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**Date of Birth:** September 29, 1967  
**Place of Birth:** Baltimore, Maryland, U.S.A.  
**Marital Status:** Married – 4 children

**Faculty Positions**

7/1/2014–present	Chairman and Roy E. Mason and Elizabeth Patee Mason Distinguished Professor, Cornea/External Disease, Ocular Oncology and Refractive Surgery, Mason Eye Institute, University of Missouri, Columbia, Missouri
9/11/2014–present	Clinic Medical Director. Department of Ophthalmology, University of Missouri, Columbia, Missouri.
7/1/2011–6/30/2014	Professor of Ophthalmology, Cornea/External Disease, Ocular Oncology, and Refractive Surgery, Casey Eye Institute, Oregon Health & Science University, Portland, Oregon
1/1/2012–6/30/2014	Martha and Eddie Peterson Endowed Professor
2008–6/30/2014	Director/Chief, Cornea/ External Disease/ Refractive Surgery Division Casey Eye Institute, Portland, Oregon
2006–6/30/2011	Associate Professor of Ophthalmology, Cornea/External Disease, Ocular Oncology, and Refractive Surgery, Casey Eye Institute, Oregon Health & Science University, Portland, Oregon
2001–2006	Assistant Professor of Ophthalmology, Cornea/External Disease, Ocular Oncology, and Refractive Surgery, Casey Eye Institute, Oregon Health & Science University, Portland, Oregon

**Board Certification**

American Board of Ophthalmology, July 2002  
Recertification January 2013

## Education

2009–2012	Master in Business Administration in Healthcare Management Portland State University/ OHSU Portland, OR
2001–2002	Fellowships: World Health Organization, Uppsala, Sweden Food and Drug Administration, Baltimore, Maryland Alcon Pharmaceuticals, Fort Worth, Texas
2002–2002	Fellow, Cornea/External Disease and Refractive Surgery, Casey Eye Institute, Oregon Health Sciences University, Portland, Oregon
1997–2000	Ophthalmology Resident, University of Washington Medical Center Seattle, Washington
1995–1997	Resident Medical Officer, Alice Springs Hospital Alice Springs, NT Australia
1994–1995	Medical Resident, Providence Medical Center Portland, Oregon
1990–1994	M.D., Oregon Health Sciences University Portland, Oregon
1986–1990	B.A., Economics, Baylor University Waco, Texas

## Offices

2014–present	Director of the cornea resident rotation, University of Missouri
2014–present	Director of the cornea fellowship, University of Missouri
2013–2014	Zoster Eye Disease Study (ZEDS) Steering Committee
2010–2012	Selection Committee for Claes Dohlman Award
2008–present	Chair of Ocular Toxicology session for International Symposium on Ocular Pharmacology and Therapeutics (ISOPT)
2009–2014	Course director of the resident lecture series, OHSU/ CEI
2009–2014	OHSU Laser Committee
2009–2014	Laser credentialing at Casey Eye Institute
2008–2014	President, International Society of Ocular Toxicology
2008–2014	Director of the cornea resident rotation, Oregon Health & Science University
2008–2014	Director of the cornea fellowship, Oregon Health & Science University
2006–2010	Lions Eye Bank of Oregon, Medical Advisory Committee
2006–2009	Director of Continuing Medical Education, Casey Eye Institute
2005–2014	Associate Faculty Member for the Cornea Fellowship, Devers Eye Institute
2003–2005	Casey Eye Institute Residency Selection Committee
2003–2007	Executive Board, Oregon Academy of Ophthalmology
2003–2007	HIPAA Faculty Representative, Oregon Health & Science University

2002–2004	Institutional Review Board Member, Oregon Health & Science University
2001–present	Consultant, World Health Organization’s Uppsala Monitoring Center, Uppsala, Sweden
2000–present	Director, National Registry of Drug-Induced Ocular Side Effects

### Editorial Board Member

2015 – present	<i>New Frontiers in Ophthalmology (NFO)</i>
2015 – present	<i>BMC Ophthalmology</i>
2003 – present	<i>Drugs of the Future</i> <i>Drugs of Today</i> <i>Physicians Desk Reference</i>
2003–2010	<u>EyeNet</u>

### Reviewer

2009–present	<i>Journal of Neuro-Ophthalmology</i>
2001–present	<i>American Journal of Ophthalmology</i> <i>Archives of Ophthalmology</i> <i>British Journal of Ophthalmology</i> <i>Comprehensive Ophthalmology Update</i> <i>Cornea</i> <i>Cutaneous and Ocular Toxicology</i> <i>Drugs of Today</i> <i>Expert Opinion on Drug Safety</i> <i>Journal of Glaucoma</i> <i>Journal of Refractive Surgery</i> <i>Ophthalmic and Physiological Optics</i> <i>Ophthalmology</i>

### Societies and Organizations

2014–present	Missouri Society of Eye Physicians and Surgeons
2014–present	Association for Research in Vision and Ophthalmology
2014–present	Boone County Medical Society
2008–present	American Ophthalmological Society
2003–present	Oregon Academy of Ophthalmology
2002–present	Cornea Society, Member with Thesis
2002–present	International Society of Ocular Pharmacology and Therapeutics
2002–present	International Society of Ocular Therapeutics
2002–2007	American Society of Cataract and Refractive Surgery
2002–2006	International Congress of Ophthalmology
2002–2005	Oregon Medical Association
2001–present	American Academy of Ophthalmology

1993–2007 Association for Research in Vision and Ophthalmology

### **Research/Awards/Scholarship**

- 2015 University of Missouri Coulter Program Grant Award. Research project: An Efficient Long-Term Corneal Preservation System; Fraunfelder FW, clinical PI; Han X, engineering PI.
- 2012–2013 Portland Top Doctors
- 2011–present Marquis Who'sWho in Medicine and Healthcare
- 2009–2012 School of Medicine MBA in Healthcare Management scholarship PSU/OHSU
- 2008 Poster award at the American Academy of Ophthalmology meeting: Fraunfelder, FW, Richards AB. Diplopia, Blepharitis, and Ophthalmoplegia Associated with the use of HMG-CoA Reductase Inhibitors. Atlanta, Georgia. November 2008.
- 2007 American Academy of Ophthalmology Outstanding Achievement Award
- 2002 Collins Medical Trust: Decreased Tumor Recurrence After Excision and Cryotherapy for Surface Eye Tumors
- 2000–present American Academy of Ophthalmology annual instruction course, ranked in the top 10 percent within subject area.
- 2000 Heed Ophthalmic Foundation Fellowship Award
- 1993 Ophthalmology Research Assistant: Keith Green, Ph.D., Medical College of Georgia, Augusta, Georgia. Research project: Effects of Calcium Channel Blockers on Rabbit Corneal Endothelial Function.
- 1991 Sigma Xi Grants-in-Aid of Research. John C. Morrison, M.D., and Frederick W. Fraunfelder, B.A. "Corrosion Casting & Scanning Electron Microscopy of Aqueous Outflow Pathways of the Adult Rat Eye."
- 1990–1994 Research to Prevent Blindness Medical Student Fellowship
- 1990-93 Research Assistant for John C. Morrison, M.D., Casey Eye Institute and Oregon Regional Primate Center, Portland, Oregon.
- 1990 Outstanding Senior Man, Baylor University, Waco, Texas

### **Committee Responsibilities, University of Missouri Department of Ophthalmology**

Medical Director  
 Fellowship Director  
 Residency Selection Committee  
 Compliance Committee  
 Medical Student Mentor

### **Committee Responsibilities, University of Missouri Health Care**

2014–present Clinic Medical Director's Committee  
 2014–present Executive Clinical Chairs  
 2014–present Council of Chairs  
 2014–present UP Management Committee  
 2014–present UP Professional Liability/Compliance Committee  
 2014–present Operating Room Operations Committee

2014–present Operating Room Operations Committee Policy Advisory with Leadership  
 2014–present Hospital Operations Clinical Chair  
 2014–present Executive Board of Missouri Society for Outpatient Surgery (MCOS)

### Leadership Short Courses

1. Executive Development Seminar for Associate Deans and Chairs. Association of American Medical College (AAMC). Tempe, AZ, September 25 – 29, 2015.

### Publications

#### Books

1. Fraunfelder FT, **Fraunfelder FW**, Chambers WA. *Drug-Induced Ocular Side Effects*. 7th edition. Philadelphia: Elsevier Saunders, 2014.
2. Roy FH, **Fraunfelder FW**, Fraunfelder FT. *Roy and Fraunfelder's Current Ocular Therapy*. 6th edition. London: Elsevier, 2008.
3. Fraunfelder FT, **Fraunfelder FW**, Chambers WA. *Clinical Ocular Toxicology*. 6th edition. Philadelphia: WB Saunders, 2008.
4. Fraunfelder FT, **Fraunfelder FW**. *Drug-Induced Ocular Side Effects*. 5th edition. Woburn, Mass.: Butterworth-Heinemann, 2001.

#### Peer-Reviewed Journal Articles

#### Published

1. **Fraunfelder FW**, Yang HK. Association between bortezomib therapy and eyelid chalazia. *JAMA Ophthalmology* 2016 Jan;134(1):88-90.
2. Benage M, **Fraunfelder FW**. Vaccine-associated uveitis. *Missouri Medicine* 2016 Jan/Feb;113(1):48-52.
3. **Fraunfelder FW**. MU ophthalmology charts a future of growth [editorial]. *Missouri Medicine* 2016 Jan/Feb;113(1):39.
4. **Fraunfelder FW**, Fraunfelder FT. Conjunctival and corneal ulceration associated with nicorandil. *Cutaneous and Ocular Toxicology* 2014 Jun; 33(2):120-121.
5. Azuma M, Yabuta C, **Fraunfelder FW**, Shearer TR. Dry eye in LASIK patients. *BMC Research Notes* 2014 Jul 3; 7:420. doi: 10.1186/1756-0500-7-420.

6. Holt HD, Hinkle DM, Falk NS, Fraunfelder FT, **Fraunfelder FW**. Human papilloma virus vaccine associated uveitis. *Current Drug Safety* 2014 Mar; 9(1):65-68.
7. Ng JK, **Fraunfelder FW**, Winthrop KL. Review and update on the epidemiology, clinical presentation, diagnosis, and treatment of fungal keratitis. *Current Fungal Infection Reports* 2013 Dec; 7(4):293-300.
8. **Fraunfelder FW**. Liquid nitrogen cryotherapy of pterygia. *Ophthalmology* 2013 Oct; 120(10):e70.
9. Tehrani S, **Fraunfelder FW**. Cryotherapy in ophthalmology. *Open Journal of Ophthalmology* 2013 Nov; 3(4):103-117.
10. **Fraunfelder FW**, Fraunfelder FT. Restricting topical ocular chloramphenicol eye drop use in the United States. Did we overreact? *American Journal of Ophthalmology* 2013 Sep; 156(3): 420-2.
11. Patel M, **Fraunfelder FW**. Toxicity of topical ophthalmic anesthetics. *Expert Opinion on Drug Metabolism and Toxicology* 2013 Aug; 9(8):983-988.
12. **Fraunfelder FW**. Common ocular adverse drug reactions from systemic medications: a review. *Ophthalmology International* 2013;8(1):30-33.
13. Winthrop KL, Chen L, **Fraunfelder FW**, et al. Initiation of anti-TNF therapy and the risk of optic neuritis: from the safety assessment of biologic ThERapy (SABER) Study. *American Journal of Ophthalmology* 2013 Jan; 155(1):183-189.e1.
14. Hinkle DM, Dacey MS, Mandelcorn E, Kalyani P, Mauro J, Bates JH, Soukasian SH, Holland GN, Foster CS, Fraunfelder FT, Davis JL, **Fraunfelder FW**. Bilateral uveitis associated with fluoroquinolone therapy. *Cutaneous and Ocular Toxicology* 2012 Jun; 31(2):111-116.
15. Schwab P, Harmon D, Bruno R, **Fraunfelder FW**, Kim DH. A 55-year-old woman with orbital inflammation. *Arthritis Care and Research* 2012 Nov; 64(11):1776-1782.
16. Fraunfelder FT, **Fraunfelder FW**. Trichomegaly and Other external eye side effects associated with epidermal growth factor. *Cutaneous and Ocular Toxicology* 2012 Sep;31(3):195-197.
17. Rush SW, **Fraunfelder FW**, Mathers MD, Chamberlain WD. Femtosecond laser-assisted keratoplasty in failed penetrating keratoplasty and globe trauma. *Cornea* 2011 Dec; 30(12):1358-1362.
18. Wilkinson JT, **Fraunfelder FW**. Use of herbal medicines and nutritional supplements in ocular disorders: an evidence-based review. *Drugs* 2011 Dec 24; 71(18):2421-2434.
19. Fraunfelder FT, Steinkamp P, **Fraunfelder FW**. Casey Eye Institute camera system for recording cortical lens opacities. *Experimental Eye Research*. 2011 Nov; 93(5):790-794.

20. Chamberlain WD, Rush SW, Mathers WD, Cabezas M, **Fraunfelder FW**. Comparison of femtosecond laser-assisted keratoplasty versus conventional penetrating keratoplasty. *Ophthalmology* 2011 Mar; 118(3):486-491.
21. **Fraunfelder FW**, Cabezas M. Treatment of recurrent corneal erosion by extended-wear bandage contact lens. *Cornea* 2011 Feb; 30(2):164-166.
22. **Fraunfelder FW**, Fraunfelder FT. Interferon alfa associated anterior ischemic optic neuropathy. *Ophthalmology* 2011 Feb; 118(2):408-11, e1-2.
23. **Fraunfelder FW**, Dhoot DS. Successful treatment of conjunctival sarcoidosis with local cryotherapy. *Ophthalmic Surgery Lasers & Imaging* 2010 Apr; 45:E1-E4 doi: 10.3928/15428877-20100325-08
24. **Fraunfelder FW**, Suhler EB, Fraunfelder FT. Hepatitis B vaccine and uveitis: an emerging hypothesis suggested from 32 case reports. *Cutaneous and Ocular Toxicology* 2010 Mar; 29(1):26-29.
25. **Fraunfelder FW**. Liquid nitrogen cryotherapy for conjunctival lymphangiectasia: a case series. *Archives of Ophthalmology* 2009 Dec; 127(12):1686-1687.
26. **Fraunfelder FW**. Liquid nitrogen cryotherapy for conjunctival lymphangiectasia. *Transactions of the American Ophthalmological Society* 2009 Dec; 107;229-232.
27. Page MA, **Fraunfelder FW**. Safety, efficacy, and patient acceptability of lidocaine hydrochloride ophthalmic gel as a topical ocular anesthetic for use in ophthalmic procedures. *Clinical Ophthalmology*. 2009 Nov 2;3:601-609. Epub <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2773282/>
28. **Fraunfelder FW**, Fraunfelder FT. Diplopia and fluoroquinolones. *Ophthalmology* 2009 Sep; 116(9):1814-1817.
29. **Fraunfelder FW**. Liquid nitrogen cryotherapy of lymphangiectasia. *Cornea* 2009 Jun; 28(5):594-596.
30. **Fraunfelder FW**. Liquid nitrogen cryotherapy of conjunctival amyloidosis. *Archives of Ophthalmology* 2009 May;127:645-648.
31. **Fraunfelder FW**, Winthrop K, Suhler E, Choi D, Fraunfelder FT. Postmarketing surveillance rates of uveitis and scleritis with bisphosphonates among a national veteran cohort. *Retina* 2009 Feb; 29(2):285-286; author reply 286-7, 2009 Feb.
32. **Fraunfelder FW**. Liquid nitrogen cryotherapy of superior limbic keratoconjunctivitis. *American Journal of Ophthalmology*. 2009 Feb; 147(2):234-238.e1.

33. **Fraunfelder FW**. Cryotherapy for pterygia [Letter]. *Ophthalmology* 2008 Dec; 115(12):2314-2314.e2.
34. **Fraunfelder FW**. Liquid nitrogen cryotherapy for surface eye disease (an AOS thesis). *Transactions of the American Ophthalmological Society* 2008 Dec; 106:301-324.
35. **Fraunfelder FW**, Richards AB. Diplopia, blepharoptosis, and ophthalmoplegia and 3-hydroxy-3-methyl-glutaryl-CoA reductase inhibitor use. *Ophthalmology* 2008 Dec; 115(12):2282-2285.
36. Lim LL, **Fraunfelder FW**, Rosenbaum JT. Uveitis following the use of tumor necrosis factor  $\alpha$  inhibitors: comment on the article by Lim et al. [reply to letter]. *Arthritis and Rheumatology* 2008 May; 58(5):1556-1557.
37. **Fraunfelder FW**, Fraunfelder FT. Central serous chorioretinopathy associated with sildenafil. *Retina* 2008 Apr; 28(4):606-609.
38. Myers TD, **Fraunfelder FW**. Bilateral anterior uveitis associated with clomiphene citrate. *Ocular Immunology and Inflammation* 2008 Jan;16(1-2):23-24.
39. McGee HT, **Fraunfelder FW**. Toxicities of topical ophthalmic anesthetics [review article]. *Expert Opinion on Drug Safety* 2007 Nov; 6(6):637-640.
40. Lloyd MJ, **Fraunfelder FW**. Drug-induced optic neuropathies. *Drugs of Today (Barc)*. 2007 Nov; 43(11):827-836.
41. **Fraunfelder FW**, Harrison D. Peripheral ulcerative keratitis-like findings associated with filgrastim. *Cornea* 2007 Apr;26(3):368-369.
42. Lim LL, **Fraunfelder FW**, Rosenbaum JT. Do tumor necrosis factor inhibitors cause uveitis? A registry-based study. *Arthritis and Rheumatology* 2007 Sep 28;56(10):3248-3252.
43. **Fraunfelder FW**. Drug-induced ocular inflammatory diseases. *Drugs of Today (Barc)* 2007 Feb; 43(2):117-123.
44. Santaella RM, **Fraunfelder FW**. Ocular adverse effects associated with systemic medications. *Drugs* 2007 Jan; 67(1):75-93.
45. **Fraunfelder FW**, Sadun AA, Wood T. Update on ethambutol optic neuropathy. *Expert Opinion on Drug Safety* 2006 Sep;5(5):615-618.
46. **Fraunfelder FW**, Fraunfelder FT. Scientific challenges in postmarketing surveillance of ocular adverse drug reactions. *American Journal of Ophthalmology* 2007 Jan; 143(1):145-149.
47. Mathers WD, **Fraunfelder FW**, Rich LF. Risk of Lasik surgery vs contact lenses. *Archives of Ophthalmology* 2006 Oct; 124(10):1510-1511.



48. **Fraunfelder FW**. Corneal toxicity from topical ocular and systemic medications. *Cornea* 2006 Dec; 25(10):1133-1138.
49. **Fraunfelder FW**, Shults T. Nonarteritic anterior ischemic optic neuropathy, erectile dysfunction drugs, and amiodarone: is there a relationship? *Journal of Neuro-Ophthalmology* 2006 Mar; 26(1):1-3.
50. **Fraunfelder FW**, Pomeranz H, Egan RA. Nonarteritic ischemic optic neuropathy and sildenafil. *Archives of Ophthalmology* 2006 May; 124(5):733-734.
51. **Fraunfelder FW**. Clomifene and optic neuritis. *WHO Signal* March 2006.
52. **Fraunfelder FW**, Solomon J, Mehelas TJ. Ocular adverse effects associated with cyclooxygenase-2 inhibitors. *Archives of Ophthalmology* 2006 Feb; 124(2):277-279.
53. **Fraunfelder FW**. Liquid nitrogen cryotherapy of advancing wavelike epitheliopathy. *Cornea* 2006 Feb; 25(2):196-198.
54. **Fraunfelder FW**. Pegaptanib for wet macular degeneration. *Drugs of Today (Barc)* 2005 Nov; 41:703-709.
55. **Fraunfelder FW**. Ocular side effects associated with dietary supplements and herbal medicines. *Drugs of Today (Barc)* 2005 Aug; 41(8):537-545.
56. **Fraunfelder FW**. Visual side effects associated with erectile dysfunction agents. *American Journal of Ophthalmology* 2005 Oct; 140(4):723-724.
57. **Fraunfelder FW**. The science and marketing of dietary supplements. *American Journal of Ophthalmology* 2005 Aug; 140(2):302-304.
58. **Fraunfelder FW**. Twice-yearly exams unnecessary for patients taking quetiapine. *American Journal of Ophthalmology* 2004 Nov; 140(2):348-349, 2005.
59. Falkenhagen KM, Braziel RM, **Fraunfelder FW**, Smith JR. B-Cells in ocular adnexal lymphoproliferative lesions express B-cell attracting chemokine 1 (CXCL13). *Archives of Ophthalmology* 2005 Aug; 140(2):335-337.
60. Egan RA, **Fraunfelder FW**. Viagra and anterior ischemic optic neuropathy. *Archives of Ophthalmology* 2005 May; 123(5):709-710.
61. **Fraunfelder FW**, Fraunfelder FT. Liquid nitrogen cryotherapy of a conjunctival vascular tumor. *Cornea* 2005 Jan; 24(1):116-117.
62. **Fraunfelder FW**. Twice-yearly exams unnecessary for patients taking quetiapine. *American Journal of Ophthalmology* 2004 Nov; 138(5):870-871.

63. **Fraunfelder FW**. Epinastine hydrochloride for atopic disease. *Drugs of Today* (Barc) 2004 Aug; 40(8):677-683.
64. **Fraunfelder FW**. Ocular side effects associated with herbal medicines and nutritional supplements. *American Journal of Ophthalmology* 2004 Oct; 138(4):639-647.
65. **Fraunfelder FW**, Fraunfelder FT. Evidence for a probable causal relationship between tretinoin, acitretin, and etretinate and intracranial hypertension. *Journal of Neuro-Ophthalmology* 2004 Sep; 24(3):214-216.
66. **Fraunfelder FW**. Adverse ocular effects from lice shampoo [Letter]. *Archives of Ophthalmology* 2004 Oct; 122(10):1575.
67. **Fraunfelder FW**, Fraunfelder FT. Ocular side effects recently identified by the National Registry of Drug-Induced Ocular Side Effects. *Ophthalmology* 2004 Jul; 111(7):1275-1279.
68. **Fraunfelder FW**. Ocular adverse drug reactions and the National Registry of Drug-Induced Ocular Side Effects. *Insight* 2004; XXIX(2):7-11.
69. **Fraunfelder FW**, Fraunfelder FT, Corbett JJ. Isotretinoin-associated intracranial hypertension. *Ophthalmology* 2004 Jun; 111(6):1248-1250.
70. **Fraunfelder FW**, Rich LF. Laser in situ keratomileusis Using the Nidek EC-5000 or the Alcon LADARVision 4000 systems. *Journal of Refractive Surgery* 2004 Mar-Apr; 20(2):127-131.
71. Wheeler D, **Fraunfelder FW**. Ocular motility dysfunction associated with chemotherapeutic agents. *Journal of American Association for Pediatric Ophthalmology and Strabismus* 2004 Feb; 8(1):15-17.
72. **Fraunfelder FW**. Ocular side effects associated with isotretinoin. *Drugs of Today* (Barc) 2004 Jan; 40(1):23-27.
73. **Fraunfelder FW**. Ocular hemorrhage possibly the result of HMG-CoA reductase inhibitors. *Journal of Ocular Pharmacology and Therapeutics* 2004 Apr; 20(2):179-182.
74. **Fraunfelder FW**, Fraunfelder FT. Oculogyric crisis in patients taking cetirizine. *American Journal of Ophthalmology* 2004 Feb; 137(2):355-357.
75. Esmaeli B, Diba R, Ahmadi A, Saadati HG, Faustina MM, Shepler TR, Talpaz M, **Fraunfelder FW**, Rios MB, Kantarjian H. Periorbital edema and epiphora as ocular side effects of imatinib mesylate (Gleevec). *Eye* 2004 Jul; 18(7):760-762.
76. **Fraunfelder FW**, Fraunfelder FT, Keates EU. Topiramate-associated acute, bilateral, secondary angle-closure glaucoma. *Ophthalmology* 2004 Jan; 111(1):109-111.

77. **Fraunfelder FW**. HMG-CoA reductase inhibitors and ocular haemorrhage. *WHO Pharmaceuticals Newsletter* 2003;5:7.
78. **Fraunfelder FW**. Ocular side effects associated with bisphosphonates. *Drugs of Today (Barc)* 2003 Nov; 39(11):829-835.
79. **Fraunfelder FW**, Fraunfelder FT. Adverse ocular effects from over-the-counter lice shampoo. *Archives of Ophthalmology* 2003 Dec; 121(12):1790-1791.
80. **Fraunfelder FW**. Ocular adverse drug reactions. *Expert Opinion on Drug Safety* 2003; 2(4):411-420.
81. **Fraunfelder FW**, Solomon J, Druker BJ, Esmaeli B, Kuyl J. Ocular side effects associated with imatinib mesylate (Gleevec®). *Journal of Ocular Pharmacology and Therapeutics* 2003 Aug; 19(4):371-375.
82. **Fraunfelder FW**, Fraunfelder FT. Bisphosphonates and ocular inflammation. *New England Journal of Medicine* 2003 Mar 20; 348(12):1187-1188.
83. **Fraunfelder FW**, Fraunfelder FT, AJensvold B. Scleritis and other ocular side effects associated with pamidronate disodium. *American Journal of Ophthalmology* 2003 Feb; 135(2):219-222.
84. **Fraunfelder FW**, Rich LF. Possible adverse effects of drugs used in refractive surgery. *Journal of Cataract and Refractive Surgery* 2003 Jan; 29(1):170-175.
85. **Fraunfelder FW**, Fraunfelder FT, Jensvold B. Adverse systemic effects from pledgets of topical ocular phenylephrine 10%. *American Journal of Ophthalmology* 2002 Oct; 134(4):624-625.
86. **Fraunfelder FW**, Rich LF. Laser-assisted in situ keratomileusis complications in diabetes mellitus. *Cornea* 2002 Apr; 21(3):246-248.
87. Fraunfelder FT, **Fraunfelder FW**, Edwards R. Ocular side effects possibly associated with isotretinoin usage. *American Journal of Ophthalmology* 2001 Sep; 132(3):299-305.
88. **Fraunfelder FW**, Wilson SE. Laser in situ keratomileusis versus photorefractive keratectomy in the correction of myopic astigmatism. *Cornea* 2001 May; 20(4):385-387.
89. **Fraunfelder FW**, Rosenbaum JT. Drug-induced uveitis. *Drug Safety* 1997 Sep; 17(3):197-207.
90. Morrison JC, **Fraunfelder FW**, Milne ST, Moore CG. Limbal microvasculature of the rat eye. *Investigative Ophthalmology and Visual Science* 1995 Mar; 36(3):751-756.
91. **Fraunfelder FW**, Fraunfelder FT, Illingworth DR. Adverse ocular effects associated with

niacin therapy. *British Journal of Ophthalmology* 1995; 79(1):54-56.

92. Fraunfelder FT, Samples JR, **Fraunfelder FW**. Possible optic nerve side effects associated with nonsteroidal anti-inflammatory drugs. *Cutaneous and Ocular Toxicology* 1994; 13(4):311-316.
93. Fraunfelder FT, **Fraunfelder FW**, Jefferson JW. The effects of lithium on the visual system. *Cutaneous and Ocular Toxicology* 1992; 11(2):97-169.
94. Fraunfelder FT, **Fraunfelder FW**. Short-term use of carbonic anhydrase inhibitors and hematologic side effects. *Archives of Ophthalmology* 1992 Apr; 110(4):446-447.
95. Fraunfelder **FW**, Fraunfelder FT, Edwards R. Diplopia and HMG-CoA reductase inhibitors. *Cutaneous and Ocular Toxicology* 1991;18(4):287-289.
96. Fraunfelder FT, Coster DJ, Drew R, **Fraunfelder FW**. Ocular injury induced by methyl ethyl ketone peroxide. *American Journal of Ophthalmology* 1990 Dec; 110:635-640.

#### **Peer-Reviewed Journal Articles in Progress**

1. **Fraunfelder FW**. Erectile dysfunction drugs and visual side effects [letter]. *New Engl J Med* 2016 [submitted].

#### **Thesis**

**Fraunfelder FW**. Liquid nitrogen cryotherapy for external eye disease. *Transactions of the American Ophthalmological Society* 2008;106:301-24.

#### **Chapters in Books**

1. **Fraunfelder FW**, McDaniel LM. Ocular and systemic side effects of drugs (Chapter 22.2). In: Riordan-Eva P, Cunningham ET, Augsburger JJ, eds. *General Ophthalmology*. 19th ed. St. Louis: McGraw-Hill [in press].
2. **Fraunfelder FW**. Conjunctival and corneal intraepithelial neoplasia. In: Roy FH, ed. *Master Techniques: Ophthalmic Surgery*. New Delhi: JP Medical Publishers, 2015.
3. **Fraunfelder FW**. Ocular side effects of prescription medications. In: Andrews EB, Moore N, eds. *Mann's Pharmacovigilance*. 3rd edition. Hoboken, N.J.: Wiley & Sons 2012: pp 557-565 (published online 4 Apr 2014, Wiley Online Library).
4. **Fraunfelder FW**. Ocular toxicology. In: Tasman W, Jaeger EA, eds. *Duane's Clinical Ophthalmology*. 2012 edition. Philadelphia: Lippincott Williams & Wilkins, 2012.

5. Fraunfelder FT, **Fraunfelder FW**. Toxic optic neuropathies. In: Levin LA, Albert DM, eds. *Ocular Disease: Mechanisms and Management*. Amsterdam: Elsevier, 2010.
6. **Fraunfelder FW**. Ocular and systemic side effects of drugs. In: Riordan-Eva P, Cunningham E, eds. *Vaughan & Asbury's General Ophthalmology*. 18th edition. New York: McGraw-Hill, 2011.
7. **Fraunfelder FW**, Page MA. 49 Clinical Questions. Question 23 In: Price FW, Price MO, Letko E, eds. *Curbside Consultation in Cornea and External Disease*. Thorofare, N.J.: Slack Inc, 2010.
8. **Fraunfelder FW**. Toxic retinopathies. In: Tasman W, Jaeger EA, eds. *Duane's Clinical Ophthalmology*. Philadelphia: Lippincott Williams & Wilkins, 2009.
9. **Fraunfelder F W**. Toxic retinopathies. In: Tasman W, Jaeger EA, eds. *Duane's Clinical Ophthalmology* 2007 edition, Philadelphia: Lippincott Williams & Wilkins, 2007.
10. **Fraunfelder FW**. Ocular toxicology. In: Rhee DJ, Rapuano CJ, Papaliadis GN, Fraunfelder FW, editorial consultants and contributors. *PDR for Ophthalmic Medicines*. Montvale, N.J.- Medical Economics, 2007.
11. Fraunfelder FT, **Fraunfelder FW**. Toxic optic neuropathies. In: Levin LA, Albert DM. *Ocular Disease: Mechanisms and Management*. Amsterdam: Elsevier, 2008.
12. **Fraunfelder FW**. Ocular toxicology. In: Tasman W, Jaeger EA, eds. *Duane's Clinical Ophthalmology*. Philadelphia: Lippincott Williams & Wilkins, 2007.
13. McGee H, **Fraunfelder FW**. Clinical systemic manifestations of ocular therapy. In: Yorrio T, Clark A, Wax MB, eds. *Ocular Therapeutics: Eye on New Discoveries*. Amsterdam: Elsevier, 2006.
14. **Fraunfelder FW**. Ocular and systemic side effects of drugs. In: Riordan-Eva P, Whitcher J, eds. *Vaughan & Asbury's General Ophthalmology*. 17th edition. New York: McGraw-Hill, 2006.
15. **Fraunfelder FW**. Ocular side effects of prescription medications. In: Mann RD, Andres E, eds. *Mann's Pharmacovigilance*. 2nd edition. Hoboken, N.J.: Wiley & Sons, 2005.
16. **Fraunfelder FW**. Ophthalmic principles. In: Goldfrank LR, Flomenbaum NE, Lewin NA, Weisman RS, Howland RS, Hoffman RS, eds. *Goldfrank's Toxicologic Emergencies*. 8th edition. Stamford, Conn.: Appleton & Lange, 2006.
17. **Fraunfelder FW**. Ocular toxicology. *PDR for Ophthalmic Medicines*. Montvale, N.J.: Medical Economics, 2005.

18. **Fraunfelder FW**. Ocular toxicology. *PDR for Ophthalmic Medicines*. Montvale, N.J.: Medical Economics, 2003.
19. **Fraunfelder FW**. Ocular and systemic side effects of drugs. In: Riordan-Eva P, Whitcher J, eds. *Vaughan & Asbury's General Ophthalmology*. 16th edition. New York: McGraw-Hill, 2002.
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23. **Fraunfelder F W**, Fraunfelder FT, Wood T. Toxic retinopathies. In: Tasman W, Jaeger EA, eds. *Duane's Clinical Ophthalmology*, 2002 edition. Philadelphia: Lippincott Williams & Wilkins, 2002.
24. **Fraunfelder FW**, Rich LF. Epithelial adhesion disorders. In: Holland EJ, Mannis MJ, eds. *Ocular Surface Disease: Diagnosis and Management*. New York: Springer Verlag, 2001: pp 58-64.
25. **Fraunfelder FW**, Fraunfelder FT. Schistosomiasis. In: Fraunfelder FT, Roy H, eds. *Current Ocular Therapy*. 5th edition. Philadelphia: WB Saunders, 1998: pp 134-135.
26. Fraunfelder FT, **Fraunfelder FW**. Ocular toxicology. In: Easty DL, Sparrow JM, eds. *Oxford Textbook of Ophthalmology*, Volume 2 Sections 2.11-3.24. New York: Oxford University Press, 1999: pp767-774.
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29. **Fraunfelder FW**, Fraunfelder FT. Hypothermal injury. In: Fraunfelder FT, Roy H, eds. *Current Ocular Therapy*. 5th edition. Philadelphia: WB Saunders, 1998: pp. 366-368.
30. **Fraunfelder FW**. Fraunfelder FT. Schistosomiasis. In: Fraunfelder FT, Roy H, eds. *Current Ocular Therapy*. 4th edition. Philadelphia: WB Saunders, 1995: pp 134-135.

31. Fraunfelder FT, **Fraunfelder FW**. Erythema multiforme major. In: Fraunfelder FT, Roy H, eds. *Current Ocular Therapy*. 4th edition. Philadelphia: WB Saunders, 1995: pp 204-205.
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### Recent Abstracts/ Posters

1. Mohan RR, Raikawar S, Gupta S, Giuliano EA, Fink M, Anumanthan G, Rieger FG, Sinha PR, **Fraunfelder FW**. A Novel Gene Transfer Approach to Treat Fuchs' Endothelial Corneal Dystrophy. Harry S. Truman Veterans' Medical Hospital, VA Second National Research Week Symposium, May 19-20, 2016.
2. Grillo, AP, **Fraunfelder FW**. Varicella Zoster Vaccine Associated Keratitis. American Academy of Ophthalmology, Las Vegas, Nevada, November 14, 2015.
3. Shashi A, Patel M, **Fraunfelder FW**. Liquid Nitrogen Cryotherapy Treatment of Herpes Simplex Epithelial Keratitis. American Ophthalmological Society May 15 – 18, 2015. Newport, Rhode Island.
4. Benage M, **Fraunfelder FW**. Vaccine Associated Uveitis. Association for Research in Vision and Ophthalmology (ARVO). May 7, 2015.
5. **Fraunfelder FW**. Drug-Induced Ocular Side Effects of Clinical Importance to Ophthalmologists. 13<sup>th</sup> Congress of the International Society of Ocular Toxicity (ISOT). Ishikawa, Japan. October 10, 2014.
6. **Fraunfelder FW**. Vaccine Associated Uveitis. Fraunfelder FW. Drug-Induced Ocular Side Effects of Clinical Importance to Ophthalmologists. 13th Congress of the International Society of Ocular Toxicity (ISOT). Ishikawa, Japan. October 10, 2014.
7. **Fraunfelder FW**. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology (AAO). Chicago, Illinois. October 19, 2014.
8. **Fraunfelder FW**. Manufacturing Process Tools Applied to Ophthalmology: Quality, Profits, and Pitfalls. American Ophthalmological Society. Charleston, South Carolina. May 17-20, 2012.
9. Page MA, **Fraunfelder FW**. Liquid Nitrogen Cryotherapy is a Safe and Effective Adjunctive Treatment for Primary Pterygium. American Ophthalmological Society (AOS), Dana Point, California. May 2011.
10. Chamberlain WD, **Fraunfelder FW**, Rush S, Mathers WD. Comparison of Femtosecond

Laser-Assisted Keratoplasty with Conventional Penetrating Keratoplasty. American Academy of Ophthalmology. Chicago, Illinois. October 2010.

11. **Fraunfelder FW**. Diplopia Associated with Fluoroquinolones. American Academy of Ophthalmology. San Francisco, California. October 2009.
12. **Fraunfelder FW**, Richards AB. Diplopia, Blepharitis, and Ophthalmoplegia Associated with the use of HMG-CoA Reductase Inhibitors. American Academy of Ophthalmology. Atlanta, Georgia. November 2008.
13. Fraunfelder FW, Richards AB. Diplopia, Blepharitis, and Ophthalmoplegia Associated with the Use of HMG-CoA Reductase Inhibitors. International Society of Ocular Toxicology (ISOT). Philadelphia, Pennsylvania. September 2008.
14. Giegengack M, Rich LF, Mathers WD, **Fraunfelder FW**. DSAEK Experience Including Eyes with Altered Anterior Chamber Architecture. Association for Research in Vision and Ophthalmology (ARVO). Fort Lauderdale, Florida. May 2007.
15. Lim LL, **Fraunfelder FW**, Fraunfelder FT, Rosenbaum JT. TNF Inhibitors and Uveitis – Is There a Causal Relationship? American Academy of Ophthalmology. Las Vegas, Nevada, November 2006.
16. Lim LL, **Fraunfelder FW**, Fraunfelder FT, Rosenbaum JT. TNF Inhibitors and Uveitis – Is There a Causal Relationship? Association for Research in Vision and Ophthalmology (ARVO). Fort Lauderdale, Florida. May 2006.
17. **Fraunfelder FW**. B Cells in Ocular Adnexal Lymphoproliferative Lesions Express B Cell Attracting Chemokine 1. Association for Research in Vision and Ophthalmology (ARVO). Fort Lauderdale, Florida. May 2005.
18. Steele EA, **Fraunfelder FW**. Thick Versus Thin Laser In Situ Keratomileusis Flaps in the Correction of Myopic Astigmatism. Association for Research in Vision and Ophthalmology (ARVO). Fort Lauderdale, Florida. May 2005.
19. Kiuru AK, **Fraunfelder FW**, Edwards IR. Bisphosphonates and Ocular Side Effects. 8th World Congress on Clinical Pharmacology & Therapeutics. Brisbane, Australia (Brisbane Convention & Exhibition Centre). August 2004.
20. **Fraunfelder FW**, Fraunfelder FT. Scleritis and Other Ocular Side Effects Associated with Pamidronate Disodium. International Symposium of Ocular Pharmacology and herapeutics (ISOPT). Monte Carlo, Monaco, March 2004.
21. Fraunfelder FT, **Fraunfelder FW**. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. Anaheim, California. November 2003.
22. Watkins A, Macaluso DC, **Fraunfelder FW**, Rich LF, Mathers WD. Late Traumatic Flap



Dislocation Two Years Following LASIK. American Society of Cataract and Refractive Surgery. San Francisco, California. April 2003.

23. **Fraunfelder FW**, Rich LF. LASIK Complications in Diabetes Mellitus. International Congress of Ophthalmology, Sydney, Australia, June 2002.
24. **Fraunfelder FW**, Mathers WD. Enhanced Culture Detection of Acanthamoeba Organisms. International Congress of Ophthalmology. Sydney, Australia. June 2002.
25. **Fraunfelder FW**, Fraunfelder FT. Ocular Side Effects Associated with Isotretinoin. International Congress of Ophthalmology. Sydney, Australia. June 2002.
26. **Fraunfelder FW**, Fraunfelder FT. Systemic Side Effects Associated with Topical Ocular Phenylephrine 10% in Pledglet Form. International Society of Ocular Pharmacology and Pharmaceutics. Seville, Spain. February 2002.
27. **Fraunfelder FW**, Harrison DA. Survey of Treatment of Bacterial and Viral Conjunctivitis. Association of Research in Vision and Ophthalmology (ARVO) Conference. Fort Lauderdale, Florida. 1999.
28. **Fraunfelder FW**, Milne ST, Morrison JC. Anterior Segment Microvasculature of the Rat Eye. Association of Research in Vision and Ophthalmology (ARVO) Conference. Sarasota, Florida. 1992.

### **Invited Lectures and Courses**

1. Frederick W. Fraunfelder. OCT of Surface Eye Tumors, Toxicity of Cancer Drugs, and Manufacturing Process Tools Applied to Ophthalmology: Quality, Profits, and Pitfalls, 2016 Resident and Alumni Day Guest Lecturer. Wake Forest University. Winston-Salem, NC, April 8, 2016.
2. Frederick W. Fraunfelder. Vaccine-Associated Uveitis. International Symposium on Ocular Pharmacology and Therapeutics (ISOPT) Berlin, Germany July 2015.
3. Frederick W. Fraunfelder. OCT for Surface Eye Tumors. . International Symposium on Ocular Pharmacology and Therapeutics (ISOPT) Berlin, Germany July 2015.
4. Frederick W. Fraunfelder. Herpes Zoster Vaccine Associated Keratitis. University of Missouri 22st Annual Resident and Alumni Day. Columbia, Missouri. May 30, 2015.
5. Frederick W. Fraunfelder. Eye Problems in the Elderly. Invited speaker. Geriatrics Fellowship Faculty and Fellow. University of Missouri. April 22, 2015.
6. Frederick W. Fraunfelder. Ocular Toxicology. Visiting Professor. St. Louis University Eye Institute. February 19, 2015.

7. Frederick W. Fraunfelder. Sports Eye Injury. Invited speaker- Missouri Orthopedic Institute, University of Missouri. October 24, 2014.
8. Frederick W. Fraunfelder. Intracameral Antibiotics for the Prevention of Post-Cataract Surgery Endophthalmitis. 57<sup>th</sup> Annual Physicians Alumni Weekend. October 24, 2014.
9. Frederick W. Fraunfelder. Global Freezing – Diagnosis and Treatment of Surface Ocular Tumors. 57<sup>th</sup> Annual Physicians Alumni Weekend. October 24, 2014.
10. Frederick W. Fraunfelder. Course: Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology (AAO). Chicago, Illinois. October 19, 2014.
11. Frederick W. Fraunfelder. Drug-Related Immunotoxicity in Ophthalmology. 13<sup>th</sup> Congress of the International Society of Ocular Toxicity (ISOT). Ishikawa, Japan. October 10, 2014.
12. Frederick W. Fraunfelder. Ocular Oncology. Table Rock Regional Round-Up. Branson, Missouri. September 19, 2014.
13. Frederick W. Fraunfelder. Ophthalmology and Health Reform. Yale School of Medicine. New Haven, Connecticut. August 29, 2014.
14. Frederick W. Fraunfelder. Drug-Induced Ocular Side Effects of Clinical Importance to Ophthalmologists. University of Missouri 21st Annual Resident and Alumni Day. Columbia, Missouri. May 30, 2014.
15. Frederick W. Fraunfelder. Global Freezing: Diagnosis and Treatment of Surface Ocular Tumors. University of Missouri 21st Annual Resident and Alumni Day, Columbia, Missouri. May 30, 2014.
16. Frederick W. Fraunfelder. Business Practices in Ophthalmology with Health Care Reform and Ocular Surface Tumors. Yale University, Department of Ophthalmology. New Haven, Connecticut. August 30, 2013.
17. Frederick W. Fraunfelder. Surface Ocular Oncology: Treatment and Imaging Techniques. Resident lecture, Yale University, Department of Ophthalmology. August 29, 2013.
18. Frederick W. Fraunfelder. Business Practices in Ophthalmology with Health Care Reform. Ophthalmology. Mount Sinai Medical Center. New York, New York. August 28, 2013.
19. Frederick W. Fraunfelder. Cryotherapy of Surface Eye Disease. 97<sup>th</sup> Pacific Coast Ophthalmological Society Meeting. June 21-24 2013.
20. Frederick W. Fraunfelder. Novel Treatment for Herpes Simplex Viral Keratitis. Oregon Ophthalmological Alumni Association (OOAA). Portland, Oregon. June 14, 2013.

21. Frederick W. Fraunfelder. Diagnosis and Treatment of Surface Eye Tumors. Oregon Ophthalmological Alumni Association Technician meeting, Portland, Oregon. June 14, 2013.
22. Frederick W. Fraunfelder,. Adverse Ocular Drug Reactions Recently Identified by the National Registry of Drug-Induced Ocular Side Effects. International Symposium on Ocular Pharmacology and Therapeutics (ISOPT). Paris, France. March 2013.
23. Frederick W. Fraunfelder. OCT of Surface Eye Tumors. International Symposium on Ocular Pharmacology and Therapeutics (ISOPT). Paris, France. March 2013.
24. Frederick W Fraunfelder. Cryotherapy for Surface Eye Disease: Indications and Surgical Techniques. Yale University Department of Ophthalmology. New Haven, Connecticut. August 31, 2012.
25. Frederick W Fraunfelder. Surface Eye Tumors and Ocular Oncology [Resident lecture]. Yale University Department of Ophthalmology. New Haven, Connecticut. August 30, 2012.
26. Frederick W Fraunfelder. Manufacturing Production Techniques Applied to Ophthalmology. Mount Sinai Medical Center. New York, New York. August 29, 2012.
27. Frederick W. Fraunfelder. Ophthalmology Management and Health Care Reform. University of Florida Department of Ophthalmology, Grand Rounds. Jacksonville, Florida. June 2012.
28. Frederick W. Fraunfelder. Toxicology and the Eye. University of Florida Department of Ophthalmology. Jacksonville, Florida. Resident Banquet. June 2012.
29. Frederick W Fraunfelder. Cryotherapy for Surface Eye Disease: Indications and Surgical Techniques. Texas Ophthalmological Association. May 18, 2012.
30. Frederick W Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. Texas Ophthalmological Association. May 18, 2012.
31. Frederick W Fraunfelder. Cryotherapy for Surface Eye Disease: Indications and Surgical Techniques. American Academy of Ophthalmology, Orlando, Florida. October 2011.
32. Frederick W Fraunfelder, Frederick T. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology. Orlando, Florida. October 2011.
33. Frederick W. Fraunfelder. Ocular Surface Tumors. Columbia University Medical Center, Edward S. Harkness Eye Institute. New York, New York. September 2011.
34. Frederick W. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology. Chicago, Illinois. October 2010.
35. Frederick W. Fraunfelder. Drug-Induced Ocular Side Effects of Clinical Importance in Primary

- Care. 2010 Family Medicine & Primary Care Group. Portland, Oregon. February 2010.
36. Frederick W. Fraunfelder. Pharmacovigilance in Ophthalmology. International Symposium on Ocular Pharmacology and Therapeutics (ISOPT). Rome, Italy. December 2009.
  37. Frederick Fraunfelder. World Health Organization (WHO) classification system. International Symposium on Ocular Pharmacology and Therapeutics (ISOPT). Rome, Italy. December 2009.
  38. Frederick W. Fraunfelder. Side Effects of Drugs on the Macula and the Eye. Macular Degeneration Center Advisory Board Meeting, Casey Eye Institute. Portland, Oregon. December 2009.
  39. Frederick W. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist, American Academy of Ophthalmology. San Francisco, CA., 10/2009.
  40. Frederick W. Fraunfelder. Liquid Nitrogen Cryotherapy of Conjunctival Lymphangiectasia: A Case Series American Ophthalmological Society. Half Moon Bay, California. May 2009.
  41. Frederick W. Fraunfelder. Ocular Toxicology. Wake Forest University Eye Center, Winston-Salem, North Carolina. January 2009.
  42. Frederick W. Fraunfelder. Cryotherapy For Surface Eye Disease. Wake Forest University Eye Center, Winston-Salem, North Carolina. January 2009.
  43. Frederick W. Fraunfelder, and Frederick T. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology, Atlanta, Georgia. November 2008.
  44. Frederick W. Fraunfelder, and A.B. Richards. Diplopia, Blepharitis, and Ophthalmoplegia Associated with the Use of HMG-CoA Reductase Inhibitors. American Academy of Ophthalmology. Atlanta, Georgia. November 2008.
  45. Frederick W. Fraunfelder. Resident Lecture Series: Basic and Clinical Science Course, Clinical Optics. Casey Eye Institute, Portland, Oregon. October 2008.
  46. Frederick W. Fraunfelder. Resident Lecture: Ocular Emergencies and Surface Eye Disorders. Casey Eye Institute. Portland, Oregon. July 2008.
  47. Frederick W. Fraunfelder and Frederick T. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology, New Orleans, Louisiana. November 2007.
  48. Frederick W. Fraunfelder. Drug-Induced Ocular Side Effects of Clinical Importance. 6<sup>th</sup> International Symposium on Ocular Pharmacology and Therapeutics. Budapest, Hungary. March 2007.

49. Frederick W. Fraunfelder and Frederick T. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology. Las Vegas, Nevada. November 13, 2006.
50. Frederick W. Fraunfelder. Preservative in Glaucoma Medications. Alcon African American Glaucoma Advisory Meeting. Vancouver, British Columbia. July 8, 2006.
51. Frederick W. Fraunfelder. Definitely DSAEK (Descemet Stripping Automated Endothelial Keratoplasty). 31st University of Washington Department of Ophthalmology Annual Resident/Alumni Day. Seattle, Washington. June 17, 2006.
52. Frederick W. Fraunfelder. Drug-Induced Ocular Side Effects of Clinical Importance. 6th International Symposium on Ocular Pharmacology and Therapeutics. Berlin, Germany. March 31, 2006.
53. Frederick W. Fraunfelder. Common Eye Problems. 37th Annual Family Medicine Review. Portland, Oregon. February 15, 2006.
54. Frederick W. Fraunfelder and Frederick T. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology. Chicago, Illinois. October 16, 2005.
55. Frederick W. Fraunfelder. Drug-Related Adverse Effects. Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) Annual Continuing Education (ACE) Program for Ophthalmic Medical Personnel. Chicago, Illinois. October 15, 2005.
56. Frederick W. Fraunfelder. Liquid Nitrogen Cryotherapy for Surface Eye Disease. Corneal and External Disease Update. Portland, Oregon. April 9, 2005.
57. Frederick W. Fraunfelder. The Red Eye. 36th Annual Family Medicine Review. Portland, Oregon. February 15, 2005.
58. Frederick W. Fraunfelder. Drug-Induced Ocular Side Effects of Clinical Importance. Ophthalmology Grand Rounds. Portland, Oregon. February 4, 2005.
59. Frederick T. Fraunfelder and Frederick W. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology. New Orleans, Louisiana. October 24, 2004.
60. Frederick W. Fraunfelder. The Aging Eye. Oregon Academy of Ophthalmology. Portland, Oregon. October 21, 2004.
61. Frederick W. Fraunfelder. Ocular Tumors. Current Issues in Ophthalmology for Ophthalmic Personnel. Portland, Oregon. September 17, 2004.
62. Frederick W. Fraunfelder. Liquid Nitrogen Cryotherapy for Surface Eye Disease. 59th Annual

- Oregon Ophthalmological Alumni Association Meeting. Portland, Oregon. September 14, 2004.
63. D.S. Rajguru and Frederick W. Fraunfelder. Cataracts Associated with Quetiapine (Seroquel). 4th International Symposium on Ocular Pharmacology and Therapeutics. Monte Carlo, Monaco. March 13, 2004.
  64. Frederick W. Fraunfelder and Frederick T. Fraunfelder. Scleritis and Other Ocular Side Effects Associated with Pamidronate Disodium. 5th International Symposium on Ocular Pharmacology and Therapeutics (ISOPT). Monte Carlo, Monaco. March 12, 2004.
  65. Frederick W. Fraunfelder. Chairperson, Free Paper Session. ISOPT. Monte Carlo, Monaco. March 12, 2004.
  66. Frederick W. Fraunfelder. The Red Eye: When to Treat and When to Refer. 35th Annual Family Practice Review. Portland, Oregon. February 2, 2004.
  67. Frederick W. Fraunfelder. Opening Comments and Updates. Refractive Surgery Clinical Case Conference. Portland, Oregon. January 23, 2004.
  68. Frederick W. Fraunfelder and Frederick T. Fraunfelder. Adverse Ocular Drug Reactions Recently Identified by the National Registry of Drug-Induced Ocular Side Effects. American Academy of Ophthalmology. Anaheim, California. November 16, 2003.
  69. Frederick W. Fraunfelder. Ocular Toxicity – Common and Uncommon Causes. Ophthalmology Grand Rounds. Portland, Oregon. May 2, 2003.
  70. Frederick W. Fraunfelder.:Opening Comments and Updates. Refractive Surgery Clinical Case Conference. Portland, Oregon. March 28, 2003.
  71. Frederick W. Fraunfelder. LASIK Complications. Oregon Academy of Ophthalmology – OAO Technicians/Assistants Programs. Portland, Oregon. February 28, 2003.
  72. Frederick W. Fraunfelder. The Red Eye: When to Treat and When to Refer. 34th Annual Family Medicine Review. Portland, Oregon. February 13, 2003.
  73. Frederick W. Fraunfelder. Diagnosis and Treatment of Surface Eye Tumors. Ophthalmology Grand Rounds. Portland, Oregon. February 7, 2003.
  74. Frederick W. Fraunfelder. Macular Function Testing; Glare Testing; Contrast Sensitivity Function. Ophthalmology Grand Rounds. Portland, Oregon, October 25, 2002.
  75. Frederick T. Fraunfelder and Frederick W. Fraunfelder. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. American Academy of Ophthalmology - AAO/PAAO Joint Meeting. Orlando, Florida. October 23, 2002.
  76. Frederick W. Fraunfelder. Dry Eye: A Feedback Model. Ophthalmology Grand Rounds.

Portland, Oregon. October 4, 2002.

77. Frederick W. Fraunfelder. The Human Eye as an Optical System. Ophthalmology Grand Rounds. Portland, Oregon. September 20, 2002.
78. Frederick W. Fraunfelder. Surface Eye Tumors. 57th Annual Oregon Ophthalmological Alumni Association Meeting. Portland, Oregon. September 13, 2002.
79. Frederick W. Fraunfelder. Current Issues in Drug-Induced Ocular Side Effects/Issues in Ophthalmology in Other Countries. 57th Annual Oregon Ophthalmological Alumni Association Meeting. Portland, Oregon. September 13, 2002.
80. Frederick W. Fraunfelder. Assessment and Treatment of Common Eye Conditions in Primary Care. Washington State University, Class – Advanced Assessment of Differential Diagnosis. Vancouver, Washington. May 10, 2002.
81. Frederick W. Fraunfelder. Adverse Effects of Topical Ocular 10% Phenylephrine in Pledglet Form. 4<sup>th</sup> International Symposium on Ocular Pharmacology and Pharmaceutics (ISOPP). Seville, Spain. March 2, 2002.
82. Frederick W. Fraunfelder. Opening Comments and Updates. LASIK Complications and Diabetes & Adverse Effects of Pledgets of 10% Phenylephrine. Refractive Surgery Clinical Case Conference. Portland, Oregon. February 24, 2002.
83. Frederick W. Fraunfelder. Refractive Surgery. 33rd Annual Family Medicine Review. Portland, Oregon. February 11, 2002.
84. Frederick W. Fraunfelder. Refractive Surgery and Who Makes a Good Candidate. Central Coast Medical Update. Newport, Oregon. September 29, 2001.

**Clinical Trials** (approved by OHSU institutional review board)

1. Co-Investigator, LALAK for Opacities. (IRB00009282)
2. Co-Investigator, Multi-center clinical trial of OCT-based IOL power formula. (IRB 00006612)
3. Co-Investigator, Observational study of corneal power, astigmatism & aberration changes after LASIK. (IRB 00006612)
4. Co-Investigator, Clinical trial of OCT-guided transepithelial PTK. (IRB 00006612)
5. Co-Investigator, Observational study of KCN and post-keratoplasty eye. (IRB 00006612)
6. Co-Investigator, Randomized clinical trial of OCT guided lamellar keratoplasty in adults. (IRB 00007884)

7. Co-Investigator, Randomized clinical trial comparing the measurement of uveitis response comparing OCT grading to slit lamp grading. (IRB 00008052)
8. Principal Investigator, Ophtec artificial iris lens (unfunded). (IRB 00005307)
9. Principal Investigator for IRB and Co-investigator for NIH. Guiding the treatment of anterior eye diseases with optical coherence tomography (IRB 00006612). NIH/NEI R01 EY018184 \$751,926, 9/1/2011-8/31/2016.
10. Principal Investigator, Recovery times for corneal sensitivity and visual acuity after LASIK/PRK. Sponsored by Senju pharmaceutical Co., Ltd. (IRB 00006245)
11. Co-Principal Investigator, INTACS (unfunded). (IRB 00006747).
12. Principal Investigator, Corneal crosslinking with Avedro Laser (Phase III trial). (IRB 00006783).

### **Past Clinical Trials**

1. Principal Investigator, Endothelial survival with femtosecond laser creation of deep lamellar endothelial keratoplasty (DLEK) corneal buttons. Sponsored by Medical Research Foundation of Oregon. (IRB 00001050)
2. Principal Investigator, Outcomes following excision and cryotherapy for conjunctival primary acquired melanosis. Sponsored by Research to Prevent Blindness. (IRB 00002808)
3. Principal Investigator, Liquid nitrogen cryotherapy of surface eye disease (unfunded). (IRB 00004678)

### **State Society Meetings, Alumni Days and Keynote Addresses**

1. Missouri Society of Eye Physicians and Surgeons (MOSEPS). Ocular Oncology. September, 2014.
2. Oregon Ophthalmology Alumni Association. Surface Eye Tumors. June 2012.
3. Utah Ophthalmology Society Annual Meeting. February 2011.
4. Texas Ophthalmological Association. Keynote lectures on Ocular Toxicology and Surface Eye Tumors. May 18, 2012.
5. Orphans Overseas Keynote Lecture. Portland Oregon. February 2010.



6. Drug-Related Adverse Effects of Clinical Importance to the Ophthalmologist. Orange County Ophthalmology Society. February 2008.
7. Global Freezing: Alternative Treatments of External Eye Disease with Liquid Nitrogen Cryotherapy. Oregon Ophthalmology Alumni Association. May 2008.
8. DSAEK and the History of Corneal Transplantation. Oregon Ophthalmology Alumni Association. May 2007.
9. DSAEK (Descemet Stripping Automated Endothelial Keratoplasty). 31<sup>st</sup> University of Washington Department of Ophthalmology Annual Resident/Alumni Day. Seattle, Washington. June 17, 2006.

### **Non-Peer Reviewed Articles**

1. Fraunfelder FW. Confessions of a New Chairman on Recruiting. *Review of Ophthalmology* 2016 Mar:42-46.
2. Fraunfelder FW. Medication-Related Visual Hallucinations: What You Need To Know. Clinical Update: EyeNet. April 2015.
3. Fraunfelder FW. Ocular adverse drug reactions from systemic medications: a review. *Ophthalmology International* 2013 Spring.
4. Fraunfelder FW, Chalam KV, Eisner A. Watch for Ocular Effects of Breast Cancer Drugs. Eye Net. March 2013. Interviewing K.V. Chalam, Alvin Eisner, and Frederick W. Fraunfelder.
5. Fraunfelder FW. Some Supplements Can Damage Eyes. International News Network, 1/23/2013. (Fraunfelder explained that most people are unaware of how damaging supplements can be to the eyes...
6. Fraunfelder FW. Liquid nitrogen cryotherapy for primary pterygia may prevent recurrence. *Ocular Surgery News*, 2/25/2012.
7. Fraunfelder FW, John T. Superior limbic keratoconjunctivitis can be treated with liquid nitrogen cryotherapy. *Ocular Surgery News*, 1/25/2012.
8. Fraunfelder FW. Game plan for a winning practice: Ten strategies to improve efficiency, simplify workflow, cut costs and eliminate waste-without compromising care. *Ophthalmology Management*, 1/1/2012.
5. Fraunfelder FW. Make yours a “LEAN” practice; yes, you can apply manufacturing efficiencies to medicine without compromising quality. Here’s how. *Ophthalmology Management*, 12/1/2011.
9. Systemic Drugs with Ocular Side Effects: Elderly patients are often taking medications for

osteoporosis, erectile dysfunction and prostate conditions that are known to have ocular side effects. *Review of Ophthalmology*, 10/4/2011. Michelle Stephenson contributing editor, interview of Rick W. Fraunfelder.

10. Fraunfelder FW. *Ocular Surgery News* U.S. Edition, December 25, 2011
  - a. Surgical Maneuvers. Liquid nitrogen cryotherapy an effective surgical alternative for treating conjunctivochalasis. In this technique, redundant conjunctiva is tacked down to the underlying globe via a cryogenic burn.
11. Fraunfelder FW (Rick). *Ophthalmology Management*, 10/1/2011
  - a. Keep Alert for These Drug-Related Adverse Effects. Here's a guide to the most common ones affecting ophthalmology patients.
12. Clinical Update: External Disease. Liquid Nitrogen for Ocular Surface Disease. Eye Net.
  - a. By Marianne Doran, Contributing Writer, Interview of Frederick W. Fraunfelder and Matthew Giegengack. October 2011.
13. Comprehensive. Do Ask, Do Tell: Herbs and Your Patients. Eye Net. By Jean Shaw, Senior Editor 2011.
14. Ocular anesthesia: using lidocaine gel. *EyeWorld*. By Maxine Lipner, interview of Rick W. Fraunfelder. Feb 2010.
15. News in Review: A look at today's Ideas and Trends. CSC May Be Associated With Viagra. Eye Net. July 2008.
16. Rx Side Effects: New Plaquenil Guidelines and More. *Eye Net*. By Miriam Karmel, Contributing Writer, Interview of Frederick W. Fraunfelder.
17. Watch Out: Refractive Surgery and Drug Side Effects. *Eye Net*. By Lori Baker Schena, Contributing Writer, Interview of Frederick W. Fraunfelder.
18. News in Review. A Look at Today's Ideas and Trends. Statins Linked to Diplopia, Ptosis, Ophthalmoplegia, Eye Net. By Lori Baker Schena, Interview of Frederick W. Fraunfelder.
19. Morning Rounds. Sudden, Painful Vision Loss in a Young, Healthy Woman. *Eye Net*. By Kenneth C. Mathys, MD, Edited by Thomas A. Oetting, MD, Interview of Frederick W. Fraunfelder.
20. Ophthalmic Pearls: Cornea. Diagnosing and Treating Neurotrophic Keratopathy. *Eye Net*. By Jill R. Wells, MD, and Marc A. Michelson, MD, Edited by Ingrid U. Scott, MD, MPH, Sharon Fekrat, MD, and Frederick W. Fraunfelder, MD.
21. Clinical Update: Comprehensive: When Non-ophthalmic Drugs Cause Ocular Toxicity. *Eye Net Magazine*. By Jean Shaw, Contributing writer, Interview of Rick W. Fraunfelder, 2006.

22. News in Review: Patient Care: One Thing Leads to Another. News compiled by Linda Roach, interview of Frederick W. Fraunfelder.
23. Going Beyond an Approved Use: When Off-Label is on Target: Eye Net Magazine. By Miriam Karmel, Contributing writer, Interview of Frederick W. Fraunfelder.

### **Medical Student and Resident Lectures**

1. "Vision and Optic Reflexes," Problem-Based Learning (PBL) for 1<sup>st</sup> year med students. February 2, 2016.
2. "Laterality of Pterygia, melanoma and CIN," Resident research day. May 4, 2012.
3. "OCT of Ocular squamous neoplasia," Resident research day. May 4, 2012.
4. "Cornea," Resident Lecture, Ocular Oncology, November 11, 2011.
5. "Cornea," Resident Lecture, Ocular Oncology, October 16, 2009.
6. "Optics," Resident Lecture, October 24, 2008.
7. "Cornea," Resident Orientation, July 3, 2008.
8. "Optics," Resident Lecture, August 11, 2006.
9. "Congenital Anomalies of the Cornea," Resident Lecture, September 23, 2005.
10. "Cornea Conference," Resident Orientation, July 26, 2005
11. "Cornea," Resident Orientation, July 12, 2005
12. "Corneal Diseases, Especially Dry Eye," Continuity Curriculum Clinics, June 1, 2005
13. "The human eye as an optical system, schematic eye, visual acuity", "Entopic phenomenon", "Automated refraction, macular testing, glare testing", "Aberrations, irregular astigmatism, wavefront analysis" -Resident Course: "Optics and Refraction and Contact Lenses," August 13, 2004.
14. "OKAP Review/ Cornea and Optics," Resident Lecture, April 14, 2004.
15. "Introduction to Surgery of the Ocular Surface," Resident Lecture, October 31, 2003.
16. "Corneal Dystrophies and Metabolic Disorders Involving the Conjunctiva, Cornea and Sclera," Resident Lecture, October 24, 2003.
17. "Current Ocular Therapy," Resident Lecture, August 29, 2003.

18. “Refractive Surgery,” Resident Lecture, May 23, 2003.
19. “LASIK,” Ophthalmology Medical Student Lectures, November 10, 2002.
20. “External, Anterior and Slit-lamp Exam,” Resident Orientation, July 8, 2002.
21. Quarterly Resident Lectures at a Cornea Case Conference year round.

### **Radio, Video, Press Releases and Newspaper and Other Periodicals Interviews**

1. University of Missouri Trauma Center, 2016. Interview on a video on driving in older adults [in process].
2. *Pharmacy Times* staff. “Watch for Keratitis When Administering Varicella Vaccine” [Interview]. *Pharmacy Times*, Published online March 2, 2016. <http://www.pharmacytimes.com/news/watch-for-keratitis-when-administering-varicella-vaccine>
3. Dohack C. “New Treatment Could Offer Longer-Lasting Relief for Dry Eyes” [Interview]. *Columbia Daily Tribune* 2016 Mar 6, 2016. [http://www.columbiatribune.com/arts\\_life/pulse/new-treatment-could-offer-longer-lasting-relief-for-dry-eyes/article\\_3446d4b4-c461-5c41-9d5b-99f9abfbe762.html](http://www.columbiatribune.com/arts_life/pulse/new-treatment-could-offer-longer-lasting-relief-for-dry-eyes/article_3446d4b4-c461-5c41-9d5b-99f9abfbe762.html)
4. University of Missouri Health Care, press release, “Personalized Drops Offer a New Solution for Dry Eyes.” Posted February 23, 2016. <http://www.muhealth.org/news/releases/personalized-drops-offer-a-new-solution-for-dry-eyes/>
5. University of Missouri Health Care, press release. “Chickenpox, Shingles Vaccine May Cause Corneal Inflammation in Some Patients.” Posted January 20, 2016, subsequently featured in more than 68 national and internal media. <http://medicine.missouri.edu/news/20160120-vaccine-may-cause-corneal-inflammation.php>
6. Medical Research.com, interview. “Ocular herpes can rarely occur after varicella vaccine [Q&A interview]. Posted January 30, 2016. <http://medicalresearch.com/ophthalmology/ocular-herpes-can-rarely-occur-after-varicella-vaccine/21149/>
7. I-Care Village 2009-present. How to put in eye drops. <http://www.icarevillage.com/health-vision-video-fraunfelder-eyedrops.aspx>
8. FM News KXL 101. April, 2012 The Aging Eye. <http://www.youtube.com/watch?v=ZQkw5gT7ZeQ>
9. Web MD. 2006-present. Descemet Stripping Endothelial Keratoplasty. <http://www.webmd.com/eye-health/video/dsaek-corneal-transplant-surgery>

10. AAO video. LASIK. 2006-present. <http://www.youtube.com/watch?v=txZN1mIwURU>
11. Acne medicine (isotretinoin) tied to visual side effects. March 2012.  
<http://www.foxnews.com/health/2012/04/19/acne-drug-tied-to-doubled-risk-eye-problems/>