, Chavis PS, **Freeman WR**: Clinical manifestations and outcome of vogt-koyanagi-harada syndrome in children. Ophthalmology. 1992; 99 (Suppl): 138.
56. Flores-Aguilar M, Kuppermann BD, Quiceno JI, Rickman LS, Dankner WM, Spector SA, Capparelli EV, Connor JD, Fullerton SC, Munguia D, **Freeman WR**: Pathophysiology and treatment of clinically resistant cytomegalovirus retinitis. Ophthalmology. 1992; 99 (Supplement): 115.
57. Shakiba S, **Freeman WR**, Amani R, Flores-Aguilar M, Munguia D, Chandler B, Wiley CA, Sridhar CN, Hostetler KY: Acyclovir diphosphate dimyristoylglycerol (ACVDP-DMG): A novel intravitreal drug for human cytomegalovirus (HCMV) retinitis. Investigative Ophthalmology & Visual Science. 1993; 34 (4): 2503.
58. Kuppermann BD, Assil KK, Vuong C, Dolnak DR, Chandler B, Wiley CA, De Clercq E, **Freeman WR**: The control of herpetic retinitis in rabbits using HPMPC in liposomes. Investigative Ophthalmology & Visual Science. 1993; 34 (4): 2502.

59. Bartsch D-U, **Freeman WR**: Depth resolution evaluation in confocal scanning laser tomography. Investigative Ophthalmology & Visual Science. 1993; 34 (4): 2959.
60. Gonzalez C, Wiley CA, **Freeman WR**, Garcia R, Wang R: Detection of cytomegalovirus in the retina of AIDS patients with and without cotton-wool spots using the polymerase chain reaction. Investigative Ophthalmology & Visual Science. 1993; 34 (4): 1741.
61. Flores-Aguilar M, Huang JS, Vuong C, Munguia D, Wiley CA, De Clercq E, **Freeman WR**: Long acting therapy of viral retinitis with HPMPC. Antiviral Research. 1993;20(S1):134.
62. Flores-Aguilar M, Kuppermann BD, Quiceno JI, Dankner WM, Wolf DG, Capparelli EV, Connor JD, Sherwood CH, Gambertoglio JG, Spector SA, **Freeman, WR**: Pathophysiology and treatment of clinically resistant cytomegalovirus retinitis. Antiviral Research. 1993;20(1):134.
63. Besen G, Assil KK, Pursley M, Flores-Aguilar M, Munguia D, Vuong , Gangan P, De Clercq E, Bergeron-Lynn G, **Freeman WR**: Reduced toxicity and prolonged availability of liposome encapsulated HPMPC. Investigative Ophthalmology & Visual Science. 1993; 34 (4): 3566.
64. Garcia RF, Quiceno JI, Flores-Aguilar M, Kuppermann BD, **Freeman WR**: Results of retinal detachment repair in CMV retinitis with and without scleral buckling: A controlled study. Ophthalmology. 1993; 100 (9A):87-8.
65. Grant I, Heaton RK, McCutchan JA, **Freeman WR**, Atkinson JH, Wallace MR, the HNRC Group: HIV-related mild neurocognitive disorder (MND): Prevalence, features, risk factors, and outcome. National Institute of Mental Health. 1994; April.
66. **Freeman WR**, Wiley CA, Flores-Aguilar M, Bergeron-Lynn G, Besen G: Animal models of herpes family viral retinitis. Antiviral Research. 1994; 23(Suppl 1): 108.
67. Flores-Aguilar M, Besen G, Vuong C, Gangan P, Tatebayashi M, Anderson K, **Freeman WR**: Evaluation of retinal toxicity and efficacy of a phosphorothioate antisense against herpes retinitis in a rabbit model. Antiviral Research. 1994; 23(Suppl 1):89.
68. Besen G, Jähne G, Winkler I, Helsberg M, Munguia D, Chandler B, Gangan P, Bergeron-Lynn G, **Freeman WR**: Evaluation of retinal toxicity of the anti-CMV compound 2-amino-7-[(1,3-dihydroxy-2-propoxy) methyl] Purine. Antiviral Research. 1994; 23 (Suppl 1):44.
69. Flores-Aguilar M, Besen G, **Freeman WR**: Treatment of viral retinitis with high-dose HPMPC Liposomes. Antiviral Research. 1994;23(Suppl 1):42.
70. Gonzalez C, Arévalo JF, Wiley CA, Kuppermann BD, Kirsch L, **Freeman WR**: Detection of CMV genetic sequence in vitreous and aqueous humor in AIDS patients



- utilizing semi-quantitative polymerase chain reaction. Investigative Ophthalmology & Visual Science. 1994;35:3368.
71. Flores-Aguilar M, Besen G, Munguia D, Vuong C, Gangan P, Tatebayashi M, Anderson K, **Freeman WR**: Evaluation of retinal toxicity and efficacy of a phosphorothioate antisense against herpes retinitis in a rabbit model. Investigative Ophthalmology & Visual Science. 1994;35:3369.
  72. Arévalo JF, Gonzalez C, Kirsch LS, Garcia R, Quiceno JI, Connor JD, Gambertoglio J, Capparelli E, Sherwood CH, Bergeron-Lynn G, **Freeman WR**: Intravitreal antiviral drug concentration after intravenous ganciclovir and foscarnet in acquired immunodeficiency syndrome patients with cytomegalovirus retinitis. Investigative Ophthalmology & Visual Science. 1994; 35:2957.
  73. Ahn DSH, Flores-Aguilar M, Munguia D, Gangan P, Wiley CA, Besen G, Tatebayashi M, **Freeman WR**: Retinal toxicity of acetylcholine (miochol) on rabbit eyes. Investigative Ophthalmology & Visual Science. 1994;35 :3004.
  74. Gangan PA, Flores-Aguilar M, Besen G, Kirsch LS, Wiley CA, Tatebayashi M, Bergeron-Lynn G, Chandler BA, Kwan MK, **Freeman WR**: Subretinal implantation of a biodegradable membrane. Investigative Ophthalmology & Visual Science. 1994; 35:365.
  75. **Freeman WR**, Kim JW, Haig WE, Mischell D, Azen SP, Maguire A, Bailey I, Goldbaum MH Vitrectomy for Treatment of Macular Hole Study Group: Vision and fundus photographic characteristics of patients with full thickness macular holes: Baseline results from a multicentered randomized trial. Investigative Ophthalmology & Visual Science. 1994; 35:2134.
  76. Plummer DJ, Sample PA, Arévalo JF, Quiceno JI, **Freeman WR**: Visual field loss in patients with HIV. Investigative Ophthalmology & Visual Science. 1994; 35:251.
  77. Kirsch LS, Arévalo JF, Garcia R, De Clercq E, **Freeman WR**: A prospective pilot study of intravitreal (s)-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine (HPMPC) for the treatment of CMV retinitis in AIDS patients. Investigative Ophthalmology & Visual Science. 1994;35: 265.
  78. Frohn A, Brauning J, Bartsch D-U, **Freeman WR**, Thiel HJ: Comparison of measurements of the nerve fiber layer thickness between scanning laser polarimetry and laser tomographic scanning. Investigative Ophthalmology & Visual Science. 1994; 35:408.
  79. Kashima Y, **Freeman WR**, Wurdeman A, Sadun, AA: Light and electron microscopic study of AIDS associated optic neuropathy: A New Feature. Investigative Ophthalmology & Visual Science. 1994; 35:1354.

80. Ochabski R, Kirsch LS, Weinreb RN, **Freeman WR**: Ultrasound biomicroscopy. Evaluation of pars plana sclerotomies. Investigative Ophthalmology & Visual Science. 1994; 35: 1672.
81. Skolik SA, Moreira CA, **Freeman WR**, Moreira AT, Saito Y, Cordahi G, Liggett PE: Liquid perfluorocarbons for control of bleeding during pars plana vitrectomy: An animal model and human clinical correlation. Investigative Ophthalmology & Visual Science. 1994; 35:1692.
82. Bartsch D-U, Weinreb RN, Zinser G, **Freeman WR**: Confocal scanning infrared laser angiography using indocyanine green. Investigative Ophthalmology & Visual Science. 1994; 35: 1773.
83. Zinser G, **Freeman WR**, Bartsch D-U: Depth resolution improvement in confocal scanning laser tomography. Investigative Ophthalmology & Visual Science. 1994; 35: 1775.
84. Kim JW, El-Haig WMO, Macguire AM, **Freeman WR**: Vitrectomy for treatment of macular hole study group: Preliminary data from a prospective randomized trial of surgery for stage II macular holes. Investigative Ophthalmology & Visual Science. 1994; 35:2134.
85. Besen G, Jahne G, Winkler I, Helsing M, Flores-Aguilar M, Tatebayashi M, Gangan P, Chavez de La Paz EC, Munguia D, Chandler B, Bergeron-Lynn G, **Freeman WR**: Evaluation of retinal toxicity and efficacy of the anti-CMV compound 2-amino-7 (1,3-dihydroxy-2-propoxy methyl) purine (compound i). Investigative Ophthalmology & Visual Science. 1994;35:3922.
86. Munguia D, Shakiba S, Flores-Aguilar M, Besen G, Tatebayashi M, Bergeron-Lynn G, Sridhar CN, Gardner MF, Hostetler KY, **Freeman WR**: Intravitreal pharmacokinetic study of acyclovir diphosphate dimyristoylglycerol (ACVDP-DMG): A promising liposome pro-drug for human cytomegalovirus (HCMV) retinitis. Investigative Ophthalmology & Visual Science. 1994; 35:3931.
87. **Freeman WR**: Retinal complication of AIDS. Neurology. 1994; 44(Suppl):90.
88. Kim JW, **Freeman WR**, Arévalo JF, El-Haig W, Azen SP, Mishell DR, Maguire AM, Mawr B: Characteristics, natural history and risk factors to progression in eyes with stage II macular hole. Ophthalmology. 1994; 101(Suppl): 69.
89. **Freeman WR**, Kim JW, El-Haig W, Azen SP, Mishell DR, the Vitrectomy for Macular Hole Study Group: Baseline vision measurements in patients with macular hole. Ophthalmology. 1994; 101(Suppl): 69.

90. McCutchan JA, **Freeman WR**, Eisenman P, Schrier RD, Heaton R, Jernigan T, Hesselink J, Wallace M, Grant I: Does subclinical CMV encephalitis (CMV-E) cause neuropsychologic (NP) dysfunction in AIDS patients presenting with CMV retinitis (CMV-R) The Second National Conference on Human Retroviruses and Related Infections. 1995;289(46).
91. Rahhal FM, Arévalo JF, Kirsch LS, Munguia D, De Clercq E, **Freeman WR**: Maintenance treatment of CMV retinitis with intravitreal HPMPC (Cidofovir) in patients with AIDS. Investigative Ophthalmology & Visual Science. 1995; 36(4): 180.
92. Bartsch D-U, Chavez-de La Paz E, **Freeman WR**: Improved depth resolution in confocal scanning laser tomography of macular diseases. Investigative Ophthalmology & Visual Science. 1995;6(4):239.
93. O'Connor NJ, Bartsch D-U, **Freeman WR**, Holmes TJ: Automatic random eye movement correction for visualization of 3D indocyanine green laser scanned ophthalmoscope data. Investigative Ophthalmology & Visual Science. 1995; 36(4):242.
94. Flores-Aguilar M, Besen G, Munguia D, Gangan P, Arévalo JF, **Freeman WR**: Clinical vs. fundus photographic evaluation of the treatment of CMV retinitis. Investigative Ophthalmology & Visual Science. 1995;36(4):321.
95. Taskintuna I, Flores-Aguilar M, Tatebayashi M, Munguia D, Chavez-de La Paz E, De Clercq E, Bergeron-Lynn G, Chandler B, **Freeman WR**: An animal model of HPMPC (cidofovir) toxicity. Investigative Ophthalmology & Visual Science. 1995;35(4):322.
96. Plummer D, Sample PA, Arévalo JF, Dua R, **Freeman WR**: Vision loss in HIV and individual without retinitis: A longitudinal study. Investigative Ophthalmology & Visual Science. 1995;36(4):778.
97. Fram NR, Plummer DJ, Arévalo JF, Quiceno JI, **Freeman WR**: Detection of CMV Retinitis through entopic perimetry. Investigative Ophthalmology & Visual Science. 1995; 36(4):778.
98. Chavez-de La Paz E, Arévalo JF, Rahhal FM, Munguia D, De Clercq E, **Freeman WR**: Incidence of retinal detachment following intravitreal HPMPC (cidofovir) for the treatment of cytomegalovirus retinitis. Investigative Ophthalmology & Visual Science. 1995; 36 (4):778.
99. Arévalo JF, Friedberg DN, Kirsch LS, Rahhal FM, Munguia D, **Freeman WR**: Myopia is a risk factor for the development of rhegmatogenous retinal detachment in patients with cytomegalovirus retinitis. Investigative Ophthalmology & Visual Science. 1995;36 (4): 820.
100. Mueller AJ, Bartsch D-U, Goldbaum MH, Bitner DG, Weinreb RN, **Freeman WR**: Microcirculation pattern of choroidal melanoma using confocal indocyanine green angiography. Ophthalmology. 1995; 102 (Suppl):161.

101. Rahhal FM, Arévalo JF, Kirsch LS, Munguia D, Chavez de la Paz E, **Freeman WR**: Intravitreal cidofovir (HPMPC) for the maintenance treatment of cytomegalovirus retinitis. Ophthalmology. 1995; 102(Suppl): 120.
102. **Freeman WR**, Vander JF, Banker AS: Use of perflubron as a new temporary vitreous substitute and manipulation agent for vitreoretinal surgery. Ophthalmology. 1995; 102 (Suppl): 93.
103. Banker AS, **Freeman WR**, Kim JW, Azen SP, Bailey I: Visual threatening complications of surgery for full thickness macular holes. Ophthalmology. 1995; 102 (Suppl): 91.
104. Dua R, Mueller AJ, Plummer DJ, Sample PA, **Freeman WR**: Visual dysfunctions in ophthalmoscopically normal HIV-positive patients are not related to the stage of the disease. Investigative Ophthalmology and Visual Science. 1996; 37 (3): 1723.
105. Sample PA, Heaton R, Grant I, **Freeman WR**: Relationship of visual field and neuropsychology disturbances due to HIV infection. Investigative Ophthalmology and Visual Science. 1996;37(3): 1724.
106. Taskintuna I, Rahhal FM, Arévalo JF, Munguia D, Banker AS, De Clerq E, **Freeman WR**: Low dose intravitreal HPMPC (cidofovir) therapy for CMV retinitis in patients with AIDS. Investigative Ophthalmology and Visual Science. 1996; 37 (3): 3073.
107. Banker AS, Taskintuna I, De Clerq E, Bergeron-Lynn G, Chandler B, **Freeman WR**: Influence of intravitreal injections of HPMPC-related nucleotide analogues on intraocular pressure of guinea pig eyes. Investigative Ophthalmology and Visual Science. 1996; 37(3): 3548.
108. Rahhal FM, Taskintuna I, Arévalo JF, Banker AS, Clarke T, **Freeman WR**: Intraocular drug delivery into silicone oil-filled eyes: Experience with cidofovir (HPMPC). Investigative Ophthalmology and Visual Science. 1996;37(3): 3604.
109. Lowder CY, Santos CI, Margolis TP, **Freeman WR**, Okinami S, Secic M, Knight C, Foster RE: CD8+ T-lymphocytes and CMV retinitis in patients with cd4+ 50. Investigative Ophthalmology and Visual Science. 1996;37(3): 4156.
110. Nasemann AJ, Bartsch DU, **Freeman WR**: Retinal layer-by-layer imaging with the confocal scanning laser ophthalmoscope. Ger J Ophthalmol. (1995), Suppl.
111. Mueller AJ, Bartsch DU, Grossniklaus H, **Freeman WR**: Identification of microvascularization patterns in human choroidal melanomas with confocal indocyanine green-angiography. Ger J Ophthalmol. (1996) 5.

112. Bartsch DU, Mueller AJ, Lopez A, **Freeman WR**: Simultaneous fluorescein and indocyanine green-angiography in macular diseases using the Heidelberg retina angiograph. Ger J Ophthalmol (1996) 5.
113. **Freeman WR**, Bartsch D-U, Mueller AJ, Weinreb RN: Simultaneous indocyanine-green and fluorescein angiography. Ophthalmology. 1996;103(Suppl) 118.
114. Taskintuna I, Rahhal FM, Arévalo J, Banker AS, De Clercq E, **Freeman WR**: Adverse events and autopsy findings after intravitreal cidofovir (HPMPC) therapy. Ophthalmology 1996; 104 (Suppl).
115. Mueller AJ, Bartsch D-U, Jian G, Folberg R, Kan-Mitchell J, Goldbaum MH, **Freeman WR**: Confocal scanning laser ICG of choroidal melanocytic tumors before and after brachy therapy. Ophthalmology 1996;103(Suppl).
116. Zhu L, **Freeman WR**, Fainman Y: Optical aberration and compensation in a mathematical eye model using ray tracing. ARVO Annual Meeting. Fort Lauderdale, Florida. April 21 - 26, 1996.
117. Zhu L, Bartsch D-U, **Freeman WR**, Sun PC, Fainman Y: Modeling human eye aberrations and their compensation for high resolution retinal imaging. OSA Annual Meeting, Rochester, NY. October 20 - 24, 1996.
118. Banker AS, **Freeman WR**, Azen SP, Vitrectomy for Macular Hole Study Group: A multicentered clinical trial of serum as adjuvant therapy for surgical treatment of macular holes. Invest Ophthalmol. 1997; 38 3392.
119. Macdonald JC, Taskintuna I, Rahhal FM, Munguia D, Banker AS, Clercq ED, **Freeman WR**: Intravitreal cidofovir (HPMPC) for the treatment of CMV retinitis: A dose escalating clinical trial. Invest Ophthalmol. 1997; 38:4278.
120. Cheng L, Hostetler KY, Aldem KA, Gardner MF, Avila CP, Bergeron-Lynn G, Munguia D, **Freeman WR**: Intravitreal toxicology in rabbits of the 1-o-octadecyl-sn-glycerol-3-phosphonoformate (ODG-PFA) and its carboxymethyl ester. Invest Ophthalmol. 1997;38:1015.
121. Avila CP, Mueller AJ, Bartsch D-U, **Freeman WR**: Retinal blood flow in branch retinal vein occlusion using scanning laser doppler flowmetry. Invest Ophthalmol. 1997;38:4885.
122. Mueller AJ, Bartsch D-U, Folbert RN, Mehaffey M, Jian G, Avila CP, Taskintuna I, Kan-Mitchell J, **Freeman WR**: Prognostically significant microvascularization patterns in a human choroidal melanoma rabbit eye model.: Confocal ICG and histology. Invest Ophthalmol. 1997;38: 3758.

123. Wang JC, Mueller AJ, Bartsch D-U, Folberg RN, Mehaffey M, Jian G, Kan-Mitchell J, **Freeman WR**: Prognostically significant microvascularization patterns in a human choroidal melanoma scid mouse model: Confocal ICG and histology. Invest Ophthalmol. 1997; 38:3760.
124. Taskintuna I, Smith IL, Rahhal FM, Powell HC, Mueller AJ, AI E, Jiles RE, Cherrington JM, Spector SA, **Freeman WR**: Clinical resistance to intravitreal cidofovir treatment in patients with AIDS - related cytomegalovirus retinitis. Invest Ophthalmol 38:3419, 1997.
125. Bartsch D-U, Mueller AJ, O'Connor N, Holmes T, **Freeman WR**: Improved visualization of ocular microvascularization in patients with melanoma and other diseases using computer image processing. Invest Ophthalmol. 38: 3754, 1997.
126. Munguia HD, Bartsch D-U, Mueller AJ, Schaller U, **Freeman WR**: Visualization of retinal and choroidal microcirculation in three animal models of ocular melanoma using simultaneous indocyanine green and fluorescein angiography. Invest Ophthalmol. 38:1596, 1997.
127. Plummer DJ, Sample PA, Azen SP, **Freeman WR**: Improved entopic perimetry allows detection and localization of scotomas due to CMV retinitis. Invest Ophthalmol. 38:5152, 1997.
128. Arévalo JF, **Freeman WR**: Intraocular pressure in HIV positive patients without CMV retinitis: Correlation with the CD-4 cell count. XXI Pan American meeting. Cancun, Mexico 1997.
129. Mueller AJ, Bartsch D-U, Folberg R, Mehaffey MG, **Freeman WR**, Kampik A: Histologic confirmation of choroidal melanoma microvascularization patterns imaged with confocal ICG. American Academy of Ophthalmology, San Francisco, October 1997, Poster #77.
130. Torriani FJ, Macdonald JC, Karavellas M, **Freeman WR**: Lack of progression after discontinuation of maintenance therapy for cytomegalovirus retinitis (CMRV) in AIDS patients responding to highly active antiretroviral therapy (HAART). Abstracts in HIV and Other Retroviruses, and Complications of AIDS. 37th ICAAC September 28 - October 1, 1997 pg249.
131. Cheng L, Hostetler KY, Gardner MF, Avila CP, Bergeron-Lynn G, Keefe KS, Munguia D, Garcia C, **Freeman WR**: Intravitreal toxicology of the 1-O-octadecyl-sn-glycerol-3-phosphonoformate (ODG-PFA) and its carboxymethyl ester in liposome formulation. Invest. Ophthalmol. 1998, In Press.
132. Torriani FJ, Havlir DV, **Freeman WR**, Durand D, Schrier R: Proliferative responses against CMV in AIDS patients on HAART and with healed CMVretinitis who stopped

- maintenance therapy. Program and Abstracts of the 5th Conference on Retroviruses and Opportunistic Infections. Chicago, IL. February 1-5, 1998 (747).
133. **Freeman WR**, Macdonald JC, Torriani FJ, Karavellas M. Ophthalmologic manifestation of immune recovery in AIDS patients on HAART therapy. Program and Abstracts of the 5th Conference on Retroviruses and Opportunistic Infections. Chicago, IL. February 1-5, 1998 (757).
  134. Plummer DJ, Sample PA, **Freeman WR**: Entopic perimetry: A rapid, inexpensive screening technique for CMV retinitis. In: program and abstracts of the 5th conference on retroviruses and opportunistic infections. Chicago, IL. February 1-5, 1998 (755).
  135. Matsubara KI, Plummer DJ, Sample PA, **Freeman WR**: A comparison between entopic and achromatic perimetry for detection of scotomas due to CMV retinitis. Investigative Ophthalmology. (Suppl 1998) Poster Board#B563. 1998;39 (4)640.
  136. Akduman L, Karavellas MP, Macdonald JC, Olk RJ, **Freeman WR**: Macular translocation for exudative age-related macular degeneration. Investigative Ophthalmology. (Suppl). Program #1034. 1998;39(4):1034.
  137. Plummer DJ, Sample PA, Mueller AJ, Matsubara KI, Sadun A, Grant I, **Freeman WR**: HIV-related patterns of visual field loss reflect optic nerve injury. Investigative Ophthalmology. (Suppl). Program #1058. 1998;39 (4) 1058.
  138. Zhang KE, McDermott CR, Brekken J, Vekich S, Shalinsky DR, Appelt K, Rivero ME, Garcia CR, **Freeman WR**: Ocular bioavailability and pharmacokinetics of AG3340, a potent MMP inhibitor with antiangiogenic activity, following oral administration. New York Academy of Sciences Conference on MMPs. Tampa, FL. October 21-24, 1998.
  139. Karavellas MP, Lowder CY, Macdonald JC, Torriani FJ, **Freeman WR**: Immune recovery vitritis in AIDS: Natural history, long-term treatment results, and associated factors of a new syndrome. Ophthalmology. (Suppl). Paper pg. 138, November 11, 1998.
  140. Plummer DJ, Azen SP, Sample PA, La Bree L, **Freeman WR**: Entopic perimetry reliability in locating scotomas due to CMV retinitis. 2<sup>nd</sup> International Conference on Ocular Infections. Page 11. Munich, Germany, August 1998.
  141. Reed JB, Macdonald JC, **Freeman WR**, Morse LS: Highly active antiretroviral therapy associated-regression of CMV retinitis: Long-term results. Investigative Ophthalmology. (Suppl). Program #1062. 1998; 39 (4) 1062.
  142. Macdonald JC, Morse LS, Torriana FJ, Karavellas MP, Schrier R, Reed JB, **Freeman WR**: Lack of progression of CMV retinitis without anti-CMV therapy in AIDS patients with protease inhibitor related immune recovery. Investigative Ophthalmology. (Suppl). Program # 1063. 1998; 39 (4) 1063.

143. Karavellas MP, Lowder CY, Macdonald JC, Glasgow CP, Avila CP, **Freeman WR**: Immune recovery vitritis associated with inactive CMV retinitis. Investigative Ophthalmology. (Suppl). Program #1064. 1998; 39 (4) 1064.
144. Cheng L, Hostetler Ky, Gardner MF, Avila CP, Bergeron-Lynn G, Keefe KS, Munguia D, Garcia CR, **Freeman WR**: Intravitreal toxicology of the 1-O-Octadecyl-SN-Glycerol-3-Phosphonoformate (ODG-PFA) and its Carboxymethyl ester in liposome formulation. Investigative Ophthalmology. (Suppl). Poster Board #B142. 1998;39(4):1261.
145. Schaller UC, Mueller AJ, Folberg R, Kan-Mitchell J, Mehaffey M, **Freeman WR**: Metastatic potential of the human choroidal melanoma SCID-mouse model. Investigative Ophthalmology. (Suppl). Program #1944. 1998;39 (4) 2707.
146. Rivero ME, Garcia CR, Hagedorn M, Zhang KE, McDermott C, Bartsch D-U, Ruoslahti E, Keefe KS, Appelt K, **Freeman WR**: Intraocular properties of AG3340, a selective matrix metalloproteinases inhibitor with antiangiogenic activity. Investigative Ophthalmology. (Suppl). Poster Board #B564. 1998;39 (4) 2707.
147. Bartsch D-U, Otto T, Clark T, **Freeman WR**: Automatic wide-field retinal image montage using scanning laser ophthalmoscopy in retinal diseases. Investigative Ophthalmology. (Suppl). Poster Board #B616. 1998; 39 (4) 2759.
148. **Freeman WR**, Macdonald JC, Garcia CR, Rivero ME, Smith I, Shapiro AM, Jiles RE, Spector SA: Quantitative competitive PCR analysis of aqueous, vitreous and plasma; Relationship to and prediction of CMV retinitis activity and antiviral resistance. Investigative Ophthalmology. (Suppl). Program #4107. 1998;39 (4) 4107.
149. Garcia CR, Rivero ME, Bartsch D-U, Ishiko S, Takamiya A, Kukui K, Clark T, Bartsch D-U, Yoshida A, **Freeman WR**: Oral fluorescein angiography with the confocal scanning laser ophthalmoscope. Investigative Ophthalmology. (Suppl). Paper pg. 125, November 11. 1998; 39 (4) 4241.
150. **Freeman WR**: Management of CMV retinitis in the HAART era. 2nd International Conference on Ocular Infections. 1998, In Press.
151. Zhang KE, McDermott CR, Brekken J, Vekich S, Shalinsky DR, Appelt K, Rivero ME, Garcia CR, **Freeman WR**: Ocular bioavailability and pharmacokinetics of AG3340, a potent MMP inhibitor with antiangiogenic activity, following oral administration. New York Academy of Sciences Conference on MMPs. Tampa, FL. October 21-24, 1998.
152. Shalinsky DR, Zou H, McDermott CD, Brekken J, Niesman MR, Rivero ME, Garcia CR, **Freeman WR**, Appelt K: AG3340, a selective MMP inhibitor, has broad antiangiogenic activity across oncology and ophthalmology models in vivo. AACR Annual Meeting, Philadelphia, PA. April 10-14, 1999.



153. Macdonald JC, Karavellas MP, Morse LS, Reed JB, Carmichael, Torriani FJ, **Freeman WR**: Healed cytomegalovirus retinitis without CMV therapy in AIDS patients with protease inhibitor related immune recovery. Ophthalmology. (Suppl) Paper p. 138, November 11, 1998.
154. Akduman L, Oruc S, Olk R, **Freeman WR**: Anatomic screening of patients with subfoveal choroidal neovascularization (CNV) for macular translocation (MT). Ophthalmology. (Suppl). Scientific Poster # 143 pg. 166, November 11, 1998.
155. Rivero ME, Bartsch D-U, Garcia CR, Zinser G, Otto T, **Freeman WR**: Automated scanning laser ophthalmoscope (SLO) image montages of retinal diseases. Ophthalmology. (Suppl). Scientific Poster #150 pg. 167, November 11, 1998.
156. Garcia CR, Rivero ME, Ishiko S, Fukui K, Yoshida A, **Freeman WR**: Oral fluorescein angiography with the confocal laser ophthalmoscope. Ophthalmology. (Suppl). Paper pg. 125, November 11, 1998.
157. Flores-Aguilar M, Munguia D, Azen SP, Gangan P, Wolf D, Besen G, Spector SA, **Freeman WR**: Measures of systemic viral disease in patients with AIDS and cytomegalovirus retinitis: A Prospective Study. 2<sup>nd</sup> International Conference on Ocular Infections page 69, Munich, Germany, August 1998.
158. Plummer DJ, Azen SP, Sample PA, La Bree L, **Freeman WR**: Entoptic perimetry reliability in locating scotomas due to CMV retinitis. 2<sup>nd</sup> International Conference on Ocular Infections. Page 11. Munich, Germany, August 1998.
159. Smith IL, Macdonald JC, **Freeman WR**, Shapiro AM, Spector SA: Qualitative and Quantitative competitive PCR-based analyses of vitreous and aqueous humor accurately reflect cytomegalovirus (CMV) retinitis activity. 2<sup>nd</sup> International Conference on Ocular Infections. Page 68, Munich, Germany, August 1998.
160. Karavellas MP, Lowder CY, Macdonald JC, **Freeman WR**: Immune recovery vitritis in AIDS; natural history, long term treatment results and associated factors of a new syndrome. 2<sup>nd</sup> International Conference on Ocular Infections. Page 66, Munich, Germany, August 1998.
161. Plummer DJ, Bartsch D-U, **Freeman WR**: Portable scanning laser entoptic perimetry for retinal disease detection within a 120-degree field of vision. Investigative Ophthalmology and Visual Science. 1999; 40 (Suppl), pg. S571.
162. Garcia CR, Rivero ME, Hagedorn M, McDermott CD, Bergeron Lynn G, Appelt K, **Freeman WR**: Efficacy of AG3340 a selective inhibitor of matrix metalloproteases, in an animal model of retinal neovascularization. Investigative Ophthalmology and Visual Science. 1999; 40 (Suppl), pg. S617.

163. Ozerdem U, Cheng LY, Mach-Hofacre B, Chaidhawangul S, McDermott C, Appelt K, **Freeman WR**: The effect of AG3340, a potent inhibitor of matrix metalloproteinase on a subacute model of proliferative vitreoretinopathy. Investigative Ophthalmology and Visual Science. 1999;40 (Suppl), pg.S974.
164. Bartsch DG, Zhu L, Sun PC, Fainman Y, **Freeman WR**: High-resolution fundus imaging using a micromachined membrane deformable mirror. Investigative Ophthalmology and Visual Science. 1999; 40 (Suppl) pg. S124.
165. Chaidhawangul S, Cheng LY, Avila P, Bergeron Lynn G, Friedmann T, Wong-Staal F, **Freeman WR**: Evaluation of different viral vector systems for in vivo gene delivery to the rabbit retina. Investigative Ophthalmology and Visual Science. 1999; 40 (Suppl) page S717.
166. Cheng Ly, Hostetler KY, Ozerdem U, Gardner MF, Mach-Hofacre B, **Freeman WR**: Intravitreal toxicology and treatment efficacy of a long acting anti-viral lipid prodrug of ganciclovir (HDP-GCV) in liposome formulation. Investigative Ophthalmology and Visual Science. 1999;40(Suppl) pg. S872.
167. O'Connor N, Aphinyanaphongs Y, Zinser G, Bartsch D, **Freeman WR**, Flanagan J, Hutchins N, Hudson C, Holmes T.: Computational Resolving Power Improvement for the Scanning Laser Ophthalmoscope. Investigative Ophthalmology and Visual Science. (1999), 40 [Suppl]: Abstract #664, page S123.
168. Rivero ME, Garcia CR, Wiley CA, Keefe KS, Appelt K, **Freeman WR**: Evaluation of long-term effects of intraocular injections of AG3340, a selective matrix metalloprotease inhibitor. Investigative Ophthalmology and Visual Science. 1999;40 (Suppl) pg. S172.
169. **Freeman WR**, Karavellas MP, Macdonald JC, Dreilinger A, Smith I, Torriani F, Schrier R: Immunopathogenesis of HAART induced immune-recovery and vitritis in CMV retinitis. Investigative Ophthalmology and Visual Science. 1999;40 (Suppl), pg. S188.
170. Song MK, Karavellas MP, Macdonald JC, **Freeman WR**: Posterior and anterior segment complications of AIDS patients with immune recovery vitritis. Investigative Ophthalmology and Visual Science. 1999;40 (Suppl) pg. S874.
171. Mueller AJ, Bartsch DU, Shalinsky D, Appelt K, Folberg R, **Freeman WR**: Effects of a novel metalloproteinase-inhibitor (AG3340) on subcutaneous and ocular tumors in the human choroidal melanoma SCID mouse model. Investigative Ophthalmology and Visual Science. 1999;40 (Suppl), pg. S247.
172. Smith IL, Jiles RE, Shapiro AM, Macdonald JC, Song MK, **Freeman WR**, and Spector A: Resistance patterns of ocular and systemic cytomegalovirus (CMV) populations indicate that ocular CMV comprise a separate and distinct viral reservoir. Programs and abstracts 24<sup>th</sup> International Herpesvirus Workshop, Boston MA, July 1999.

173. Garcia CR, Rivero ME, Bartsch D-U, Ishiko S, Takamyia A, Fukui MS, Hirokawa H, Clark T, Yoshida A, **Freeman WR**: Oral Fluorescein Angiography with the Confocal Scanning Laser Ophthalmoscope. American Academy of Ophthalmology XXII Congress of the Pan-American Association of Ophthalmology. Annual Meeting-Vitreoretinal Symposium, Orlando, Florida. October 24, 1999.
174. Shalinsky DR, Zou H, McDermott CD, Brekken J, Niesman MR, Rivero ME, Garcia CR, **Freeman WR**, Appelt K: AG3340, a selective MMP inhibitor, has broad antiangiogenic activity across oncology and ophthalmology models in vivo. AACR Annual Meeting, Philadelphia, PA. April 10 - 14, 1999.
175. Smith IL, Jiles RE, Shapiro AM, Macdonald JC, Song MK, Freeman WR, and Spector A: Resistance patterns of ocular and systemic cytomegalovirus (CMV) populations indicate that ocular CMV comprise a separate and distinct viral reservoir. Programs and abstracts 24<sup>th</sup> International Herpesvirus Workshop, Boston MA, July 1999.
176. Cheng L, Ozerdem U, Song M-K, Azen SP, **Freeman WR**: Prevalence, Correlates, and Natural History of Epiretinal Membranes Surrounding Idiopathic Macular Hole. American Academy of Ophthalmology XXII Congress of the Pan-American Association of Ophthalmology. Annual Meeting-Academy Free Papers, Orlando, Florida. October 27, 1999.
177. Green RL, Ossoinig KC, Byrne SF, Hill M, Harrie RP, DiBernardo C, **Freeman WR**: Ultrasound of the Eye. American Academy of Ophthalmology XXII Congress of the Pan-American Association of Ophthalmology. Annual Meeting – Academy Instruction Course Program, Orlando, Florida. October 27, 1999.
178. Scholz B, Rivero ME, Cheng LY, Zhange KE, Nanda A, Appelt K, and **Freeman WR**: Intraocular Properties of Prinomastat (AG3340) following Intravitreal Injection Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #733, page S142.
179. Bartsch DG, Zhu L, Sun PC, Fainman Y, and **Freeman WR**: High-resolution retinal imaging using inverse filtering and wavefront sensor measurement. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #862, page S166.
180. Clark T, Ozerdem U, Bartsch D-U, Mach-Hofacre B, Irkec M, and **Freeman WR**: A Simple Non-contact Wide-angle Fundus Photography and Fluorescein Angiography Procedure for Clinical and Research Use. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #877, page S169.
181. Mach-Hofacre B, Ozerdem U, Soules K, Mendez T, Pham T, Appelt K, and **Freeman WR**: The Effect of Prinomastat (AG3340), A Selective Inhibitor of Matrix Metalloproteinases, on Experimental Posterior Penetrating Eye Trauma in the Rabbit. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #1813, page S345.

182. Plummer, DJ, Bartsch D-U G, Azen SP, Max SL, Sadun AA, and **Freeman WR**: Retinal Nerve Fiber Layer Evaluation in HIV-positive Patients. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #1848, page S352.
183. Song MK, Azen S, Buley A, Cheng LY, Chaidhawangul S, Ozerdem U, Scholz B, and **Freeman WR**: Effect of Ganciclovir on the Incidence of Immune Recovery Vitritis in AIDS Patients with Healed CMV Retinitis. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #1850, page S352.
184. Pham T, Ozerdem U, Folberg R, Mach-Hofacre B, Mueller AJ, Soules K, Appelt K, and **Freeman WR**: Histopathologic Analysis of Regression of AG3340 (Prinomastat) Treated Human Choroidal Melanoma in a Partially Immunosuppressed Rabbit Model. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #2034, page S385.
185. Ozerdem U, Mach-Hofacre B, Folberg R, Mueller AJ, Maniotis A, Ochabsky R, Bergeron-Lynn G, Pham T, Appelt K, and **Freeman WR**: The Effect of Prinomastat (AG3340), A Selective Inhibitor of Matrix Metalloproteinases on Tumor Growth in the Human Choroidal Melanoma Rabbit Model. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #2035, page S385.
186. Cheng LY, El-Bradey M, Scholz BM, Song MK, Lai MY, Azen SP, **Freeman WR**, and Vitrectomy Macular Hole Group: Duration of Vitrectomy Surgery and Post-Operative Nuclear Sclerotic Cataract in Idiopathic Macular Hole Patient. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #2489, page S468.
187. Chaidhawangul S, Cheng LY, Gilbert J, Bergeron-Lynn G, Soules KA, Severson GM, Poeschla E, Wong-Staal F, **Freeman WR**: An Efficient Photoreceptor Transducing Virus Vector Based on HIV-2. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #2880, page S542.
188. **Freeman WR**, Plummer DJ, Azen SP, Bartsch D-U G, Levi L, and Sadun AA: Entoptic Perimetry for the Screening of Retinal and Neuro-Ophthalmological Disease. Investigative Ophthalmology and Visual Science (2000), 41[Suppl]: Abstract #4048, page S763.
189. **Freeman WR**, Bartsch D-U, Elmusharaf AB, El-Bradey MH: Improved Visualization of Choroidal Neovascularization by SLO Frame Averaging Using Automated Image Registration. 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology (2000), Abstract #301, page 245.
190. Elmusharaf AB, **Freeman WR**, Cheng L, Scholz B, El-Bradey MH: Oral Fluorescein Angiography in Patients with Choroidal Neovascularization and Macular Degeneration. 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology (2000), Abstract #302 page 245.

191. El-Bradey MH, Cheng L, Song M-K, Garcia CR, **Freeman WR**: Long-Term Follow-up of Macular Complications in Eyes with Immune Recovery Vitritis. 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology (2000), Abstract #303, page 245.
192. Schaller UC, Mueller AJ, Bosserhoff AK, Kan-Mitchell J, **Freeman WR**, Folberg R, Buettner R, Kampik A: Protein “Melanoma inhibitory activity” (MIA) in the Human Choroidal Melanoma SCID-Mouse Model. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #599, page S110.
193. Rodanant N, Aurora A, Friberg TR, Cheng L, Toyoguchi M, Corbin P, **Freeman WR**: Predictors of Drusen Reduction after Subthreshold Infrared (810-nm) Diode Laser Macular Grid Photocoagulation in Prophylactic Treatment for Nonexudative Age-related Macular Degeneration. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #677, page S127.
194. Cheng L, Hostetler KY, Chaidhawangul S, Gardner MF, Elj-Bradey M, **Freeman WR**: A New Intravitreally Injectable, Crystalline Prodrug of Ganciclovir (HDP-P-GCV). Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #932, page S174.
195. Mueller AJ, Schaller UC, Folberg R, **Freeman WR**: Orthotopic vs. non-orthotopic implantation of a human choroidal uveal melanoma cell line (OCM 1) in the SCID mouse. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #1175, page S218.
196. Elmusharaf A, El-Bradey MH, Bartsch D-U, Cheng L, **Freeman WR**: Effect of Triamcinolone acetonide on experimental choroidal neovascularization in a rat model. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #1245, page S231.
197. Toyoguchi M, Cheng L, Looney D, Wong-Staal F, Rodanant N, Bergeron-Lynn G, Severson GM, **Freeman WR**: A Reporter Gene Transfer to Rabbit Retina Mediated by Feline Immunodeficiency Virus (FIV) Based Viral Vector. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #1856, page S344.
198. El-Bradey MH, Cheng L, Appelt K, Bartsch DU, Plummer D, Bergeron-Lynn G, Severson GM, **Freeman WR**: Prevention of Experimental Laser Induced Choroidal Neovascularization by Intravitreal Injection of AG3340. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #2805, page S521.
199. Goldberg DE, **Freeman WR**: Long Term Visual Outcome of Patients with CMV Retinitis on Highly Active Antiretroviral Therapy (HAART). Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #3045, page S567.

200. Bartsch DG, El-Bradey MH, Severson G, Bergeron-Lynn G, Elmusharaf A, Cheng L, **Freeman WR**: Evaluation of choroidal neovascularization using confocal indocyanine green angiography in a rat model. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #3781, page S702.
201. Aurora A, Rodanant N, Cheng L, Bartsch DU, WR, **Freeman WR**: Volumetric Analysis of Macular Edema with the Heidelberg Retina Tomograph in Immune Recovery Uveitis. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #3783, page S702.
202. Tabandeh H, Smiddy WE, Sullivan PM, Monshizadeh R, Cheng L, **Freeman WR**: Characteristics and Outcomes of Choroidal Neovascularization Following Macular Hole Surgery. Investigative Ophthalmology and Visual Science (2001) 42 [Suppl]: Abstract #3914, page S729.
203. Cheng L, Azen P, El-Bradley M, Toyoguchi M, **Freeman WR**: Effects of Preoperative and Postoperative Epimacular Membranes on Macular Hole Closure and Visual Restoration.
204. Goldberg D, Roch-Leveca AC, Maclean MH, Brody BL, McGuire DE, Goldbaum MH, Thomas RG, Brown SI, **Freeman WR**: Psychosocial and Functional Parameters in Patients with Age Related Macular Degeneration and Choroidal Neovascularization with and without Photodynamic Therapy. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract # , page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
205. Schaller UC, Mueller AJ, Bartsch DU, Schaumberger M, Folberg R, **Freeman WR**, Kampik A: Correlation of the ICG-angiographical Presence of Complex Microcirculation Patterns with the Regression Rate of Uveal Melanomas following Brachytherapy. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #1153, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
206. Rodanant N, **Freeman WR**, Musch DC, Friberg TR, Cheng L, Toyoguchi M, Bartsch DU, PTAMD Study Group: Predictors of Choroidal Neovascularization in Eyes Treated with Subthreshold Diode Grid Laser Therapy to Prevent Choroidal Neovascularization; Results from the Unilateral Arm of the PTAMD Study. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract # 1211, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
207. Toyoguchi M, Cheng L, Hostetler KY, Gardner MF, Beadle JR, Rodanant N, Bergeron-Lynn G, **Freeman WR**: Free Ganciclovir Release from Different formulations of 1-O-Hexadecyl-propanediol-3-Phospho-Ganciclovir (HDP-P-GCV). Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #1850, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.

208. Beadle JR, Cheng L, Hostetler KY, **Freeman WR**: Phospholipid Prodrugs of Nucleosides for Intravitreal Injection: Synthesis of Hexadecyloxypropyl-phospho-Ara G for the Treatment of Proliferative Vitreoretinopathy. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract # 2311. ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
209. Cheng LY, Hostetler KY, Beadle JR, Toyoguchi M, Aldern K, Rodanant N, Bergeron-Lynn G, **Freeman WR**: Intravitreal Toxicology and Pharmacokinetics of 1-O-Hexadecylpro-penediol-3-phospho Arabinosides. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract # 2802, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
210. Pham TH, Bartsch DU, **Freeman WR**: Retinal Vessel Reaction to 100% Oxygen and Carbogen Breathing in Diabetic Patients Using the Retinal Vessel Analyzer. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #559, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
211. Gong X, Bartsch DU, **Freeman WR**: A New Method of Determining Retinal Thickness for Optical Coherence Tomography. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #2547, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
212. Ly CC, Bartsch DU, **Freeman WR**: Accuracy of the Optical Coherence Tomograph in a Clinical Setting. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #2556, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
213. Bartsch DU, Freeman WR: Characterization of Whole Eye Aberration by Ray Tracing and Hartmann-Shack Wavefront Sensing. Investigative Ophthalmology and Visual Science (2002) [Suppl]: Abstract #2055, page . ARVO Annual Meeting. Fort Lauderdale, Florida. May 5-10, 2002.
214. Freeman WR, Aurora A, Bartsch DU, Rodanant N, Cheng L: Volumetric Analysis of Macula Edema by Scanning Laser Tomography in Immune Recovery Uveitis. Short Title: Volumetric Analysis of Macular Edema. 3<sup>rd</sup> International Conference of Ocular Infections. Page 33, Salzburg, Austria, June 2002.
215. Freeman WR, Schrier RD, Song MK, Smith I, Karavellas MP, Torriani FJ, Garcia CR: Intraocular Viral and Immune Pathogenesis of Immune Recovery Uveitis in Patients with Healed Cytomegalovirus Retinitis. 3<sup>rd</sup> International Conference of Ocular Infections. Page 36, Salzburg, Austria, June 2002.
216. Freeman WR: Changing Patterns for the Repair of Primary Retinal Detachment – Minisymposium: Outlook for the Future, 1037. ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.

217. Kosobucki BR, Goldberg DE, Bessho K, Koh J, Rodanant N, LaBree L, Cheng L, Schrier RD, Azen SP, Freeman WR: Valganciclovir Therapy for Immune Recovery Uveitis Complicated by Macular Edema. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 3131. (2003) ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
218. Bessho K, Bartsch DU, Cheng L, Koh HJ, Freeman WR: Ocular Wavefront Abberations in Patients with Macular Diseases. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 3199. (2003) ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
219. Koh HJ, Bessho K, Cheng L, Bartsch DU, Jones TR, Bergeron-Lynn G, Freeman WR: Treatment of Choroidal Neovascularization with an 8-Mer Peptide Derived From the Uroplasinogen Activator System. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 3918. Page B621. (2003) ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
220. Lee JE, Cheng L, Hostetler KY, Koh HJ, Beadle JR, Aldern K, Bergeron-Lynn G, Freeman WR: Prevention and Treatment of HSV-1 Retinitis in Rabbit with Intravitreal Crystalline 1-0-Hexadecyloxypropyl-Cyclic Cidofovir. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 4211. (2003) ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
221. Cheng L, Hostetler KY, Lee J, Koh H, Beadle JR, Toyoguchi M, Aldern K, Bergeron-Lynn G, Freeman WR: Further Characterization of a Novel Intraocular Drug Delivery System using Crystalline 1-0-hexadecyloxypropyl-cyclic Cidofovir. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 4212. (2003) ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
222. Freeman WR, Bessho K, Rodanant N, Bartsch DU, Cheng L: The Effect of Subthreshold Infrared Laser Treatment for Drusen Regression on Macular Autofluorescence in Patients with Age Related Macular Degeneration. Invest. Ophthalmol. Vis. Sci. 44: E-Abstract 5020. Page B679. ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
223. Morrison VL, LaBree L, Azen SP, Goldberg DE, Freeman WR: Results of Silicone Oil Removal in Patients with Cytomegalovirus Retinitis Related Retinal Detachments. American Academy of Ophthalmology. Scientific Poster 293. Anaheim, California. November 15-18, 2003.
224. Freeman WR, Koh HJ, Azen SP, Flaxel CJ, LaBree LD, Wills M, Jones TR. Effect of a novel octapeptide urokinase fragment, Å6, on experimental choroidal neovascularization in the monkey. Paper Session # 1183. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
225. Kosobucki BR, Freeman WR, Cheng L. Photographic Estimation of the Duration of High Dose Intravitreal Triamcinolone in the Vitrectomized Eye. Scientific Poster 1918/B729. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.



226. Bessho K, Bartsch DU, Koh HJ, Kozak I, Freeman WR. Characteristics of autofluorescence and optical coherence tomography imaging after prophylactic subthreshold diode laser treatment for drusen. Paper Session # 2204. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
227. Cheng LY, Toyoguchi M, Looney DJ, Lee J, Koh HJ, Davidson MC, Freeman WR. An Efficient Gene Transferring Vector for Retinal Pigment Epithelium Cells. Scientific Poster 3704/B165. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
228. Lu SY, Cheng L, Hostetler KY, Koh HJ, Beadle JR, Davidson MC, Freeman WR. Intraocular Properties of 1-0-hexadecyloxypropyl-cyclic-cidofovir in guinea pigs. Paper Session # 4554. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
229. Bartsch D-U, Gomez L, Bessho K. Comparison of 4 Different Wavefront Analysers in a Model Eye with Different Known Waveplates. Scientific Poster. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
230. Kozak I, Bartsch D-U, Kosobucki B, Cheng L, Freeman WR. Objective Analysis of Vision Loss in HIV-positive Patients in the HAART Era Using OCT. Paper Session # 1131. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
231. Morrison VL, Koh HJ, Cheng L, Bessho K, Freeman WR. Intravitreal Toxicity of the Kenalog Vehicle (Benzyl Alcohol) in Rabbits. Scientific Poster 1917/B728. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
232. Tanaka N, Ikawa M, Bessho K, Freeman WR. Prokineticin 1 Induces Choroidal Angiogenesis but not Retinal Angiogenesis; a Possible Model for the Pathogenesis of Age-Related Macular Degeneration. Scientific Poster 1820/B631. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
233. Naheedy JH, Bartsch D-U, Freeman WR. Comparison of Retinal Thickness and Macular Volume Using Three Imaging Techniques. Scientific Poster 2407//B42. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
234. Koh HJ, Cheng L, Bessho K, Jones TR, Davidson MC, Freeman WR. Intraocular Properties of Urokinase-derived Anti-angiogenic Å6 Peptide in Rabbits. Scientific Poster 5231/B555. ARVO Annual Meeting. Fort Lauderdale, Florida. April 25-29, 2004.
235. Wu YK, Cheng L, Hostetler KY, Kayikcioglu O, Valiaeva N, Beadle J, Bergeron-Lynn G and Freeman WR: A novel Intravitreally injectable, Crystalline Prodrug of 5-Fluoruracil (HDP-P-f2' du) for Sustained Intraocular drug Delivery to treat pathologic Intraocular Proliferation. Scientific Poster 471/B445. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.

236. Kozak I, Kayikcioglu OR, Cheng L, Frost GI, Haller MF, Lim JE and Freeman WR: Recombinant Human Hyaluronidase facilitates Dexamethasone Penetration into the Posterior Ocular Segment after Sub-Tenon's Injection. Scientific Poster 1015/B989. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
237. Morrison VL, Kozak I, Kayikcioglu OR and Freeman WR: High Dose Intravitreal Kenalog for the Treatment of Immune Recovery Uveitis Macular Edema. Scientific Poster 1036/B1010. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
238. Falkenstein I, Kozak I, Kayikcioglu O, Omid N, Cheng L, Bartsch DU and Freeman WR: Assessment of Retinal Function in HIV patients without infectious Retinitis with Various CD4 counts by Multifocal Electroretinogram and Automated Perimetry Studies. Scientific Poster 1036/B1010. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
239. Bartsch DU, Kozak I, Cheng L, Kayikcioglu O, McCutchan AM, Weinreb RN and Freeman WR: Laser polarimetry and Optical Coherence Tomography optic Nerve Head Analysis in HIV patients with out infectious retinitis. Scientific Poster 239/B265 ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
240. Kayikcioglu OR, Cheng L, Kozak I, Bergeron-Lynn G, Schulteis CT, Staal FW, Paoni N and Freeman WR: Subretinal Administration of Ribozyme to the Proliferating Cell Nuclear Antigen and 5-fluorouracil in Rat Eyes. Scientific Poster 1427/B196. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
241. Kempen JH, Min YI, Freeman WR, Holland GN, Friedberg DN, Dieterich DT, Jabs DA and the SOCA research Group. Risk of Immune Recovery Uveitis in Patients with Cytomegalovirus Retinitis and the Acquired Immune Deficiency Syndrome. Scientific Paper 3479. ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
242. Freeman WR and Kozak I: Verteporfin Enhanced Feeder Vessel Therapy for Choroidal Neovascularization. Scientific Paper 3570 ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
243. Cheng LY, Sailor MJ, Kayikcioglu O, Kim D, Kozak I, Bergeron-Lynn G and Freeman WR: Intraocular Properties of Silicon Photonic Crystals for Intravitreal Drug Delivery and Sensing. Scientific Paper 3537 ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2005.
244. Hayden AM, Ross-Cisneros FN, Nguyen DT, Freeman WR, and Sadun AA: An Immunohistochemical (IHC) Examination of Tumor Necrosis Factor  $\alpha$  (TNF- $\alpha$ ) Presence in the Optic Nerves of Patients With Chronic HIV Infection. Scientific Paper ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.

245. Kozak I, Bartsch D-U, Morrison VL, Freeman WR: Co-Localization Studies of Cotton Wool Spot Damage Using a Novel Combined Scanning Laser Ophthalmoscope (SLO/Optical Coherence Tomography (OCT) Device. Scientific Poster. ARVO Annual Meeting. Fort Lauderdale, Florida May 1-5 2006.
246. Korotkin A, Kozak I, Morrison VL, Magana L, Freeman WR: An Emerging Problem: Recurrence of CNV in AMD is Common After Cessation of 24 Month Treatment with Ranibizumab (Lucentis®). Scientific Paper ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.
247. Falkenstein I, Cheng L, Jones GL, Kozak I, Tammewar AM, Freeman WR: Intraocular Properties of Urokinase-Derived Antiangiogenic Å36 Peptide in Rabbits. Scientific Paper ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.
248. Tammewar AM, Cheng L, Hostetler KY, Falkenstein I, Beadle JR, Kozak I, Freeman WR: Intraocular Properties in Rabbit Eyes of Hexadecyloxypropyl-Cyclic-HPMPA, a Potent Crystalline Anti CMV Lipid Prodrug of HPMPA. Scientific Paper ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.
249. Morrison VL, Falkenstein I, Tammewar AM, Freeman WR: Evaluation of Hypotony and Other Complications of the 25-Gauge Sutureless Vitrectomy System. Scientific Poster ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.
250. Bartsch D-U, Kozak I, Falkenstein i, Tammewar AM, Henry RR, Burke P, Cheng L, Freeman WR: Effect of Glitazone Therapy for Diabetes on Macular Thickness and Vision: Preliminary Safety Study. Scientific Paper ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.
251. Cheng L, Valiaeva N, Tammewar AM, Hostetler K, Falkenstein I, Beadle J, Freeman WR: Synthesis and Investigation of Hexadecyloxypropyl 5-Fluoro-2-Deoxyuridine Cyclic 3,5-Monophosphate for Antiproliferation in Vitreoretinal Diseases. Scientific Poster ARVO Annual Meeting. Fort Lauderdale, Florida. May 1-5 2006.

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252. Freeman WR, Hantsbarger G, Schneider S and the HORIZON Study group: Extension Trial of Ranibizumab for Choroidal neovascularization (CNV) in Age Related Macular Degeneration (AMD). Scientific Poster, American Academy of Ophthalmology. Poster P0729 Las Vegas, Nevada, November 2006.
253. Cheng, LC, Tammewar A, Falkenstein I, Kayikcioglu OR, Goldbaum MH and Freeman WR: Comparison of the Standard 4mg Intravitreal Kenalog Injection with the Decanted 20 mg Injection. P0675 Scientific Poster, American Academy of Ophthalmology. Poster P0729. Las Vegas, Nevada, November 2006.

254. Freeman WR: New Retinal Imaging Techniques: Implication for Vitreoretinal Diseases. Abstract no 54. Vail Vitrectomy March 10-14. Published MCPI Scarsdale NY.
255. Khan SY, Hayden AM, Alvi1 RA, Jivrajka1 RV, Ross-Cisneros FN, Freeman WR, Sadun AA: Optic Nerve Axon Loss and Neuropsychological Impairment in HIV Encephalitis. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 8, 2007.
256. Nigam N, Bartsch D, Francesca M, Tammewar A, Freeman WR: Spectral OCT for Imaging Surface and Inner Retinal Pathology. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
257. Tammewar AM, Bartsch D-U, Kozak I, Mojana F, Nigam N, Falkenstein I, Freeman WR: Volumetric Analysis of Drusen by Three Dimensional Reconstruction of Extremely High-Resolution Spectral OCT Image in Patients With Dry Age Related Macular Degeneration. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
258. Falkenstein I, Cochran DE, Azen SP, Dustin L, Tammewar AM, Kozak I, Freeman WR: Comparison of Visual Acuity Measurements in Macular Degeneration Patients Tested With Snellen and LogMAR (ETDRS) Charts. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2007.
259. Mojana F, Tammewar AM, Bartsch D-U, Nigam N, Kozak I, Cheng L, Freeman WR: Advantages of Ultra High Speed/Extremely High Resolution Spectral OCT versus Conventional Stratus OCT in Imaging Age Macular Degeneration. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2007.
260. Cheng L, Tammewar A, Falkenstein I, Li H-X, Wong-Staal F, Freeman WR: Intraocular Anti-Angiogenic and Antiproliferative Properties of IMS 2186, a Long Lasting Intravitreally Injectable Non-Steroid Small Molecule. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
261. Kozak I, Bartsch D-U, Clark TM, Morrison VL, Falkenstein I, Tammewar AM, Mojana F, Lee B, Freeman WR: Understanding the Discrepancy Between Fluorescein Angiography and High-Resolution Optical Coherence Tomography in Detection of Macular Edema. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
262. Lee B, Bartsch D-U, Kozak I, Cheng L, Freeman WR: Comparison of a Novel Confocal Scanning Laser Ophthalmoscopic Macular Topography Algorithm Using the HRT3 With Stratus Oct in the Measurement of Macular Volume and Thickness. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.

263. Goldbaum MH, Kozak I, Hao J, Lee T-W, Sample PA, Weinreb RN, Sejnowski TJ, Freeman WR: Machine Learning Classifiers Can Detect Subtle Field Defects in Eyes of HIV Subjects. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
264. Hedaya J, Korotkin A, Magana L, Freeman WR: Recurrent Armd-Related Cnv Reactivation Following Treatment With Ranibizumab. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2007.
265. Freeman WR, Falkenstein I, Cheng L, Morrison VL, Kozak I, Tammewar AM: ETDRS Vision Results of Primary Avastin (Bevacizumab) for CNV in ARMD versus Avastin Rescue After Macugen (Pegaptanib) Therapy. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 8, 2007.
266. Bartsch D-UG, Kozak I, Lee B, Falkenstein I, Cheng L, Sadun A, Freeman WR: Confocal Scanning Laser Tomography in Patients With HIV. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2007.
267. I.Kozak, M.H.Goldbaum, P.A.Sample, J.Hao, T-W.Lee, , R.N.Weinreb, W.R.Freeman,: Machine learning classifiers are able to detect visual field defects in eyes of HIV subjects, 143th annual meeting of the American Ophthalmological Society, The Greenbier, White Sulphur Springs, West Virginia. May 20-23, 2007.
268. Freeman WR: Discussion: Age-Related Macular Degeneration Therapy. American Academy of Ophthalmology. New Orleans, Louisiana. November 2007.
269. Mojana F, Cheng L, Bartsch DU, Silva GA, Kozak I, Nigam N, Freeman WR: Abnormal Vitreoretinal Interface in Age-Related macular Degenraton: A Spectral OCT Study and Preliminary Surgical Outcomes. Investigative Ophthalmology and Visual Science (208) [Suppl]: Abstract #260. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
270. Kozak I, Mojana F, Morrison VL, Bartsch D-U, **Freeman WR**: Autofluorescence Imaging in Exudative Age-Related Macular Degeneration After Anti-VEGF Treatment. Investigative Ophthalmology and Visual Science (2008) [Suppl]: Abstract #264. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
271. Hedaya J, Nigam N, **Freeman WR**: Intravitreal Avastin Treatment in Poor Prognosis Patients With Chronic, Disciform Age-Related Macular Degeneration (ARMD). Investigative Ophthalmology and Visual Science (2008) [Suppl]: Abstract #313. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.

272. Pilyugina SA, **Freeman WR**, Nigam N, Goldbaum M: Visudyne Photodynamic Therapy for ARMD-Associated CNV After Initial Treatment Course With Bevacizumab. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #559. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
273. Brar M, Bartsch D-U, Nigam N, Mojana F, Gomez ML, Cheng L, **Freeman WR**: Color versus Gray Scale Display of Images on the Ultrahigh Resolution Spectral OCT. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #926. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
274. Goldbaum MH, Falkenstein I, Bartsch D-U, Hao J, Kozak I, Mojana F, Nigam N, Lee T-W, Sejnowski TJ, **Freeman WR**: Relevance Vector Machine Analysis of Multifocal ERGs of Eyes in HIV-Positive Subjects Without Infectious Retinitis Shows Deficiencies Compared to Normal Eyes. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #947. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
275. **Freeman WR**, Leese P, Khan J, Martin M, Danis R, Shorr J: A Topical (Eye Drop) Multi-kinase Inhibitor for Treatment of Choroidal Neovascularization in Age-Related Macular Degeneration: Rationale and Results of Early Clinical Trials. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #3771. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
276. Bartsch D-U, Mojana F, Nigam N, **Freeman WR**: Reproducibility of Interactive Correction of Retinal Thickness Measurements in Optical Coherence Tomography. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #4230. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
277. Cheng L, Tammewar A, Hostetler KY, Beadle JR, Falkenstein I, Barron EC, Aldern KA, **Freeman WR**: Pharmacokinetics and Physicochemical Properties of a Prototype Compound With a Crystalline Intravitreal Drug Delivery System; Octadecyloxyethyl Cyclic Cidofovir. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #5003. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
278. Barron EC, Kozak I, Cheng L, Rought S, Woelk C, Schrier RD, Corbeil J, **Freeman WR**: Characterization of Cytokine Gene Expression Associated With Non-Infectious HIV Retinopathy in Human Autopsy Eyes. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #5129. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.

279. Nigam N, Brar M, Hedaya J, Mojana F, Yuson RMS, Kozak I, **Freeman WR**: Multiple Recurrences of CNV Activity Occur in Majority of Eyes After Aggressive Monthly Avastin Monotherapy in AMD Patients. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #5562. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
280. Yuson RS, Nigam N, Cheng L, Freeman WR: Prognostic Implications of Pigmented Epithelial Detachment in Bevacizumab (Avastin) Treated Eyes With Age-Related Macular Degeneration and Choroidal Neovascularization. *Investigative Ophthalmology and Visual Science* (2008) [Suppl]: Abstract #5563. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
281. Freeman SR, Kozak I, Cheng L, Bartsch DU, Mojana F, Nigam N, Brar M, Yuson R, Freeman WR: Relationship Between Spectral Domain OCT Determined Drusen Volume in AMD and AREDS Classification. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 3, 2009.
282. Bartsch DU, Kozak I, Nigam N, Mojana F, Brar M, Gomez M, Freeman WR, Dustin L, Azen S: Correlation of Visual Function and Structural Measurements in Patients with HIV and Normal Controls. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2009.
283. Mojana F, Kozak I, Cheng L, Bartsch DU, Oster SF, Brar M, Yuson RMS, Freeman WR: New Observations by Spectral OCT/SLO: Imaging of the Vitreous. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2009.
284. Nguyen KT, Kozak I, Davidson MC, Freeman WR, Silva GA: Distribution of Anti-VEGF Molecules in ARPE-19 Cells Using Quantum Dot Labeling. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2009.
285. Freeman WR, Neubauer AS, Weber U, Liesfeld B: Retinal Navigated Laser Photocoagulation Using Eye Tracking and Registered Diagnostic Imaging with a Scanning Slit Ophthalmoscope (NAVILAS). Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2009.
286. Morrison VL, Bartsch DU, Kozak I, Lee B, Freeman WR: Retinal Nerve Fiber and Optic Disc Morphology Analysis in Patients with Human Immunodeficiency Virus using the Heidelberg Retina Tomography. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2009.
287. Oster SF, Mojana F, Brar M, Yuson RMS, Cheng L, Freeman WR: Retinal Photoreceptor Layer Disruption on Spectral Optical Coherence Tomography is a Strong Predictor of Poor Visual Acuity in Patients with Epiretinal Membranes. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2009.

288. Andrew JS, Anglin EJ, Cunin F, Tourne-Peteilh C, Cheng LC, Freeman WR, Devoisselle JM, Sailor MJ: Sustained Release of a Monoclonal Antibody from Electrochemically Prepared Porous Silica for the Treatment of Age Related Macular Degeneration. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2009.
289. Gomez ML, Mojana F, Bartsch DU, Cheng LC, Freeman WR: Long Term Retinal Damage Years After Retinal Cotton Wool Spots; a Spectral OCT Study. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2009.
290. Kozak I, Cheng L, Sasik R, Hardiman G, Rought S, Pearson LJ, Woelk C, Freeman WR: Non-Infectious HIV Retinopathy: Pathway and Gene Ontology Based Analysis of Gene Expression in Lesions from Human Autopsy Eyes. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2009.
291. Brar M, Kozak I, Cheng L, Bartsch DU, Yuson RMS, Nigam N, Oster SF, Mojana F, Freeman WR: Findings and Correlation Between Spectral OCT and Fundus Autofluorescence at the Margins of Geographic Atrophy. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2009.
292. Yuson RMS, Nigam N, Mjoana F, Brar M, Oster SF, Shiba DR, Freeman WR: The Use of Intraoperative Icg Dye to Assist in Epiretinal Membrane Removal; A Novel Application of Icg Surgical Use. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2009.
293. Cheng L, Brar M, Yuson RMS, Mojana F, Gill PS, Freeman WR: Intraocular Properties and Intraocular Pharmacokinetics of a Novel Therapeutic Antagonist of Ephb4/ephrinb2 Signaling to Inhibit Choroidal Neovascularization. Scientific Paper, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2009.
294. Singh M, Shariati A, Ross-Cisneros FN, Freeman WR, Sadun AA: An Immunohistochemical (IHC) Examination of Role of N-Methyl D-Aspartate (NMDA) Receptor as a Mediator of Damage in Optic Nerves of Patients with Chronic HIV Infection. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2009.
295. Nigam N, Brar M, Kozak I, Yuson RMS, Freeman WR: Anatomical Basis of Angiographic Leakage of Macular Edema with No Cystic Changes on OCT. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2009.
296. Wu EC, Park J, Cheng L, Freeman WR, Sailor MJ: Sustained and Observable Release of Daunorubicin/Doxorubicin Using Porous Si Particle: A Potential Treatment for Proliferative Vitreo-Retinopathy. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 7, 2009.



297. Gomez ML, Mojana F, Cheng L, Bartsch D-U, Freeman WR: Retinal Damage in Diabetics, Hypertensives, and HIV Disease with Retinal Cotton Wool Spots. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 2, 2010.
298. Kim J, Bartsch D-U, Cheng L, Gomez M.L, The Microperimetry of Resolved CWS in Hypertension and Diabetic Patients. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 2, 2010.
299. Hartmann K, Kim J, Klein H, Hsueh S, Gomez M, Amini P, Cheng L, Bartsch D-U, Freeman WR: Scanning Laser Ophthalmoscope Imaging Stabilized Microperimetry in Age Related Macular Degeneration. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 2, 2010.
300. Klein HL, Kozak I, Cheng S, Gamst A, Cheng L, Bartsch D, Freeman WR: A Correlation Between Manual and Automated Drusen Segmentation on Sections of Spectral Domain Optical Coherence Tomography (SDOCT) Images. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2010
301. Amini P, Cheng L, Hartmann K, Bartsch D-U, Klein H, Gomez M, Freeman WR: Reproducibility and Determination of Normative Values of Scanning Laser Ophthalmoscope Imaging Stabilized Microperimetry. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 4, 2010.
302. Freeman WR, Kozak I, Oster S, Hartmann K, Neubauer AS, Gabel-Pfisterer A, Kampik A: A Multicentered Evaluation of Retinal Navigated Laser Photocoagulation Using Eye Tracking and Registered Diagnostic Imaging (NAVILAS). Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.
303. Kozak I, Oster SF, Cortes MA, Hartmann K, Kim J, Kampik A, Neubauer AS, Freeman WR: Clinical Treatment Accuracy in Diabetic Macular Edema Using Navigated Laser Photocoagulator Navilas: A Multicentered Clinical Trial. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.
304. Hariprasad SM, Ober MD, Neubauer AS, Kernt M, Freeman WR: The Learning Curve for Performing Focal Retina Laser with the NAVILAS. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.
305. Maheshwary AS, Oster S, Yuson RMS, Cheng L, Mojana F, Freeman WR: The Association Between Percent Disruption of the Photoreceptor Inner. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.
306. Cheng S, Klein H, Kozak I, Bartsch D-U, Freeman WR: Driving Disability and Visual Dysfunction in HIV Patients Without Retinitis. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.

307. Bartsch D-U, Dustin L, Azen SP, Freeman WR: Correlation Between Structural and Functional Measures of Vision in Patients With HIV. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 5, 2010.
308. Cheng L, Kim J, Valiaeva N, Hostetler KY, Hartmann K, Beadle JR, Kozak I, Freeman WR: Ocular Toxicology of a Novel Lipid Prodrug of Cytarabine Cyclic Monophosphate (HDP-cP-Ara C). Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2010.
309. Bozorg S, Kozak I, Kim JS, Cheng L, Oster SF, Freeman WR: Macular Structure in Eyes With Healed Extramacular CMV Retinitis Using Spectral-Domain Optical Coherence Tomography. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2010.
310. Oster SF, Mojana F, Freeman WR: Evaluation of Post-Operative Scleral Buckle Patients With Spectral Domain Optical Coherence Tomography. Scientific Poster, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2010.
311. Freeman WR: Moderator. Paper Session, ARVO Annual Meeting. Fort Lauderdale, Florida. May 6, 2010.
312. Neubaure AS, Kernt M, Ulbig MW, Kampik A, Freeman WR, Dowell D, Eltahir M, Weber U; In Vitro and In –vivo results of Navigated Retinal Laser Therapy. International Society for Imaging in the Eye. Fort Lauderdale May 2010.
313. Altaweel MM, Peng Q, Reed S, Gangaputra S, Domalpally A, MUST Study Group. Morphological assessment of fundus color images for the Multicenter Uveitis Steroid Treatment (MUST) Trial. (Accepted for presentation, Association for Research in Vision and Ophthalmology, Annual Meeting, 2010).
314. Altaweel MM, Peng Q, Myers D, Domalpally A, MUST Trial Research Group. Retinal assessment with Optical Coherence Tomography in the Multicenter Uveitis Steroid Treatment Trial. (Accepted for presentation, Association for Research in Vision and Ophthalmology, Annual Meeting, 2010).
315. Kempen JH, Sugar EA, Altaweel MM, Holbrook JT, Jabs DA. The Multicenter Uveitis Steroid Treatment (MUST) Trial: Design and Baseline Characteristics. (Accepted for presentation, World Ophthalmology Congress, 2010).
316. Hartmann KI, Gomez ML, Bartsch D-U, Freeman WR: Effect of Spontaneous Drusen Regression on the Photoreceptor Inner Segment/Outer. Abstract #120. ARVO Annual Meeting, Fort Lauderdale, Florida. May 1, 2011.
317. Freeman, WR: Moderator, Vitreoretinal Surgery I: Laser. ARVO Annual Meeting, Fort Lauderdale, Florida. May 1, 2011.

318. Wang H, Chhablani J, Cheng L, Freeman WR: The Characteristics Of Diabetic Microaneurysms In Spectralis Optic Coherence Tomography. Abstract #1277. ARVO Annual Meeting. Fort Lauderdale, Florida. May 2, 2011.
319. Cheng L, Wang H, Chhablani J, Beadle, Hartmann K, Conner L, Aldern K, Pearson L, Hostetler K, Freeman WR: Intraocular Pharmacokinetics of Hexadecyloxypropyl Cidofovir (hdp-cdv) as an Intravitreal Long-lasting Antiviral Drug for CMV Retinitis. Abstract #2066. ARVO Annual Meeting. Fort Lauderdale, Florida. May 2, 2011.
320. Freeman WR, Kim JS, Chhablani J, Hartmann K, Cheng L: Predictive Value of SD OCT Morphology on Surgical Findings in Macular Pucker. Abstract #2206. ARVO Annual Meeting, Fort Lauderdale, Florida. May 2, 2011.
321. Rezeq SS, Sampat KM, Chhablani J, Garg SJ, Freeman WR, Haller JA, Witkin AJ, Bartsch D-U: Comparative Analysis of the Macula in Normal and Pathologic Eyes Using the Retinal Function Imager (RFI), a Novel, Non-Invasive Imaging Technique. Abstract #2899. ARVO Annual Meeting, Fort Lauderdale, Florida. May 3, 2011.
322. Chhablani J, Wang H, Hartmann K, Wu E, Sailor M, Freeman WR, Cheng L: Oxidized Porous Silicon Particles as an Intraocular Drug Delivery System. Abstract #3256. ARVO Annual Meeting, Fort Lauderdale, Florida. May 3, 2011.
323. Chan CK, Bartsch D-U, Lee SY, Chhablani J, Wang H, Hartmann K, Gomez ML, Zhang K, Sadda SR, Freeman WR: Image Quality Comparison Among Spectral Domain Optical Coherence Tomography Systems. Abstract #4039. ARVO Annual Meeting, Fort Lauderdale, Florida. May 4, 2011.
324. Bartsch D-U, Kozak I, Goldbaum M, Cheng L, Dustin L, Azen SP, Freeman WR: Correlation of Functional Color Vision Testing to Structural OCT Measures in Patients with HIV. Abstract #4273. ARVO Annual Meeting, Fort Lauderdale, Florida. May 4, 2011.
325. Taylor SR, Lightman S, Sugar EA, Jaffe GJ, Freeman WR, Altaweel MM, Kozak I, Holbrook JT, Jabs DA, Kempen JH: The Impact of Macular Edema on Visual Function in Uveitis. Abstract #4309. ARVO Annual Meeting, Fort Lauderdale, Florida. May 4, 2011.
326. Bozorg S, Grob S, Hughes G, Nelson MH, Tournambe PE, Goldbaum MH, Ferreyra HA, Freeman WR, Kozak I, Zhang K: Genotypic Analysis of Treatment Response to Anti-VEGF Therapy in Age-related Macular Degeneration. Abstract #5242. ARVO Annual Meeting, Fort Lauderdale, Florida. May 4, 2011.

327. Hughes GA, Zeng J, Wang K, Bedell M, Ferreyra HA, Nelson M, Freeman WR, Kozak I, Chen Y, Zhang K: LIPC is a Possible Heritability Factor for Advanced Age-related Macular Degeneration. Abstract #5263. ARVO Annual Meeting, Fort Lauderdale, Florida. May 4, 2011.
328. Gomez ML, Chhablani J, Bartsch D-U, Cheng L, Holmes L, Mendoza V, Freeman WR: A Novel Automated Vision Testing Device – Vimetrics Centtal Vision Analyzer - Accounts for Patients' Visual Complaints in Retinal Diseases. Abstract #5555. ARVO Annual Meeting, Fort Lauderdale, Florida. May 5, 2011.
329. Khraiche ML, Lo Y, Wang D, Cauwenberghs G, Freeman WR, Silva G: Ultra-High Photosensitivity Silicon Nanopotronics for Retinal Prosthesis: Electrical Characteristics. 33<sup>rd</sup> Annual Internationa Confeerence of the IEEE EMBS. Boston, Massachusetts. August 30-September 3, 2011.
330. Kozak, I, Chhablani J, Barteselli G, Want H, Bartsch DU and Freeman WR: Navigated Laser Photocoagulation of the Human Retina. Video Presentation. American Academy of Ophthalmology, Orlando, October 2011.
331. Khraiche ML, Lo Y, Wang D, Cauwenberghs G, Freeman WR, Silva G: Ultra-High Photosensitivity Silicon Nanopotronics for Retinal Prosthesis. #302/A543. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
332. Kernt M, Seidensticker F, Neubauer AS, Wolf A, Ulbig W, Freeman WR, Kampik A: Retinal navigated Laser (Navilas®) Compared Versus Conventional Laser in Diabetic Macular Edema. #384/D935. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
333. Lee SN, Chhablani J, Wang H, Barteselli G, El Emam S, Kozak I, Cheng L, Freeman WR: Fluorescein Angiography and SD-OCT Analysis of Lasered Microaneurysms in Diabetic Macular Edema. #408/D959. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
334. Freeman WR, Sailor M, Chen M, Cheng L: Nanostructured Porous Silicon Dioxide Micro-particles as an Intravitreal Injectable Drug Delivery System for Avastin (Bevacizumab) Lasting Six Months. #456/D1133. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
335. Cheng L, Wu E, Freeman WR, Sailor MJ, Andrew J, Conner L, Nieto A: Degradation and the Routes of Clearance of Intravitreal Hydrosilylated Porous Silicon Particles. #496/D1173. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
336. Barteselli G, Chhablani J, Lee SN, Wang H, Kozak I, Cheng L, Bartsch DU, Freeman WR: Safety and Efficacy of Oral Fluorescein Angiography In Detecting Macular

- Edema Compared to Spectral Domain Optical Coherence Tomography. #1171/D721. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2012.
337. Tan K, Chhablani J, Lisboa R, Freeman WR: Disruption of the Photoreceptor Inner Segment/ Outer Segment Junction and External Limiting Membrane on Spectral Domain Optical Coherence Tomography are Predictors of Visual Outcomes After Primary Epiretinal Membrane Surgery. #2609/D987. ARVO Annual Meeting, Fort Lauderdale, Florida. May 7, 2012.
  338. El Emam S, Chhablani J, Wang H, Barteselli G, Lee SN, Cheng L, Freeman WR: Correlation Between Visual Acuity and Subretinal Scarring Following Treatment of Wet Age-related Macular Degeneration. #2918/A363. ARVO Annual Meeting, Fort Lauderdale, Florida. May 8, 2012.
  339. Doede AL, Gomez ML, Chhablani J, Bartsch DU, Cheng L, Freeman WR: Vision Testing Algorithms for Time-dependent Stimuli in Patients with Macular Pathology. #5448/A644. ARVO Annual Meeting, Fort Lauderdale, Florida. May 9, 2012.
  340. Kozak I, Chhablani J, Barteselli G, Bartsch DU, Freeman WR: Image Guided Navigated Retinal Laser Treatments Using Multiple image Modalities. #5823/A443. ARVO Annual Meeting, Fort Lauderdale, Florida. May 10, 2012.
  341. Chhablani J, Kozak I, Barteselli G, El Emam S, Freeman WR: Comparison between navigated laser system and conventional and PASCAL laser system. E-Poster no.: EP-1321. The 28 Asia-Pacific Academy of Ophthalmology Congress- All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. January 17, 2013.
  342. Ma F, Lee S, Hou H, Beadle J, Freeman WR, Hostetler K, Cheng L: Intravitreal long-lasting micelle formulation of hexadecyloxypropyl-cidofovir (HDP-CDV) for cytomegalo- virus retinitis. #3208. ARVO Annual Meeting, Fort Lauderdale, Florida. May 7, 2013.
  343. Hou H, Nieto A, Ma F, Lee S, Nan K, Freeman WR, Sailor MJ, Cheng L: Tunable Sustained intravitreal drug delivery system for daunorubicin using oxidized porous silicon. Poster #5069/B0027. ARVO Annual Meeting, Fort Lauderdale, Florida. May 8, 2013.
  344. Amini P, Barteselli G, Freeman WR: Impact of Intraocular Pressure (IOP) after 20mg Intravitreal Triamcinolone Acetonide (IVTA) Injection When Utilizing Prophylactic IOP-lowering therapy. Poster #260/D0105. ARVO Annual Meeting, Fort Lauderdale, Florida. May 5, 2013.

345. Cheng L, Hou H, Nieto A, Miskelly G, Bartsch DU, Freeman WR, Sailor MJ: Correlation between release of rapamycin from Porous Silicon (pSi) and the color shifting of pSi monitored by a digital camera: a prototype of non-invasive remote monitoring system for intravitreal drug release. Poster #1084/C0061. ARVO Annual Meeting, Fort Lauderdale, Florida. May 5, 2013.
346. Nieto A, Hou H, Sailor MJ, Freeman WR, Cheng L: Porous Silicone Microparticle Formulation as an Intravitreal Delivery System for Rapamycin. Poster #1085/C0062. ARVO Annual Meeting, Fort Lauderdale, Florida. May 5, 2013.
347. Lee S, Barteselli G, El Emam S, Hou H, Bartsch DU, Cheng L, Freeman WR: Manual segmentation of choroidal volume in emmetropic and high myopic eyes. Poster #1916/B0283. ARVO Annual Meeting, Fort Lauderdale, Florida. May 5, 2013.
348. Barteselli G, Lee S, Kozak I, Chhablani J, El Emam S, Freeman WR: Navigated Laser Photocoagulation to Reduce Frequency of Bevacizumab Injections (ivB) for Diabetic Macular Edema: 1-Year Results. Poster #2379/C0080. ARVO Annual Meeting, Fort Lauderdale, Florida. May 6, 2013.
349. Bartsch DU, Arcinue C, Ma F, Cheng L, Freeman WR: Reproducibility of the rtx1 adaptive optics retinal camera. Poster #3431/C0152. ARVO Annual Meeting, Fort Lauderdale, Florida. May 7, 2013.
350. El Emam S, Barteselli G, Chhablani J, Lee S, Kozak I, Cheng L, Freeman WR: Choroidal thickness change following intravitreal bevacizumab therapy for wet age-related macular degeneration: six months results. Poster #4096/A0014. ARVO Annual Meeting, Fort Lauderdale, Florida. May 8, 2013.
351. Kozak I, El Emam S, Cheng L, Bartsch DU, Chhablani J, Freeman WR, Ghazi NG, Arevalo J: Fluorescein angiography versus superimposed OCT-guided macular laser photocoagulation. Poster #4133/A0051. ARVO Annual Meeting, Fort Lauderdale, Florida. May 8, 2013.
352. Arcinue C, Ma F, Barteselli G, Lee S, El Emam S, Doede AL, Gomez M, Freeman WR: Aflibercept Rescue of Bevacizumab- or Ranibizumab-Resistant Choroidal Neovascularization in Age-Related Macular Degeneration. Poster #4176/A0094. ARVO Annual Meeting, Fort Lauderdale, Florida. May 8, 2013.
353. Kernt M, Ulbig M, Kozak I, Freeman WR, Neubauer A, Kampik A: Combination of Anti-VEGF Injections and Navigated Laser Photocoagulation for Diabetic Macular Edema: Twelve-Month Results. Poster 449. American Academy of Ophthalmology Meeting, New Orleans November 2013.

354. Freeman, WR: Application of Nano-technology for Ocular Inflammation and Infections. Event No: SYM31 2:00 - 3:30 PM Room: 243. American Academy of Ophthalmology Meeting, New Orleans November 2013.
355. Nezgoda J, Camacho N, Bartsch D, Currie G, Freeman WR: Multicolor imaging compared with color fundus photography for retinal, choroidal and optic nerve pathology. Abstract 109. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
356. Espina M, Barteselli G, Ma F, Arcinue C, Camacho N, Freeman WR, Bartsch D: Noncontact ultra-wide field lens system by Heidelberg Spectralis. Abstract 225. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
357. Freeman WR, El Emam SY, Cheng L, Silva G, Khraiche M: Evaluation of a high density photovoltaic prosthesis in rabbits. Abstract 239. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
358. Khraiche M, Freeman WR, Silva G: High density flexible optoelectronic platform for retinal prosthesis. Abstract 239. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
359. Bartsch D, Gomez ML, Dustin L, Azen SP, Freeman WR: Cross-sectional analysis of structural and functional parameter in patients with HIV and normal controls. Abstract 270. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
360. Ramkumar HL, Khatibi A, Ezon I, Arcinue C, Barteselli G, Nezgoda J, Freeman WR, Goldbaum MH: Visual phenomenon perceived during vitrectomy surgery with MAC anesthesia. Abstract 272. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
361. Barteselli G, Bartsch D, Nezgoda J, Camacho N, Marvasti A, Weinreb RN, Freeman WR: Combined depth imaging (CDI) technique on Heidelberg Spectralis versus Topcon DRI Swept Source (SS) OCT in full-depth visualization of macular structures. Abstract 344. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
362. Camacho N, Barteselli G, Cheng L, Bartsch D, Freeman WR: Hyper-autofluorescent ring in neovascular age-related macular degeneration. Abstract 345. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
363. Arcinue C, Ma F, Barteselli G, Sharpsten L, Doede A, Gomez ML, Freeman WR: Six-month outcomes of aflibercept in recurrent or persistent neovascular age-related macular degeneration. Abstract 383. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
364. Hou H, Nieto A, Wang C, Belghith A, Freeman WR, Sailor M, Cheng L: Real-time non-invasive monitoring of intravitreal drug release from porous silicon (pSi) by digital camera. Abstract 477. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.

365. Cheng L, Wang C, Hou H, Nan K, Freeman WR, Sailor M: Porous silicon microparticles covalently loaded with dexamethasone for intravitreal injection. Abstract 477. ARVO Annual Meeting. Orlando, Florida. May 3-7, 2014.
366. Freeman WR, Khraiche M, Silva GA, Cheng L, El Emam SY: A nano engineered light-sensitive retinal prosthesis. Abstract. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
367. Arcinue C, Freeman WR: Adaptive optics imaging of the cone photoreceptor mosaic in HIV-positive patients. Abstract 403. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
368. Barteselli G, Freeman WR: Wide-angle diurnal fluctuations of choroidal thickness in healthy subjects using automated segmentation on Swept-Source Optical Coherence Tomography. Abstract 404. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
369. Camacho N, Barteselli G, Nezgoda J, El Emam SY, Cheng L, Bartsch D, Freeman WR: Significance of the hyper-autofluorescent ring associated with choroidal neovascularization in eyes undergoing anti-VEGF therapy for wet AMD. Abstract 419. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
370. Chhablani J, Freeman WR: A randomized study of efficacy and safety of intravitreal ranibizumab versus bevacizumab in macular edema secondary to branch retinal vein occlusion. Abstract 439. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
371. Nezgoda J, Freeman WR: Confocal scanning laser ophthalmology multicolor imaging compared with color fundus photography for retinal, choroidal and optic nerve disease. Abstract 425. American Society of Retina Specialists Annual Meeting. San Diego, California. August 9-13, 2014.
372. Tsai F, Freeman WR: Decanted triamcinolone for macular edema in non-vitreotomized and vitreotomized eyes. Poster 376/D0112. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
373. Freeman WR, Camacho N, Arcinue CA, Qin Y, Espina M, Alam M, You Q: High-dose aflibercept for eyes with wet age-related macular degeneration resistant to standard therapy. Poster #1655. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
374. You Q, Bartsch DU, Espina M, Alam M, Camacho N, Freeman WR: Reproducibility of macular pigment optical density measurement by two-wave length autofluorescence. Poster #5944/A0115. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
375. Cheng L, Hou H, Huffman K, Rios S, Freeman WR, Sailor MJ: A novel approach of daunorubicin application on formation of proliferative retinopathy using a porous silicon



- based, controlled delivery system. Poster # 697/C0145. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
376. Alam M: Recalcitrant Cystoid Macular Edema after Pars Plana Vitrectomy. Poster #5116/C0152. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
  377. Espina M, Arcinue CA, Camacho N, Alam M, You Q, Gomez ML, Bartsch DU, Cheng L, Afshari NA, Freeman WR: Scanning laser ophthalmoscope imaging is a diagnostic predictor of dry eye. Poster #1969/D0172. ARVO Annual Meeting. Denver, Colorado. May 3, 2015.
  378. You Q, Mendoza N, Espina M, Alam M, Gaber R, Kilic, I, Freeman WR: Long-term Outcomes of Neovascular Age-related Macular Degeneration Treated with As Needed Anti-Vascular Endothelial Growth Factor Agents. Poster #2670/C0021. ARVO Annual Meeting, Seattle, Washington. May 2, 2016.
  379. Kilic I, Mendoza N, Gaber R, Ragheb M, You Q, Freeman WR: Integrity of Outer Retinal Layers After Resolution of Central Involved Diabetic Macular Edema. Poster #3243/C0043. ARVO Annual Meeting, Seattle, Washington. May 3, 2016.
  380. Wang, Y, Warther D, Huffman K, Rios S, Sengmany D, Freeman WR, Sailor M, Cheng L: An Engineered Porous Silica Particle for Sustained Intravitreal Delivery of Mycophenolic Acid. Poster #4008/B0186. ARVO Annual Meeting, Seattle, Washington. May 2, 2016.
  381. Gaber R, You Q, Alam M, Kilic I, Mendoza N, Tsai F, Freeman WR: Characteristics of Epiretinal Membrane Remnant Edge by Optical Coherence Tomography After Pars Plana Vitrectomy. Poster # 4055/C0100. ARVO Annual Meeting, Seattle, Washington. May 2, 2016.
  382. Ramkumar HL, You Q, Bartsch DG, Freeman WR: Reduced Ganglion Cell Volumetric Assessment by Spectral-Domain Optical Coherence Tomography in Patients with Geographic Atrophy. Poster #4233/D0268. ARVO Annual Meeting, Seattle, Washington. May 2, 2016.

OTHER PUBLICATIONS:

1. **Freeman WR**, Green RL, Smith RE: Echographic localization of corticosteroids after periocular injection. Key Ophthalmology. 2: 3: 29, 1987.
2. **Freeman WR**: Patent central retinal artery is the goal in pneumatic retinopexy. Ophthalmology Times. December 15, 1988.
3. **Freeman WR**: AIDS-related retinal “microvasculopathy” defined. Ocular Surgery News. March 1, 1989, pp. 30-31.
4. **Freeman WR**: Endoretinal biopsy shows good postoperative acuity results. Ophthalmology Times. January 15, 1989, pp. 7, 25.
5. **Freeman WR**: New anterior segment surgical methods may save eyes. Ophthalmology Times. June 15, 1989, pp. 12, 39.
6. Fay MT, **Freeman WR**, Wiley CA, Hardy D, Bozzette S.: A typical retinitis in patients with the acquired immunodeficiency syndrome. Ophthalmology Digest. 1990.
7. **Freeman WR**: Macular holes, cysts and related disorders. University Vitreo-Retinal News. 1(1):4-6, 1990.
8. **Freeman WR**, Goldbaum MH Eds. University Vitreo-Retinal News. Vol. 1, No. 1, University of California, San Diego, School of Medicine, La Jolla, CA, Fall 1990.
9. **Freeman WR**: Repair of recurrent or complex retinal detachments. University Vitreo-Retinal News. 2(1): 1-2, 1991.
10. **Freeman WR** (Ed.) University Vitreo-Retinal News. Vol. 2, No. 1, University of California, San Diego, School of Medicine, La Jolla, CA, Fall 1991.
11. **Freeman WR** (quote): Celestial show on the horizon; It’ll eclipse the usual sunset. The San Diego Union-Tribune. January 2, 1992, pp. A-4.
12. **Freeman WR**: Improved therapies help save the vision of AIDS patients. Ophthalmology Times. April 15, 1992, pp. 27.
13. **Freeman WR**, Feldman ST, Munguia D, Mendez T, Wiley CA: Sutura prenebrada (Torpedo) para dilatar la pupila en ojos faquicos y afaquicos. Archives of Ophthalmology Edicion Espanola. 3: 298-301, 1992.
14. Bartsch D-U, **Freeman WR**: Diagnostic laser imaging: Part one. Ocular Surgery News International Edition. 4(4): 62, 1993.

15. Bartsch D-U, **Freeman WR**: Diagnostic laser imaging: Part two. Ocular Surgery News International Edition. 4(5): 54, 1993.
16. Denlinger D, **Freeman WR**: Measuring the effectiveness of macular hole surgery. UCSD Medicine. 3(23): 2-3, 1993.
17. **Freeman WR**, Irvine AR, Lewis H, Kuppermann BD, Morse L Eds. University Vitreo-Retinal News. University of California, San Diego, School of Medicine, La Jolla, CA. Vol. 3, No. 1, 1993.
18. **Freeman WR**, Irvine AR, Lewis H, Kuppermann BD, Morse L, Eds. University Vitreo-Retinal News. University of California, San Diego, School of Medicine, La Jolla, CA. Vol 4, No 1, 1994.
19. **Freeman WR**: Aids and the nervous system: Retinal complications. American Academy of Neurology. Minneapolis, MN. 1994, pp. 2.
20. **Freeman WR** (Cited): Tiny implants to fight AIDS related blindness. San Francisco Chronicle. A6, November 1, 1994.
21. **Freeman WR** (Cited): Ocular complications of AIDS. Argus. November 1, 1994.
22. **Freeman WR** (Cited): Progressive zonal outer retinitis. American Journal of Ophthalmology. 118(5): 583-8, 1994.
23. **Freeman WR** (Cited): Promising new drug for CMV retinitis. Ophthalmology World News. 1(3): 1, 1995.
24. **Freeman WR** Feature article (Cited): Blindness with AIDS prevented by drug. New York Times. C5, April 25, 1995.
25. **Freeman WR** Feature Article (Cited): New treatment may help to control AIDS Blindness. New York Times National. A14, April 27, 1995.
26. **Freeman WR** Feature Article (Cited): New hope against blindness. Science. 268(21): 368-9, 1995.
27. **Freeman WR** Feature Article (Cited): AIDS Drug: Experiencing local delays. Science. 268(21): 369, 1995.
28. **Freeman WR**: Tests target AIDS-linked blindness. The San Diego Union-Tribune. B1, April 10, 1995.
29. **Freeman WR** Feature Article (Cited): UCSD researcher tests new AIDS treatment. San Diego Daily Transcript: Technology Today. Front page, April 11, 1995.

30. **Freeman WR** Feature Article (Cited): The changing treatment options for CMV Retinitis. Treatment News. 9:1-11, 1995.
31. Taskintuna I, Rahhal FM, **Freeman WR**: Local therapy for CMV retinitis: Intravitreal cidofovir. The AIDS Reader. 1996;16: 157-160.
32. Plummer DJ, Arévalo JF, Fram N, Quiceno JJ, Sample PA, **Freeman WR**: Efectividad de la perimetría entópica para localizar escotomas periféricos causados por retinitis por citomegalovirus. Archives of Ophthalmology. Edición Española. 7(6) 303-307, 1996.
33. **Freeman WR**: (Feature Article): Intravitreal cidofovir treats CMV retinitis in AIDS patients. Ocular Surgery News. 1997.
34. **Freeman WR**: (Cited): Macular degeneration. Investors Business Daily. A1, May 12, 1998.
35. **Freeman WR**: (Cited): Macular degeneration. UCSD, Department of Ophthalmology, View Point, Fall 1998, Vol 2. #2, pgs 4-5.
36. **Freeman WR**: (Cited): Macular degeneration. USA Today, February 9, 1999.
37. **Freeman WR**: (Cited): UCSD Eye Research Funding. The San Diego Union Tribune, September 27, 2000.
38. **Freeman WR**: Metalloprotease inhibitors may have a preventive effect on CNV. Ocular Surgery News. 2001.
39. Cunningham, Jr ET, Dunn Jr JP, Holland GN, Van Gelder RN, **Freeman WR**: Uveitis column: HIV/AIDS. Ophthalmology Times. July 2002.
40. **Freeman WR**: (Cited) New Drugs Said To Thwart Blindness. The San Diego Union Tribune. Quoted by Cheryl Clark. July 2, 2002.
41. **Freeman WR**: (Cited) Clear Vision: Artificial retinas in development for treatment of eye diseases. The San Diego Union-Tribune, September 29, 2002.
42. **Freeman WR**: Promising Treatment for Wet Macular Degeneration. Ranch & Cove Magazine. November 2002.
43. **Freeman WR**: Optical Coherence tomography gauges HIV HIV retinal damage. Editor; David Douglass. 2005-03-31. 14:11:17-0400. Reuters Health.
44. Freeman WR and Cousins SW: Upgrades to the HRT can reveal early structural damage of the retina. Ophthalmology Times, March 1, 2008
45. Freeman WR: Diabetic Eye Disease. Eurotimes 12: 5 pg 4-5, May 2007.

46. Freeman WR: Age Related Macular Degeneration. CMA (certified medical assistant) today. Chicago Illinois, American Medical association, publisher, June 2008
47. Freeman WR: Poor Agreement Found Between Snellen, ETDRS Charts. Update from 2007 ARVO. Retina Today Vol 2, no 3, page 37, 2007.
48. Freeman WR: Bevacizumab rescue therapy after pegaptanib: minimal visual acuity improvement. Ophthalmology Times, August 1, 2007. Ed Linda Charters.
49. Freeman WR: New Techniques in Retinal Disease. Radio Publication. Franja Ocular Revista de Oftalmologia. WWW. Franjapublicaciones.com. February 2009.
50. Freeman WR: Patient-tailored Retina Treatments. Pgs 78-79. Retinal Physician Jan/Feb 2010, Wolters Kluwer Inc.
51. Mohana F and Freeman WR: Use of Spectral-domain OCT to evaluate Vitreomacular Adhesion sin AMD. Retinal Physician May 2010.
52. Chhablani J, Freeman WR: The role of predictors of success in managing vitreomacular adhesions. Retinal Physician. October 2011.
53. Chhablani J, Bartiselli G, Freeman WR: Autofluorescence Basics and Applications. Video Presentation. American Academy of Ophthalmolog New Orleans November, 2013
54. Freeman WR: A Sight to behold. (Retinal Prosthesis). UCSD Discoveries Magazine; Innovations in Research, Health Care and Eduction 4: 2013.
55. Freeman WR: cited in San Diego Union Tribune. Retinal reattachment surgery. January 28, 2014.

LECTURES AND PRESENTATIONS:

1. The compromised host and opportunistic ocular infections. Uveitis Update 1983. Lenox Hill Hospital. April 1983.
2. The retinopathy of the acquired immune deficiency syndrome. Paper. Interscience xConference on Antimicrobial Agents and Chemotherapy. Las Vegas, NV. October 1983.
3. The natural course and characteristics of retinitis in the acquired immune deficiency syndrome. Poster. American Academy of Ophthalmology. Chicago, IL. November 1983.
4. Antibiotics in vitreo-retinal disease. Retina Update, Estelle Doheny Eye Foundation, University of Southern California School of Medicine, Los Angeles, CA. September 1984.
5. Aqueous lymphocyte subtypes in uveitis patients. The Association for Research in Vision and Ophthalmology (A.R.V.O.). Sarasota, FL. May 1984.
6. A twenty four month prospective study of the ophthalmologic findings of the acquired immune deficiency syndrome. International Conference on Acquired Immunodeficiency Syndrome (AIDS). Atlanta, GA. April 1985.
7. Acute retinal necrosis; Demonstration of viral etiology in immunosuppressed and normal hosts. The Association for Research in Vision and Ophthalmology (A.R.V.O.). Sarasota, FL. May 1985.
8. Preretinal neovascularization in ocular toxoplasmosis. Association of Proctor Fellows Meeting. Lake Tahoe. June 1985.
9. Central serous retinopathy, is the treatment worse than the disease? (Paper) Photocoagulation Workshop, Estelle Doheny Eye Foundation, University of Southern California School of Medicine. Los Angeles, CA. August 1985.
10. Retinal detachment in cytomegalovirus retinitis treated with DHPG; epidemiology, pathogenesis and treatment with vitrectomy and silicone oil. (Paper.) The Association for Research in Vision and Ophthalmology (A.R.V.O.). Sarasota, FL. May 1986.
11. Necrotizing retinitis in a patient with lepromatous leprosy. The West Coast Retina Study Club. Vancouver. February 1986.
12. **Freeman WR**, Green RL, Smith RE, et al.: Echographic localization of repository steroid injections in patients with inflammatory macular disease. (Paper.) The West Coast Retina Study Club. Vancouver. February 1986.

13. Silicone oil, retinal tacks and outpatient retinal surgery. (Lecture.) Visiting Professor, University of California, San Diego. Department of Ophthalmology. La Jolla, CA. May 1986.
14. Endoretinal biopsy and silicone oil in the diagnosis and treatment of viral retinitis. (Paper.) The International Herpes Symposium. Lake Tahoe. September 1986.
15. Echographic evaluation of repository steroid injections for the treatment of inflammatory macular disease. International Symposium on Ocular Circulation and Neovascularization. Jerusalem. September 1986.
16. Laser therapy for diabetic retinal disease. Twelfth Annual Postgraduate Course. Advances in Diagnosis and Treatment of Common Medical Problems. Department of Medicine, School of Medicine, University of California, San Diego, CA. February 1987.
17. Retinitis in immunosuppressed patients. Twelfth Annual Postgraduate Course. Advances in Diagnosis and Treatment of Common Medical Problems. Department of Medicine, School of Medicine, University of California, San Diego. February 1987.
18. Ocular features of diabetes, hypertension and AIDS. California Medical Association Scientific Assembly, Anaheim, CA. March 1987.
19. Diagnosis and treatment of ophthalmologic manifestations of acquired adult immune Deficiency Disease. (AIDS) Audio Journal Review Ophthalmology., D. Char, Ed., Vol. 13, No. 5, May 1987.
20. Use of silicone & long acting gases for complicated retinal disease. Scripps Memorial Hospital, Ophthalmology Section. La Jolla, CA. July 1987.
21. Retina and uveitis update. Oregon Health Sciences University, Portland, or (July 87) Retinal Biopsy, AIDS and Periocular Steroid Injection.
22. Management of AIDS-associated retinopathies. American Academy of Ophthalmology, Dallas, TX. October 1987.
23. AIDS and eye problems. Interview WFAA-TV Channel 8, Dallas. November 11, 1987.
24. New concepts in viral retinitis. University of California, San Diego Post Graduate Course New Horizons in Posterior Segment Ocular Disease, Hotel Del Coronado, San Diego, CA. February 1988.
25. Endoretinal biopsy: Utility and controversies. University of California, San Diego, Department of Ophthalmology. Resident/Alumni/Faculty Day. June 1988.
26. Effect of HIV and other viruses on the retinas of AIDS patients. Pacific Coast Oto-Ophthalmology Society. San Diego, CA. June 1988.

27. **Freeman WR:** New Diagnostic Techniques and Treatment Modalities in Viral Retinitis. Interscience Conference on Antimicrobial Agents and Chemotherapy. 52; 1988.
28. New developments in the ocular manifestations of AIDS. Research to Prevent Blindness Research Symposium. Arlington, VA. September 1988.
29. Management of AIDS-associated retinopathies. American Academy of Ophthalmology, Las Vegas, NV. October 1988.
30. Endoretinal biopsy. American Academy of Ophthalmology. Las Vegas, NV. October 1988.
31. New developments in AIDS retinitis and pneumatic retinopathy. New Advances in Ophthalmology, Kaiser Permanente Medical Group. Le Meriden Hotel, Newport Beach, CA. November 1988.
32. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1988.
33. Infectious retinal diseases: A review of pneumatic retinopathy. Retina Update, 1989. St. Johns Hospital. Century Plaza Hotel, Los Angeles, CA. November 1988.
34. Advanced retina-angiography lectures. St. Mary's Hospital Retina Research Foundation. Carmel Valley, CA. April, 1989.
35. Uveitis frontiers course, Carmel Valley, CA, University of California, San Francisco. September 1989.
36. Retinal examination, Use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1989.
37. A rational approach to pneumatic retinopathy, therapy of infectious retinitis in immunosuppressed patients, and retinal complications of cataract surgery. Frontiers in Ophthalmology, St. Luke's Medical Center, Phoenix, AZ. February 1990.
38. Ocular inflammation course. Scripps Clinic and Research Foundation. La Jolla, CA. March 1990.
39. The topography of the macula in healthy and diseased eyes. XXVI International Congress of Ophthalmology. Singapore. March 18-24, 1990.
40. Infectious retinal diseases and new imaging techniques. Western Association for Vitreo-Retinal Education. Maui. July 1990.



41. Echography in vitreo-retinal disease: Course on ocular ultrasonography. San Diego Eye Bank San Diego, CA. October 13, 1990.
42. Crapotta JA, **Freeman WR**, Lowder CY, Ambler JS, Parker CE, Lee VW, Meisler DM: Prompt treatment of early acute retinal necrosis: A more favorable prognosis. American Academy of Ophthalmology. Atlanta, GA. October 1990.
43. Ocular sampling techniques and laboratory diagnosis. American Academy of Ophthalmology. Atlanta, GA. October 1990.
44. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1990.
45. **Freeman WR**, Assil K, Gariano R, Listhaus A, Munguia D, Schneiderman T, Svendsen P: Intravitreal drug delivery for retinal diseases. International Symposium on Pharmacotherapy of the Eye. University of Würzburg, Germany. November 1990.
46. New developments in infectious retinitis. Loma Linda University. Loma Linda, CA. December 1990.
47. Current concepts regarding macular holes. Tri-County Eye Society. San Bernardino, CA. December 1990.
48. Infectious retinitis and management of HIV infection in ophthalmology. British College of Ophthalmology, Annual Congress. Glasgow, Scotland. May 7 - 10, 1991.
49. Macular holes, infectious retinitis, retinal imaging techniques. Sarasota Retinal Institute Retinal Update Course (Univ. of South Florida Sponsored). Sarasota, FL. February 1991.
50. Ocular trauma. University of Southern California . Doheny Eye Foundation Trauma Update Course. Los Angeles, CA. March 1991.
51. Management of AIDS-associated retinopathies. The 95th Annual Meeting of the American Academy of Ophthalmology. Anaheim, CA. October 1991.
52. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1991.
53. CMV retinitis from the ophthalmologist's perspective and the future of CMV retinitis. California Pacific Medical Center. San Francisco, CA. June 1992.
54. Current results and newer treatments for patients with retinal complications of AIDS. Audio Journal Review Ophthalmology. 18(5), 1992.

55. A practical approach for avoiding sympathetic ophthalmia. California Association of Ophthalmology. Dana Point, CA. September 13, 1992.
56. Local intravitreal drug therapy. The Vitreoretinal Frontier. Dallas, TX. October 1992.
57. Management of AIDS-associated retinopathies. The 96th Annual Meeting of the American Academy of Ophthalmology. Dallas, TX. November 1992.
58. An algorithmic approach to posterior uveitis. The 96th Annual Meeting of the American Academy of Ophthalmology. Dallas, TX. November 1992.
59. CD-4 count and retinitis risk. American Uveitis Society. Dallas, TX. November 1992.
60. Update on infectious retinitis. VIII Annual G. R. O'Connor Lecture, Proctor Foundation UCSF. Alta, CA. June 1992.
61. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1992.
62. Vitrectomy or damox for uveitic cystoid macular edema. American Uveitis Society. Sarasota, FL. May 1993.
63. Update on macular holes. Western Association for Vitreoretinal Education. Maui, HI. July 1993.
64. Documented natural history of 23 cases of stage I macular holes (MH); Discussion. American Academy of Ophthalmology. Chicago, IL. November 1993.
65. Surgical and medical management of AIDS. American Academy of Ophthalmology. Chicago, IL. November 1993.
66. An algorithmic approach to posterior uveitis. American Academy of Ophthalmology. Chicago, IL. November 1993.
67. Macular holes cysts and related disorders. University of California San Diego, Ophthalmology Grand Rounds. La Jolla, CA. November 1993.
68. Epiretinal membranes associated with macular holes. New Dimensions in Retina. Chicago, IL. November 1993.
69. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1993.
70. Update on macular hole surgery. University of Pittsburgh, Department of Ophthalmology. Pittsburgh, PA. January 21, 1994.

71. Vitreoretinal seminar. University of Pittsburgh, Department of Ophthalmology. Pittsburgh, PA. January 21, 1994.
72. Retina update: AIDS and the eye. University of Pittsburgh, Department of Ophthalmology. Pittsburgh, PA. January 22, 1994.
73. Macular holes. Cornell University, Department of Ophthalmology. New York, NY. February 28, 1994.
74. AIDS and the nervous system: Retinal complications. American Academy of Neurology. Washington, D.C. May 7, 1994.
75. ICG angiography, macular surgery and macular degeneration therapy. XXI Mexican Congress of Ophthalmology. Monterey, Mexico. August 1994.
76. New developments in infectious retinitis. University of California, San Francisco, Grand Rounds. San Francisco, CA. October 13, 1994.
77. Rifabutin uveitis. American Uveitis Society. San Francisco, CA. October 1994.
78. Medical and surgical management of retinitis associated with AIDS. American Academy of Ophthalmology. San Francisco, CA. November 1, 1994.
79. Ultrasound of the eye. American Academy of Ophthalmology. San Francisco, CA. November 2, 1994.
80. An algorithmic approach to posterior uveitis. American Academy of Ophthalmology. San Francisco, CA. November 3, 1994.
81. Retinal examination, use of the direct ophthalmoscope. University of California, San Diego, School of Medicine. La Jolla, CA. November 1994.
82. New developments in infectious retinitis and retinal imaging. University of California, San Francisco, School of Medicine. San Francisco, CA. November 1994.
83. Whipple's disease. Macula Society Meeting. Palm Beach, FL. February 1995.
84. Confocal scanning laser angiography. Macula Society Meeting. Palm Beach, FL. February 1995.
85. Management of CMV retinitis: Present and future. New England Eye Center, Tufts University, School of Medicine. Boston, MA. October 1995.
86. An algorithmic approach to posterior uveitis. American Academy of Ophthalmology. Atlanta, GA. October 1995.

87. Medial and surgical management of retinitis associate with AIDS. American Academy of Ophthalmology. Atlanta, GA. November 1995.
88. Management of CMV retinitis - Past, present, future: Cidofovir, ISIS 2922, MSL 109. Ocular Manifestation of AIDS. Midway Hospital Medical Center. Los Angeles, CA. January 1996.
89. The vitrectomy for macular hole study. University of California,at Davis, Department of Ophthalmology. Davis, CA. May 1996.
90. New aspects of CMV reitnitis. University of California,at Davis, Department of Ophthalmology. Davis, CA. May 1996.
91. Confocal retinal and choroidal angiography. University of California,at Davis, Department of Ophthalmology. Davis, CA. May 1996.
92. Lessons from the Vitrectomy for Macular Hole Study, University of Washington, October 1996.
93. New Retinal Imaging Technology, University of Washington, October 1996.
94. Update on AIDS & Infectious Retinitis, University of Washington, October 1996.
95. Retinal and choroidal manifestations of systemic disease; AIDS, October 1996.
96. Macula Society Symposium, American Academy of Ophthalmology, Chicago Illinois, October 1996.
97. An algorithmic approach to posterior uveitis, American Academy of Ophthalmology, Chicago Illinois, October 1996.
98. Ultrasound of the eye, American Academy of Ophthalmology, Chicago Illinois, October 1996.
99. Moderator, Macular hole scientific paper session, Association for Research in Vision and Ophthalmology, Fort Lauderdale, Florida., May 1997.
100. Moderator, AIDS scientific paper session, Association for Research in Vision and Ophthalmology, Fort Lauderdale, Florida., May 1997.
101. Intravitreous Cidofovir: Tips and caveats. American Academy of Ophthalmology, San Francisco, October 1997.
102. Panel discussion moderator, Uveitis and Retinal Inflammation. American Academy of Ophthalmology, San Francisco, October 1997.

103. Immune recovery; A new syndrome in CMV retinitis patients. Presented at 21st Annual Meeting Macula Society, Boca Raton, Fla. February 1998.
104. New treatments for macular degeneration and other retinal diseases. Presented at the Circle of Sight, University of California, San Diego, Shiley Eye Center. October 1998.
105. Ultrasound of the Eye. Presented at the American Academy of Ophthalmology, New Orleans, LA. November 11,1998.
106. The Munich/San Diego/Iowa City Collaboration (MuSIC): Design and Preliminary Results [Paper, Co-Author]. Presented at the 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, Dallas, Texas. October 22-25, 2000, page 108.
107. CMV Retinitis: Ocular Therapy Management Issues in the HAART Era [Course Instructor], 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, Dallas, Texas. October 22-25, 2000, page 186.
108. Ultrasound of the Eye [Course Instructor], 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, Dallas, Texas. October 22-25, 2000, page 188.
109. New and Emerging Treatments for Age-Related Macular Degeneration [Senior Instructor], 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, Dallas, Texas. October 22-25, 2000, page 189.
110. CMV Retinitis: Ocular Therapy Management Issued in the HAART Era [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, LA. November 2001, page 275.
111. Ultrasound of the Eye [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, LA. November 2001, page 279.
112. Current Macular Surgery Techniques [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, LA. November 2001, page 274.
113. Update on AIDS-2002. Other AIDS-Related Retinopathies and Choroidopathies. Combined meeting with the American Asociation of Ophthalmic Pathologists. American Academy of Ophthalmology, Orlando October 21, 2002. Pg 102 Program book.
114. Uveitis Update. Immune Recovery Uveitis; Medical and Surgical Approaches. Combinedmeeting with the Panamerican society of ocular inflammation. American Academy of Ophthalmology, Orlando October 21, 2002. Pg 110 Program book.
115. Ultrasound of the eye. American Academy of Ophthalmology Course. Orlando October 2002; program book page 222.

116. Terapia Fotodinamica para el manejo de las membranas neovasculares coroideas. American Academy of Ophthalmology/ Pan American academy of Ophthalmology Course. Orlando October 2002; program book page 224.
117. Estado Actual de la Cirugia Macular. American Academy of Ophthalmology/ Pan American academy of Ophthalmology Course. Orlando October 2002; program book page 226.
118. Modern Strategies for Management of CMV retinitis in the HAART era. American Academy of Ophthalmology Course, Orlando. October 2002, program book page 229.
119. Intravitreal Injection of Triamcinolone Acetonide in Uveitis. American Academy of Ophthalmology Discussion. Anaheim, CA. November 2003; program book page 137.
120. Terapia Fotodinamica (PDT) para el Manejo de Membranas Neovasculares Coroideas. American Academy of Ophthalmology Course 569. Anaheim, CA. November 2003; program book page 209.
121. Modern Strategies for Management of CMV Retinitis in the HAART Era. American Academy of Ophthalmology Course 371. Anaheim, CA. November 2003; program book page 206.
122. Ocular Ultrasound. American Academy of Ophthalmology Course 436. November 2003; program book page 207.
123. Update on AIDS Therapy. American Academy of Ophthalmology. Anaheim Hilton, November 2004.
124. V2-Pharmacologic and Other Treatments for AMD. American Academy of Ophthalmology. Anaheim Hilton, CA. November 2004.
125. Intraocular self reporting nonocrystals as a drug delivery system for retinal disease. The retina Society, Coronado, CA September 2005.
126. Course HIV and Ocular Infections. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan Oct 1-4, 2005.
127. Intraocular self reporting nanocrystals for intraocular drug delivery. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan Oct 1-4, 2005
128. Retinal Basis of Vision loss in HIV patients without infectious retinitis. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan Oct 1-4, 2005
129. New concepts in Drug delivery for Uveitis and Retinal Disease. 19<sup>th</sup> annual GEMU (Spanish Society of Uveitis) meeting, Barcelona, Spain February 2006.

130. Imaging techniques for the posterior Segment in Patients with Uveitis, 19<sup>th</sup> annual GEMU (Spanish Society of Uveitis) Meeting, Barcelona, Spain. February 2006.
131. Photodynamic therapy enhanced Feeder Vessel treatment. Macula Society Meeting, San Diego, CA. February 2006
132. New Treatments for Retinal Diseases. Foudnation for Fighting Blindness. San Diego Chapter Meeting, October 2006, Del Mar, Ca.
133. Update on Research at the Jacobs Retina Cenrter. 4<sup>th</sup> annual residents, fellows and alumni meeting, University of Californis, San Diego, La Jolla, CA June 2-3, 2007.
134. Faculty Member; AAO Retina Metting, New Orleans, Louisiana. November 2007; AMD combination therapies and the future.
135. Invited Speaker: American Uveitis Society, Vail Colorado, January 2008; Research in Drug delivery. Drug delivery for ivtreoretinal diseases.
136. Invited Speaker: Ocular Drug and Surgery Update, Dana Point, CA, February 2008: Drug delivery for age related macular degeneration. Course on Macular Degeneration.
137. Session Moderator, Age Related Macular Degeneration. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
138. Progress at the Jacobs Retina Center; Shiley Eye Center 5<sup>th</sup> annual Resident Fellow and Alumni Meeting, UCSD May 2008.
139. Editor's Choice Invited Lecturer. American Academy of Ophthalmology, Atlanta, November 2008. Editor's Choice lecture, Vision Loss in HIV patients without Retinitis.
140. Invited Speaker AAO Retina Meeting, Atlanta Georgia. November 2008. Uveitis therapy and diagnosis.
141. Invited Speaker; National Foundation of Ophthalmology of Colombia; del Rosario University. 30<sup>th</sup> annual educational course. New developments in Retinal Imaging, New developments in retinal drug delivery systems, Use of intravitreal dyes for surgical treatment of macular diseases. Feb 2009.
142. Invited Speaker; Western Retina Study Club, Hotel Grant, San Diego, California. Alex Irvine Lecturer; Application of new imaging modalities to Retinal disease. March 2009.
143. UCSD Retina Home Study Course: Macular Diseases part I. April 2009.
144. UCSD Retina Home Study Course: Macular Diseases part II. April 2009.

145. UCSD Retina Home Study Course: Peripheral Retinal Disease /Breaks /Detachment. June 2009.
146. Jacobs Retina Center update and moderator, nine presentations. Shiley Eye Center 7<sup>th</sup> annual resident and fellow update meeting. University of California, San Diego. June 2010.
147. Clinical Experience with Retinal Navigating Laser. Retina Society, San Francisco, California. September 2010.
148. Update on OCT Course. American Academy of Ophthalmology, Orlando, Florida.
149. American Uveitis Society, Update on HIV Retinal Disease. Park City, Utah. January 2012.
150. Ophthalmology Update, UCSD. New Approaches to AMD Therapy, San Diego, California. February 2012.
151. Retinal Disease Summit, Systemic Versus Local Therapy of Uveitis. Newport Beach, California. March 2012.
152. American Society of Retina Specialists, Navigated Laser Therapy in Combination with Anti-VEGF in Diabetic Macular Edema. Las Vegas, Nevada. August 2012.
153. Colombian society of retina and vitreous VII program Cartagena Sept 2015. Upcoming therapies for CNV in AMD
154. Colombian society of retina and vitreous VII program Cartagena Sept 2015: Upcoming therapies for Dry AMD
155. Colombian society of retina and vitreous VII program Cartagena Sept 2015: New Imaging Modalities including for retinal disease
156. Colombian society of retina and vitreous VII program Cartagena Sept 2015: Recalcitrant CME after pars plana vitrectomy



VISITING PROFESSORSHIPS AND INVITED LECTURES:

1. Silicone Oil, Retinal Tacks and Outpatient Retinal Surgery. Lecture. Visiting Professor, University California, San Diego, Department of Ophthalmology. La Jolla, CA. May 1986.
2. Oregon Health Sciences University, Lecture Series, Visiting Professor. Retina and Uveitis Update July 17, 1987. Lectures on Retinal Biopsy, AIDS and Periocular Steroid Injection.
3. International Conference on Uveitis. Surgical Approaches to Uveitis. São Paulo, Brazil. March 1988.
4. Aspen Retinal Detachment Society, Invited Lecture. Prognostic Significance, Treatment and Viral Pathogenesis of AIDS Associated Retinal Disease. Aspen, CO. March 1988.
5. Pneumatic Retinopexy: A Clinical Symposium. IOP Control. Posterior Breaks. San Diego, CA. August 1988.
6. New Diagnostic Techniques and Treatment Modalities in Viral Retinitis. Interscience Conference on Antimicrobial Agents and Chemotherapy. Los Angeles, CA. October 1988.
7. Pneumatic Retinopexy and AIDS Update Lectures. Ophthalmology Symposium; New Advances in Ophthalmology. Le Meridien Hotel, Newport Beach, CA. November 1988.
8. Uveitis Therapy, The Role of Pneumatic Retinopexy, Retinal Manifestations of AIDS. Retina Update; St. John's Hospital and Health Center. Century Plaza Hotel. February 1989.
9. Aspen Retinal Detachment Society, Invited Lecture. Pneumatic Retinopathy, AIDS Update, Macular Topography. Aspen, CO. March 1989.
10. Vail Vitreo-Retinal Meeting: Endoretinal Biopsy, Macular Tomographic Scanning. Vail, CO. March 1989.
11. Retinal Angiography Workshop: Lectures on Retinal Disease, St. Mary's Hospital Instruction Course. Carmel, CA. April 1989.
12. Retinal Biopsy and Ocular Immunology. Visiting Professor, Eye Research Institute of the Retina Foundation, Harvard University School of Medicine. Boston, MA. May 1989.
13. Invasive Posterior Segment Diagnostic Procedures in Patients with Inflammatory Eye Diseases: Clinical Laboratory Aspects. Visiting Professor. Francis I. Proctor Foundation, University of California, San Francisco. May 8-9, 1989.

14. Tumor Masquerade Syndromes, Ocular Tumors Course, Doheny Eye Institute. Los Angeles, CA. May 12, 1989.
15. University of Heidelberg, Visiting Professor. Imaging of the Macula. Heidelberg, FRG. July 1989.
16. Cytomegalovirus Infection and Other Retinal Manifestations of AIDS, American Academy of Ophthalmology Western Regional Update Course. Irvine Marriott Hotel, Irvine, CA. August 25-27, 1989.
17. Retinal, Vitreous and Uveal Biopsy for Inflammatory Ocular Disease. Ocular Inflammation Course, Scripps Clinic and Research Foundation. La Jolla, CA. March 31, 1990.
18. Macular Holes. Retinal Biopsy, Lenox Hill Hospital/New York Medical College, Symposium on the Retina. New York. May 11, 1990.
19. Visiting Professor, Cleveland Clinic and Research Foundation, Department of Ophthalmology. Cleveland, OH. June 1-2, 1990.
20. Allergan XVI Visiting Professor, Pacific Presbyterian Medical Center, Department of Ophthalmology. San Francisco, CA. June 18-19, 1990.
21. Visiting Professor, University of Würzburg. Würzburg, Germany. November 1990.
22. Visiting Professor, Loma Linda University. Loma Linda, CA. December 1990.
23. Surgical Management of Complicated Choroidal Hemorrhage. Ocular Trauma Course, Doheny Eye Institute. Los Angeles, CA. March 15, 1991.
24. Featured Lecturer, The Management of Infectious Retinitis. Annual British College of Ophthalmologists. Glasgow, Scotland. May 1991.
25. Symposium: Viral Retinitis and Retinal Disease in Immunosuppressed Patients. The 95th Annual Meeting of the American Academy of Ophthalmology. Anaheim, CA. October 1991.
26. Ocular Infections in AIDS. The 95th Annual Meeting of the American Academy of Ophthalmology. Anaheim, CA. October 1991.
27. Keynote Lecturer, Controversies in CMV Management. California Pacific Medical Center. San Francisco, CA. June 1992.
28. Visiting Professor, University of Sydney and Australian College of Ophthalmology. Sydney, Australia. October 1992.

29. Diagnostic and Therapeutic Vitreoretinal Surgery in Uveitis. American Academy of Ophthalmology. Chicago, IL. November 1993.
30. Invited Speaker, American Academy of Neurology. Washington, D.C. May 1994.
31. Visiting Professor, University of Pittsburgh. Pittsburgh, PA. January 1994.
32. Visiting Professor, Cornell University. New York, NY. February 1994.
33. Guadalajara University School of Medicine: ICG Angiography, Macular Surgery and Macular Degeneration Therapy. Monterey, Mexico. August 1994.
34. Visiting Professor, University of California, San Francisco. San Francisco, CA. November 1994.
35. International Chairman, International Conference on Infectious Disease of the Eye. Jerusalem, Israel. June 1995.
36. Visiting Professor, Tufts University. Boston, MA. October 1995.
37. VIII Annual G. Richard O'Connor Lecture, University of California at San Francisco Proctor Foundation, Alta, CA. June 1992.
38. Visiting Professor, University of California at Davis, Department of Ophthalmology. Davis, CA. May 1996.
39. Visiting Professor, The 13th Annual Retina Research and Development Foundation, Washington University, St. Louis, Department of Ophthalmology and Barnes Retina Institute, St. Louis, MO September 1996.
40. Visiting Professor, CMV Symposium. "Update On Intravitreal Cidofovir". The University of California, San Francisco, San Francisco, CA February 1997.
41. Guest Professor, "AIDS Clinical Rounds". University of California, San Diego, University of San Diego, Treatment Center, San Diego, CA March 1997.
42. Moderator, AIDS scientific paper session, Association for Research in Vision and Ophthalmology, Fort Lauderdale, Florida., May 1997.
43. Imaging of the Vitreoretinal Interface: Keynote Invited Lecture. 95th Meeting of the German Ophthalmological Society, Berlin, 20-23 September, 1997.
44. Recent developments in infectious retinitis, Moorfield's Eye Hospital Grand Rounds, invited Lecture, London, September 1997.

45. Lessons from the Macular Hole Study, Moorfield's Eye Hospital Grand Rounds, invited lecture, London, September 1997.
46. Moderator, Uveitis/Retinitis scientific paper session, American Academy of Ophthalmology, San Francisco, CA October 1997.
47. An algorithmic approach to posterior uveitis, American Academy of Ophthalmology. San Francisco, CA October 1997.
48. Ultrasound of the eye, American Academy of Ophthalmology, San Francisco, CA October 1997.
49. Ophthalmic management of AIDS related eye disease. Asia-Pacific International Conference Toyko Japan, April 15-19, 1998.
50. 95th Annual Congress meeting of the German Eye Society, Berlin, September 1997.
51. Macular Degeneration: New Concept of Genetic Causes and Preventative Management, The Sam and Rose Stein Institute on Aging. San Diego, August 19, 1998.
52. Management of CMV retinitis in the HAART era. Second International Conference on Ocular Infections. Munich, Germany, August 22 - 26 1998.
53. Invited Speaker, Long-term management, including removal of silicone oil. CMV retinitis: Second Multidisciplinary Research Workshop. Yosemite National Park, February 18 - 21, 1999.
54. Invited Speaker, Mechanisms of disease. CMV retinitis: Second Multidisciplinary Research Workshop. Yosemite National Park, February 18 - 21, 1999.
55. Invited Speaker, Ocular complications. . CMV retinitis: Second Multidisciplinary Research Workshop. Yosemite National Park, February 18 - 21, 1999.
56. Invited Speaker, Age-related macular degeneration. UCSD Institute of Aging, La Jolla, August 1998.
57. Invited Speaker, Aspen Retinal Society, featured guest lecture: Update on infectious retinitis.
58. Invited Speaker, Aspen Retinal Society, featured guest lecture: New treatments for macular degeneration. Aspen, Colorado; March, 1999.
59. Invited Speaker, Duke University Eye Center, 12<sup>th</sup> Advanced Vitreous Surgery Course Program: "Complications of Vitrectomy in Patients with CMV", "Silicone Oil for the Treatment of CMV Retinitis", "Ocular Complications of Ganciclovir Implant", and "Serum for Mauclar Hole Surgery". Pinehurst, North Carolina; April 27-29, 2000.

60. New Therapies for Age-Related Macular Degeneration: Metalloprotease Inhibitors for Choroidal Neovascularization. 104<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology 2000 Symposium, pg. 286.
61. Invited Lecturer, Academy Retina Symposium, featured lecture: OCT and Scanning Laser Imaging of the Retina. New Orleans, Louisiana. November 2001.
62. Invited Lecturer, XVIII Chilean Congress of Ophthalmology, featured lecture: New Treatment for Macular Degeneration. Pucon, Chile. December 2001.
63. Invited Lecturer, XVIII Chilean Congress of Ophthalmology, featured lecture: Confocal High Speed Angiography and retinal feeder vess treatment for AMD. Pucon, Chile. December 2001.
64. Invited Lecturer, XVIII Chilean Congress of Ophthalmology, featured lecture: Immune Recovery Uveitis in Patients with CMV and HIV disease. Pucon, Chile. December 2001.
65. Invited Lecturer, XVIII Chilean Congress of Ophthalmology, featured lecture: Treatment of Drusen with Diode Laser. Pucon, Chile. December 2001.
66. Invited Lecturer, XVIII Chilean Congress of Ophthalmology, featured lecture: Do adjuvant therapies work? Pucon, Chile. December 2001.
67. Invited Lecturer, Academy Retina Symposium, featured lecture: OCT and Scanning Laser Imaging of the Retina. AAO, New Orleans, Louisiana. November 2001.
68. CMV Retinitis: Ocular Therapy Management Issued in the HAART Era [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, Loisiana. November 2001, page 275.
69. Ultrasound of the Eye [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, Louisiana. November 2001, page 279.
70. Current Macular Surgery Techniques [Course Instructor]. 105<sup>th</sup> Annual Meeting of the American Academy of Ophthalmology, New Orleans, Louisiana. November 2001, page 274.
71. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millenium, Chairperson on Course on New Approaches to Aids – Related Retinal Infections, Part I, Introduction and Overview. Salzburg, Austria, June 2002.
72. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millenium, featured lecture: Management of Complications of CMV Retinitis. Salzburg, Austria, June 2002.

73. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, featured lecture: Opening Session and Closing Session Remarks. Salzburg, Austria, June 2002.
74. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, Chairperson of Keynote Lecture on Antiretroviral Drug therapy for HIV in the 21<sup>st</sup> Century. Salzburg, Austria, June 2002.
75. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, featured lecture: Intraocular Therapy, CMV Retinitis: Indications and Techniques – Intravitreal Injections – Including Foscarnet, Ganciclovir, Cidofovir, Fomiversen. Salzburg, Austria, June 2002.
76. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, featured lecture: HIV Related Retinal Disease, Volumetric Analysis of Macular Edema by Scanning Laser Tomography in Immune Recovery Uveitis. Salzburg, Austria, June 2002.
77. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, featured lecture: HIV-Related Retinal Disease, Intraocular, Viral and Immune Pathogenesis of Immune Recovery Uveitis in Patients with Healed Cytomegalovirus Retinitis. Salzburg, Austria, June 2002.
78. Invited Lecturer, 3<sup>rd</sup> International Conference on Ocular Infections: Stepping into the New Millennium, Chairperson of Keynote Lecture on Antiviral Drug Update: Cidofovir. Salzburg, Austria, June 2002.
79. Invited Lecturer, UPDATE ON AID-2002. Other AIDS-Related Retinopathies and Choroidopathies. Combined meeting with the American Association of Ophthalmic Pathologists. American Academy of Ophthalmology, Orlando, FL, October 21, 2002. Page 102 Program Book.
80. Invited Lecturer, Uveitis update. Immune Recovery Uveitis; Medical and Surgical Approaches. Combined meeting with the PanAmerican Society of Ocular Inflammation. American Academy of Ophthalmology, Orlando, FL, October 21, 2002. Page 110 Program Book.
81. Ultrasound of the Eye. American Academy of Ophthalmology Course. Orlando, Florida. October 2002; program book page 222.
82. Terapia Fotodinamica para el manejo de las membranes neovasculares coroideas. American Academy of Ophthalmology/Pan American Academy of Ophthalmology Course. Orlando, Florida. October 2002; program book page 224.

83. Estado Actual de la Cirugia Macular. American Academy of Ophthalmology/ Pan American Academy of Ophthalmology Course. Orlando, Florida. October 2002; program book page 226.
84. Modern Strategies for Management of CMV retinitis in the HAART era. American Academy of Ophthalmology Course, Orlando, Florida. October 2002, program book page 229.
85. Intravitreal Injection of Triamcinolone Acetonide in Uveitis. American Academy of Ophthalmology Discussion. Anaheim, California. November 2003; program book page 137.
86. Terapia Fotodinamica (PDT) para el Manejo de Membranas Neovasculares Coroideas. American Academy of Ophthalmology Course 569. Anaheim, California. November 2003; program book page 209.
87. Modern Strategies for Management of CMV Retinitis in the HAART Era. American Academy of Ophthalmology Course 371. Anaheim, California. November 2003; program book page 206.
88. Ocular Ultrasound. American Academy of Ophthalmology Course 436. Anaheim, California. November 2003; program book page 207.
89. Visting Professor, Lectures on New Imaging Technology for Retinal Disease, Macular Hole Surgery and Immune Recovery Uveitis. University of California San Francisco, Department of Ophthalmology, February 20, 2003.
90. Invited Lecturer, Retina. Changing Patterns for the Repair of Primary Retinal Detachment – Minisymposium: Outlook for the Future, PGM # 1037. ARVO Annual Meeting. Fort Lauderdale, Florida. May 4-9, 2003.
91. Invited Lecturer. Update on AIDS Therapy. American Academy of Ophthalmology Retina Subspecialty Meeting. November 15, 2003.
92. Invited Lecturer. New Considerations in the Use of Triamcinolone for Macular Edema. The Sociedad Panamericana de Enfermedades Inflammatorias Oculares. Hyatt Regency, Orange County, California. November 1, 2003.
93. Update on AIDS Therapy. American Academy of Ophthalmology. Anaheim Hilton, November 2004.
94. V2-Pharmacologic and Other Treatments for AMD. American Academy of Ophthalmology. Anaheim, California. November 2004.
95. Intraocular self-reporting nonocrystals as a drug delivery system for retinal disease. The Retina Society, Coronado, California. September 2005.

96. Invited Lecturer. Update on Ocular Imaging. Taijuen, China. September 2005.
97. Invited Lecturer. Update on Diabetic Retinopathy. University of Shanghai, China. September 2005.
98. Invited Lecturer. New Treatments of Age Related Macular Degeneration. Japanese Congress of Ophthalmology, Sapporo, Japan. October 2005.
99. Invited Lecturer. Immune Recovery Uveitis. International Society of Ocular Infections. Sapporo, Japan. October 2005.
100. Course HIV and Ocular Infections. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan. Oct 1-4, 2005.
101. Intraocular self-reporting nanocrystals for intraocular drug delivery. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan Oct 1-4, 2005.
102. Retinal Basis of Vision loss in HIV patients without infectious retinitis. 4<sup>th</sup> International Conference on Ocular Infections, Hokkaido, Japan Oct 1-4, 2005.
103. Invited Lincoff Lecturer. New treatments and Imaging Modalities for Macular Degeneration. Cornell University Medical Center, New York, New York, November 2005.
104. New concepts in Drug delivery for Uveitis and Retinal Disease. 19<sup>th</sup> annual GEMU (Spanish Society of Uveitis) meeting, Barcelona, Spain. February 2006.
105. Imaging techniques for the posterior Segment in Patients with Uveitis, 19<sup>th</sup> annual GEMU (Spanish Society of Uveitis) meeting, Barcelona, Spain. February 2006.
106. Photodynamic therapy enhanced Feeder Vessel treatment. Macula Society Meeting, San Diego, California. February 2006.
107. New Treatments for Retinal Diseases. Foundation for Fighting Blindness. San Diego Chapter, Del Mar, California. October 2006.
108. Invited Lecturer. New Drug Delivery Systems for Posterior Segment Eye Disease and New Retinal Imaging Techniques. Kapiolani Medical Center/University of Hawaii, Honolulu, Hawaii, July 15, 2006.
109. Invited Lecturer and Visiting Professor. Lectures on Drug delivery for Age Related Macular Degeneration. University of California, San Francisco, Department of Ophthalmology. April 2007.



110. Invited Lecturer. ARVO/Pfizer symposium on Drug Delivery to the Posterior Segment of the Eye. Fort Lauderdale, Florida. May 2007.
111. Update on Research at the Jacobs Retina Center. 4<sup>th</sup> annual residents, fellows and alumni meeting, University of California, San Diego, La Jolla, California. June 2-3, 2007.
112. Faculty Member. AMD combination therapies and the future. AAO Retina Meeting, New Orleans, Louisiana. November 2007.
113. Invited Speaker. Drug delivery for vitreoretinal diseases. Research in Drug Delivery. American Uveitis Society, Vail Colorado, January 2008.
114. Invited Speaker: Ocular Drug and Surgery Update; Drug delivery for age-related macular degeneration. Course on Macular Degeneration. Dana Point, California. February 2008.
115. Visiting Professor and Invited lecturer, USC Keck School Dept of Ophthalmology, Doheny Eye Institute. Berkorst Lecturer. Fluorescein angiography rounds. Retinal Imaging and HIV Disease. March 2008.
116. Session Moderator, Age Related Macular Degeneration. ARVO Annual Meeting. Fort Lauderdale, Florida. April 27-May 1, 2008.
117. Progress at the Jacobs Retina Center; Shiley Eye Center 5<sup>th</sup> Annual Resident Fellow and Alumni Meeting, University of California, San Diego, La Jolla, California. May 2008.
118. Editor's Choice Invited Lecturer. Vision Loss in HIV patients without Retinitis. American Academy of Ophthalmology, Atlanta, November 2008.
119. Invited Speaker. Uveitis therapy and diagnosis. AAO Retina Meeting, Atlanta Georgia. November 2008.
120. Invited Speaker. National Foundation of Ophthalmology of Colombia; Del Rosario University. 30<sup>th</sup> annual educational course. New developments in Retinal Imaging, New developments in retinal drug delivery systems, Use of intravitreal dyes for surgical treatment of macular diseases. February 2009.
121. Visiting Professor. Wenzhou Medical College, Wenzhou, China; New developments in retinal diseases and treatment. March 2009.
122. Visiting Lecturer Xian Medical College; Xian, China. New developments in retinal imaging and treatments of macular degeneration. March 2009.
123. Invited Speaker. Western Retina Study Club, Hotel Grant, San Diego, California. Alex Irvine Lecturer; Application of new imaging modalities to retinal disease. March 2009.

124. UCSD Retina Home Study Course: Macular Diseases Part I. April 2009.
125. UCSD Retina Home Study Course: Macular Diseases Part II. April 2009.
126. UCSD Retina Home Study Course: Peripheral Retinal Disease /Breaks /Detachment. June 2009.
127. President and Lecturer. International Society of Ocular Infections. West Palm Beach, Florida. MV retinitis and immune recovery uveitis. February 2010.
128. International President and Lecturer; 1<sup>st</sup> International Conference on Retinal Imaging, Como, Italy. Lecture on Navigated retinal laser photocoagulation. March 2010.
129. Jacobs Retina Center update and moderator, nine presentations. Shiley Eye Center 7<sup>th</sup> Annual Resident and Fellow Update Meeting. University of California, San Diego, La Jolla, California. June 2010.
130. Lecturer. Retina Society. Clinical Experience with Retinal Navigating Laser. San Francisco, California. September 2010.
131. Invited Lecturer; 87<sup>th</sup> Congress of the Spanish Society of Ophthalmology; Oviedo, Spain. Intraocular drug delivery systems for retina pathologies: present and future. September 2011.
132. Visiting Professor; Henry Ford Health System. Detroit, Michigan. New development in retinal imaging and their influence in clinical practice; HIV and the retina; new considerations in retinitis management and vision loss in HIV. March 2011.
133. American Uveitis Society, Update on HIV Retinal Disease. Park City, Utah. January 2012.
134. Invited Lecturer; San Diego, California. Ophthalmology Update 2012: New Approaches to Medical and Surgical Therapies; Changing Treatments for Choroidal Neovascularization. February 2012.
135. Invited Lecturer. Retinal Disease Summit, Systemic Versus Local Therapy of Uveitis; Case Discussions. Newport Beach, California. March 2012.
136. Visiting Professor; University of Pennsylvania. Lectures on Ocular Drug Delivery and New Treatments and Approaches to Retinal Imaging. Philadelphia, Pennsylvania. May 2012.
137. American Society of Retina Specialists, Navigated Laser Therapy in Combination with Anti-VEGF in Diabetic Macular Edema. Las Vegas, Nevada. August 2012.

138. Invited Lecturer; American Academy of Ophthalmology. Lectures on History of Ocular Infections; CMV Retinitis. Chicago, Illinois. November 2012.
139. Visiting Professor; Update on retinal diseases and treatments. Hadassah University Medical Center, Jerusalem, Israel. November 2012.
140. Visiting Professor; Update on retinal diseases and treatments. King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia, November 2012.
141. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Advances in Retinal Research: Nanotechnology & Future of Retinal Diseases. January 2013.
142. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Management of Diabetic Macular Edema (DME): basics to 2013. Pathomechanisms and Molecular Basis of DME. January 2013.
143. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Modern Day Perspectives on the Use of Dyes in VR Surgery. January 2013.
144. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Use of Image Registered Raster Scanning SD OCT to Facilitate 25 Gage ERM Removal. January 2013.
145. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Imaging retinal vasculature and disease: SD-OCT. January 2013.
146. Invited Lecturer; the 28 Asia-Pacific Academy of Ophthalmology Congress-All India Ophthalmological Society (APAO-AIOS), Hyderabad, India. Updates on Diagnosis and treatment of macular diseases: Vitreo Macular Traction Syndrome. January 2013.
147. Invited Lecturer; Ophthalmology Update 2013, University of California, San Diego, California. Retina: Update on Diabetic Retinopathy. February 2013.
148. Invited Lecturer; University of California, San Diego, California. Shiley Eye Institute and Jacobs Retina Center, Associates Update Meeting: Surgical Considerations for UCSD Nanovision Artificial Retina Clinical Trial. August 2014.
149. Invited Lecturer; Connecticut Society of Eye Physicians, Litchfield, Connecticut. New developments in retinal therapeutics and imaging. January 2015.
150. Invited Lecturer and honorary member of the Association of Colombian Retina and Vitreous Surgeons. VII program, Cartagena, Colombia. September 2015.

PUBLIC SERVICE AND EDUCATIONAL ACTIVITIES:

1. Macular Degeneration, Lecture to the Public at the University of California, San Diego, Hospital. January 31, 1987.
2. Use of Silicone and Long Acting Gases for Complicated Retinal Disease. Lecture to Ophthalmology Department, Scripps Memorial Hospital. July 21, 1987.
3. Diseases and Treatment of the Retina, UCSD, "Health Watch" KSON AM 1240, KSON FM 97, 5:00 to 5:25, Sunday, September 13, 1987.
4. AIDS and Eye Problems. Interview WFAA-TV Channel 8, Dallas. November 11, 1987, 5:00 P.M.
5. San Diego Symposium on Pneumatic Retinopexy, San Diego Marriot Hotel. August 1988.
6. The Washington Post: Sighting the AIDS Virus: Eyes Hold an Early Clue. October 11, 1988.
7. The Uncertain Association Between Epstein Barr Virus and Ophthalmic Disease; Scientific Exhibit. American Academy of Ophthalmology. Las Vegas, NV. October 1988.
8. Ocular Sampling Techniques; Scientific Instruction Course. American Academy of Ophthalmology. Las Vegas, NV. October 1988.
9. Management of AIDS-Associated Retinopathies; Scientific Instruction Course. American Academy of Ophthalmology. Las Vegas, NV. October 1988.
10. Infectious Retinitis Management; Scientific Instruction Course. American Academy of Ophthalmology Regional Update. Los Angeles, CA. August 1989.
11. Management of AIDS-Associated Retinopathies; Scientific Instruction Course. American Academy of Ophthalmology. New Orleans, LA. November 1989.
12. Ocular Sampling Techniques; Scientific Instruction Course. American Academy of Ophthalmology. New Orleans, LA. November 1989.
13. Management of AIDS-Associated Retinopathies; Scientific Instruction Course. American Academy of Ophthalmology. Atlanta, GA. October 1990.

14. Ocular Sampling Techniques, Scientific Instruction Course. American Academy of Ophthalmology. Atlanta, GA. October 1990.
15. Echography in Vitro-Retinal Disease. San Diego Eye Bank, San Diego, CA. October 1990.
16. Diabetic Eye Disease and Macular Degeneration. Medicine Today. University of California San Diego, La Jolla, CA. October 1990.
17. Management of Infectious Retinitis. College of Ophthalmologists, Glasgow, May 1991.
18. San Diego Retina Symposium for the Practicing Physician. San Diego Eye Bank, San Diego, CA. February 1992.
19. A Practical Approach for Avoiding Sympathetic Ophthalmia. California Association of Ophthalmology. Dana Point, CA. September 13, 1992.
20. Moderator. Aids/Uveitis: Association for Research and Vision in Ophthalmology. May 1993.
21. Management of the AIDS Patient - Infections and CMV Detachment Controversies Panel Discussion. New Dimensions in Retina. Chicago, IL. November 13, 1993.
22. Macular Hole Surgery Controversies Panel Discussion. New Dimensions in Retina. Chicago, IL. November 13, 1993.
23. An Algorithmic Approach to Posterior Uveitis. American Academy of Ophthalmology, Chicago, IL. November 16, 1993.
24. Medical and Surgical Management of Retinitis Associated with AIDS. American Academy of Ophthalmology, Chicago, IL. November 17, 1993.
25. Moderator. Retina/Uveitis: Association for Research and Vision in Ophthalmology. May 1994.
26. An Algorithmic Approach to Posterior Uveitis. American Academy of Ophthalmology, San Francisco, CA. November 3, 1994.
27. Medical and Surgical Management of Retinitis Associated with AIDS. American Academy of Ophthalmology. San Francisco, CA. November 1, 1994.
28. Ultrasound of the Eye. American Academy of Ophthalmology. San Francisco, CA. November 2, 1994.

29. An Algorithmic Approach to Posterior Uveitis. American Academy of Ophthalmology, Atlanta, GA. November 2, 1995.
30. Medical and Surgical Management of Retinitis Associated with AIDS. American Academy of Ophthalmology. Atlanta, GA. November 2, 1995.
31. Ultrasound of the Eye. American Academy of Ophthalmology. Atlanta, GA. November 2, 1995.
32. Research Committee: Macula Society. Presented at 21st Annual Meeting Macula Society, Boca Raton, FL. February 1998.
33. The Sam and Rose Stein Institute on Aging. "Macular Degeneration: New Concept of Genetic Causes and Preventative Management," San Diego, CA. August 19, 1998.
34. President, International Conference on Ocular Infections, Munich, Germany, August 22 - 26, 1998.
35. Organizing Committee Member for the CMV Retinitis: Second Multidisciplinary Research Workshop. Yosemite National Park, February 18 - 21, 1999.
36. Don't be blindsided; a public awareness program about glaucoma and other eye diseases. Aired on television on August 1998. Pharmacia Upjohn, Sponsor.
37. Healthy Living with Macular Degeneration: "The Macular Degeneration Condition," Spreckels Organ Pavilion, Balboa Park, San Diego, CA, October 1999.
37. Faculty Member: AAO Retina Meeting, New Orleans, LA, November 2001.
38. Progress in Macular Degeneration. UCSD Institute of Continued Learning. January 23, 2002.
39. Overview Retina Division Research, UDCSD Shiley Eye Center 3<sup>rd</sup> Annual Alumni Meeting. May 20, 2006.
40. Faculty Member; AAO Retina Meeting, New Orleans, LS. AMD Combination Therapies and the Future. November 2007.
41. Faculty Member: AAO Meeting, Atlanta, GA. Lecture on vision loss in HIV disease. November 2008.
42. UCSD Nursing Spring Educational Seminar: New treatment options for retina diseases. March 2009.

43. San Diego Union-Tribune: So-called floaters can signal serious eye problem. April 2012.