

JOEL SUGAR

CURRICULUM VITAE

BORN: June 25, 1944  
Portland, Oregon

MARITAL STATUS: Married  
Two children

EDUCATION:

Cranbrook School Bloomfield Hills, Michigan	Diploma 1962 Cum laude
University of Michigan Ann Arbor, Michigan	B.A. 1967 Magna cum laude
University of Michigan Medical School	M.D. 1969 Cum laude

POSTGRADUATE TRAINING:

Straight Medical Internship University Hospital Ann Arbor, Michigan	1969-1970
Residency in Ophthalmology Washington University School of Medicine St. Louis, Missouri	1970-1972
Fellow in Cornea and External Disease with Dr. H. E. Kaufman University of Florida Medical School Gainesville, Florida	1972-1973

	Instructor and Fellow of the Seeing Eye, Inc. with Dr. Bernard Becker Washington University St. Louis, Missouri	1973-1974
	Chief Resident in Ophthalmology Washington University St. Louis, Missouri	1974-1975
MILITARY SERVICE:	United States Army Reserve Captain, Medical Corps	1970-1979
MEDICAL LICENSES:	Michigan (29396) Missouri (R4357) Illinois (036-051130)	1970-Present 1971-1992 1975-Present
FACULTY POSITIONS:	Interim Head, Dept. of Ophthalmology University of Illinois at Chicago	2004 - 2005 2005 - Present
	Vice-Chair, Dept. of Ophthalmology	1999-2004 2005-Present
	Professor of Ophthalmology University of Illinois at Chicago Eye and Ear Infirmary Chicago, Illinois	September 1987- Present
	Associate Professor of Ophthalmology University of Illinois at Chicago Eye and Ear Infirmary Chicago, Illinois	1978-1987
	Assistant Professor of Ophthalmology University of Illinois at Chicago Eye and Ear Infirmary Chicago, Illinois	1975-1978
	Director, Cornea Service University of Illinois at Chicago Eye and Ear Infirmary Chicago, Illinois	January 1976- 2004

Consultant West Side Veterans Administration Hospital Chicago, Illinois	October 1977- Present
Director of Research and Education in Ophthalmology West Side Veterans Administration Hospital Chicago, Illinois	July 1975- September 1976
Acting Chief of Ophthalmology West Side Veterans Administration Hospital Chicago, Illinois	February 1976- July 1976

ADDITIONAL  
APPOINTMENTS:

Medical Director Illinois Eye Bank	1985-Present
Associate Examiner American Board of Ophthalmology	1985-Present
Consultant, Ophthalmic Device Panel, U.S. Food and Drug Administration Panel Chair	1997-Present  2001
Consultant Navy Regional Medical Center Great Lakes, Illinois	1975-1985

PROFESSIONAL  
SOCIETIES:

St. Louis Ophthalmological Society, Junior Member	1970-1975
North Florida Eye Bank Board of Directors	1972-1973
Association for Research in Vision and Ophthalmology	1972-Present
Missouri State Ophthalmological Society, Junior Member	1970-1975
Chicago Ophthalmological Society	1976-Present
American Academy of	1976-Present

Ophthalmology Fellow Ocular Microbiology and Immunology Group, Member	1975-Present
Castroviejo Cornea Society, Member	1975-Present
Midwest Corneal Association, Member	1978-Present
American College of Surgeons, Fellow	October 1978
American Medical Association	1983-Present
Illinois State Medical Society	1983-Present
Chicago Medical Society	1983-Present
Eye Bank Association of America Paton Society Fellow	1985-Present
International Ocular Surface Society	2001-Present

## HONORS AND AWARDS

Angell Scholar  
University of Michigan

Dean's Awards  
University of Michigan  
Medical School

Phi Beta Kappa (Junior Year) 1965

Phi Kappa Phi 1965

Alpha Omega Alpha (Junior Year) 1967

Diplomate  
American Board of Ophthalmology  
May 1975

Golden Apple Award  
Outstanding Teaching  
in Ophthalmology, University of Illinois  
1979, 1989, 1995

National Ambassadors for  
Corneal Transplants Award for  
Outstanding Contributions  
1992

Honor Award 1984  
Senior Honor Award 1994  
American Academy of Ophthalmology

R. Townley Paton Award and Lectureship,  
Eye Bank Association of America  
1997

Distinguished Service Recognition – FDA	2001
“Best Doctors in the US”	1980s - Present
“Best Doctors in Chicago”	2000 – Present
Founder’s Award, Midwest Eye-Banks	2005

GRANTS:

National Society for the Prevention of Blindness Research Grant Washington University Department of Ophthalmology \$4,000	1971-1972
Fight for Sight, Inc. Research Grant Washington University Department of Ophthalmology \$5,000	1973-1974
The Seeing Eye, Inc. Research Fellowship in Glaucoma Washington University Department of Ophthalmology \$11,626	1973-1974
NIH Special Fellowship Washington University Department of Ophthalmology \$22,500	1974-1975
University of Illinois College of Medicine General Research Support Grant Department of Ophthalmology \$5,050	1975-1976
VA Hospital Research Grant Chicago, Illinois \$16,250	1975-1976

Fight for Sight Research Grant University of Illinois Department of Ophthalmology \$6,000	1975-1976
Burroughs-Wellcome Research Grant University of Illinois Department of Ophthalmology \$7,000	1975-1978
VA Hospital Research Grant Chicago, Illinois \$17,847	1976-1977
VA Hospital Research Grant Chicago, Illinois \$17,784	1977-1978
NIH - National Eye Institute R01 EY02426 Trigger Mechanisms of Recurrent Herpes Keratitis Research Grant University of Illinois Department of Ophthalmology \$95,012	1978-1981
Abbott Laboratories University of Illinois Department of Ophthalmology \$17,000	1981-1982
Ortho Pharmaceutical University of Illinois Department of Ophthalmology \$9,600	1983-1985
Ciba-Geigy University of Illinois Department of Ophthalmology \$17,175	1985

Alcon Laboratories University of Illinois Department of Ophthalmology \$4,200	1985-1986
NIH - National Eye Institute IU 10 EY07488-01A1 Herpes Eye Disease Study University of Illinois Department of Ophthalmology \$229,117	1988-1992
NIH - National Eye Institute IU 10 EY09694-01 Herpetic Eye Disease Study II University of Illinois Department of Ophthalmology \$112,349/year	1992-1997
NIH – National Eye Institute Cornea Donor Study University of Illinois Department of Ophthalmology 16,163	1999 - Present
Allergan A Multicenter, Double masked, Randomized, Vehicle-Controlled, Parallel-Group Study of the Safety and Efficacy of Cyclosporine 0.05%, Ophthalmic Emulsion Used Twice Daily for Six Months in patients with Moderate to Severe Keratoconjunctivitis. University of Illinois Department of Ophthalmology 10,725	2002 - 2003

GRANTS AS  
CO-INVESTIGATOR:

With Beatrice Yue, Ph.D. Connective Tissue Synthesis in Diseased Corneas University of Illinois Department of Ophthalmology \$186,993	1981-1984
With Robert Hendricks, Ph.D. Localized Immune Defect in Ocular Herpetic Recurrences	1981-1984

University of Illinois  
Department of Ophthalmology  
\$171,140

With Beatrice Yue, Ph.D.  
Connective Tissue and  
RNA Studies of Diseased Corneas  
University of Illinois  
Department of Ophthalmology  
\$423,964

1984-1989

With Robert Hendricks, Ph.D. NIH - National Eye Institute R01 EY06 911 New Antivirals for the Treatment of Stromal Disease University of Illinois Department of Ophthalmology \$480,000	1987-1991
With Beatrice Yue, Ph.D. NIH - National Eye Institute R01 EY03890 Biochemical Basis of Keratoconus University of Illinois Department of Ophthalmology \$84,673	1989-1994
With Robert Hendricks, Ph.D. Michigan Eye Bank and Transplantation Center The Involvement of TM cells in the Induction of Immune Tolerance University of Illinois Department of Ophthalmology \$10,000	1989-1990

COMMITTEE  
MEMBERSHIPS:

University of Illinois Student Progress Committee, Member	1976-1989
Operating Room Committee, Member	1978-1998
Surgical Case Review Committee, Member	1988-1991
Executive Committee of the Medical Staff	1989-1996
Review Board of the Medical Staff, Member	1994-1997
Treasurer Medical Staff	1994-1995
Secretary Medical Staff	1995-1996
Hospital Credentials Committee, Member	1989-1994
Committee on Appointments, Promotions, and Tenure College of Medicine Executive Committee	1991-1998  1995-1996
University of Illinois	

Eye and Ear Infirmary	
Department of Ophthalmology	
Resident Selection Committee	1976-1993
Chairman	1976-1978
Resident Education Committee	1976-1993
Executive Committee	1976-1994
Promotion Committee	1987-1991
Chairman	1989-1991
Faculty Advisory Committee, Chair	1994-1996
Chicago Ophthalmological Society	1977-Present
Eye Bank Committee	1977- 2000
Chairman	1979-1984
Monthly Meeting Chairman	1979-1980
Councillor	1980-1981
Vice-President	1981-1982
	1987-1988
President Elect	1988-1989
President	1989-1990
American Academy of Ophthalmology	
Committee on Special Programs for Continuing Education in Ophthalmology	1980-1988
Eye Bank Committee	1990-2000
Council	1995-2002
Prospective Evaluation of Radial Keratotomy Data & Safety Monitoring Board	1981-1993
Accreditation Council for Graduate Medical Education-Residency Review Committee for Ophthalmology	1983-1989
Vice Chairman	1987-1989
Eye Bank Association of America	
Scientific Program Committee	1985-1995
Medical Advisory Board	1985-Present
Chairman	1991-1996
Accreditation Committee	1991-Present
Executive Committee	1996-2004
Policy and Position Subcommittee, Chair	1997-2004

BOARD OF  
DIRECTORS:

Midwest Eye Banks and Transplantation Center	1986-Present
Regional Organ Bank of Illinois	1987-1998
Illinois Eye Fund	1987-Present
Eye Bank Association of America	1990-2004
Castroviejo Corneal Society President	1992-2003 2000-2001
Illinois Society for the Prevention of Blindness	1991-1994

EDITORIAL  
BOARDS:

Ophthalmic Surgery Associate Editorial Board Editorial Board	1981-1988 1988-1995
Archives of Ophthalmology Associate Editor Editorial Board	1984-1989 1984-1994
Insights Medical Advisory Board	1988-1990
Cornea Associate Editor	1996-Present

REVIEWER  
FOR:

Investigative Ophthalmology and Visual Science
Pediatric Dermatology
American Intraocular Implant Society Journal
Journal American Medical Association

Journal of Pediatric Ophthalmology  
and Strabismus

American Journal of Ophthalmology

Ophthalmology

Refractive and Corneal Surgery

Cornea

Current Eye Research

Journal of Cataract & Refractive Surgery

Archives of Ophthalmology

Journal of Neuro-Ophthalmology

European Journal of Ophthalmology

#### FELLOWS TRAINED

Cheryl L. Keys, MD	1988-89
Colman R. Kraff, MD	1989-90
Kathleen Scarpulla, MD	1989-90
Elissa Hassman, DO	1990-91
SueEllen Colby, MD	1992-93
Miriam Schteingart, MD	1993-94
Barry Kaufman, DO	1994-95
Michael Hennessey, MD	1995-96
Anne Marie Alino, MD	1996-97
Andrew Cu-Unjieng, MD	1997-98
Timothy Kislak, DO	1998-99
Loan Tran, MD	1999-2000
Prabha Reddy, MD	2000-2001
Harvinder Atluri, MD	2001-2002
Majid Rassouli, DO	2002-2003
Jingtao Guo, MD	2003-2004
Michael Negrey, MD	2004-2005
Satya Reddy, MD	2005-2006

JOEL SUGAR, M.D.

ABSTRACTS

1. Sugar J: Effect of systemic indomethacin on herpes recurrences in rabbits. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1978 17:274.
2. Bennett R, Sugar J, Weisbaum J: Effect of indomethacin on corneal graft survival. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1979, 18:95.
3. Hendricks RL, Sugar J: Immune functions of patients with recurrent herpes keratitis. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1980, 19:31.
4. Bennett TO, Epstein R, Sugar J: Penetrating keratoplasty and tissue typing in outbred canines. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1980, 19:235.
5. Hendricks RL, Sugar J: Cytotoxic function of patients with recurrent herpetic lesions. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1981, 20:136.
6. Sugar J, Nyberg M, Berstein J, Barlow AL, Slater W: Imipramine inhibition of ragweed allergic conjunctivitis. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1982, 22:135.
7. Hendricks RL, Sugar J: Cytotoxic function of patients with recurrent herpetic lesions. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1982, 22:215.
8. Feigelman MJ, Sugar J: Assessment of ocular protective devices for racquet sports. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1982, 22:220.
9. Ksander B, Sugar J, Baram P, Hendricks R: The cellular immune response to HSV-1 at different anatomical sites. *Federation Proc* 1983, 42:967.
10. Hendricks RL, Sugar J: Lymphocyte-mediated cytotoxicity (LMC) for targets infected with herpes simplex virus (HSV): Nature of the effector cells in fresh and cultivated human lymphocytes. *Federation Proc* 1983, 42:968.
11. Yue BYJT, Sugar J, Benveniste K: Biochemical studies of keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Suppl, 1983, 24:109.
12. Nyberg M, Sugar J, Fiscella R: Effect of lodoxamide tromethamine on immediate hypersensitivity in the guinea pig conjunctiva. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1984, 25:27.
13. Ksander B, Sugar J, Baram P, Hendricks R: The effect of primary HSV challenge site on the development of murine cytotoxic response. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1984, 25:116.

14. Hendricks R, Sugar J: Cytotoxic function of patients with recurrent herpes keratitis. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1984, 25:117.
15. Yue BYJT, Sugar J, Benveniste K: RNA metabolism in cultures of keratoconus stromal cells. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1984, 25:326.
16. Ksander B, Sugar J, Baram P, Hendricks RL: Phenotypic and functional differences in cytotoxic cells activated during ocular and cutaneous HSV infections. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1985, 26:72.
17. Sugar J, Yue BYJT, Schrod K: Collagen staining in corneal tissues. *Invest Ophthalmol Vis Sci*, ARVO abstracts 1985, 26:178
18. Sugar J, Spigelman A, LeSher D, Hanagan J: Terbutaline inhibition of ragweed allergic conjunctivitis. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1986 27:33.
19. Yue BYJT, Panjwani N, Sugar J, Baum J: Elevated glycoconjugate levels in cultured keratoconus stromal cells *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1989, 30:39.
20. Sawaguchi S, Yue BYJT, Gilboy J, Sugar J: Lysosomal enzyme activities in keratoconus. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1988, 29:312.
21. Young TL, Robin JB, Hendricks RL, Engstrom RE, Holland GN, Sugar J: Herpes keratitis in AIDS. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1989, 30:39.
22. Barfknecht C, Hendricks R, Schoenwald R, Ellingson C, Boge T, Sugar J: Chemotherapy for herpetic corneal stromal disease. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1989, 30:361.
23. Sawaguchi S, Twining SS, Yue BYJT, Wilson PM, Sugar J: Alpha-1-proteinase inhibitor levels in keratoconus. *Invest Ophthalmol Vis Sci*, ARVO abstracts 1989, 30:474.
24. Sawaguchi S, Yue BYJT, Sugar J: Proteoglycans in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1990, 31:495.
25. Panton RW, Sugar J: Excision of limbal dermoids. *Invest Ophthalmol Vis Sci* ARVO abstracts, 1990, 31:2666.
26. Chang I, Sawaguchi S, Yue B, Sugar J. Sulfated proteoglycans in corneas of Reis-Bucklers dystrophy. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1991, 32:1645.
27. Dana MR, Putz JL, Viana MAG, Sugar J, McMahon TT. Contact lens failure in keratoconus management: A retrospective study. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1991, 32:2183
28. Yue B, Loushin G, Sawaguchi S, Twining SS, Sugar J. Alpha -2- macroglobulin levels in keratoconus. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1992; 33:1421.

29. Fukuchi T, Yue B, Kawa J, Sugar J, Lam S. Abnormal lysosomal enzyme activities in conjunctival tissues of patients with keratoconus. *Invest Ophthalmol Vis Sci*, ARVO abstracts, 1993; 34:1900.
30. Dana MR, Hochman M, Viana MA, Hill C, Sugar J. Ocular manifestations of Hansen's disease in a non-institutionalized community in the U.S. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1993; 34:2922.
31. Sugar J, Zhou L, Fukuchi T, Yue B. Expression of vimentin and tenascin in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1994; 35:484.
32. Fukuchi T, Zhou L, Twining SS, Yue B, Sugar J. Expression of cathepsin G and  $\alpha_1$ -proteinase inhibitor in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1994; 35:953.
33. Dana MR, Schaumberg DA, Moyes AL, Gomes JAP, Holland EJ, Laibson PR, Sugar A, Sugar J. Outcome of penetrating keratoplasty for ocular trauma in children: A multicenter experience. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1995; 36:2984.
34. El-Naggar SA, DeBacker CM, Liu W, Sugar J. Effects of Nd: Yag laser posterior capsulotomy on corneal grafts. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1995; 36:3768.
35. Wilhelmus KR, Stulting RD, Sugar J. A case-control study of risk factors for primary graft failure following corneal transplantation. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1995; 36:4652.
36. Whitelock RB, Zhou L, Yue B, Sugar J. Transcription factors in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1996;37:3120.
37. Zhou L, Whitelock RB, Yue B, Sugar J. Cytokine and receptor expression in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1996;37:4670.
38. Sawaguchi S, Fukuchi T, Sawa M, Abe H, Yue B, Sugar J. Three-dimensional architecture of Bowman's membrane in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1996;37:4681.
39. McMahon T, Shin J, Newlin A, Edrington T, Sugar J, Zadnik K. Discordance for keratoconus in two pairs of monozygotic twins. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1997;38:4449.
40. Yue B, Zhou L, Sawaguchi S, Twinning SS, Sugar J. Expression of degradative enzymes and protease inhibitors in keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1997;38:4453.
41. Li Y, Whitelock RB, Twinning SS, Sugar J, Yue B. Identification of regulatory elements in alpha-1 proteinase inhibitor gene in relation to keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1997;38:5088.
42. Maroyama I, Zhou L, Sugar J, Yue BYJT. Normal cathepsins B and G and protease inhibitors levels in conjunctival tissues of patients with keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1998; 30:1594

43. Yue BYJT, Wentz-Hunter K, Sugar J. Subtractive hybridization of keratoconus, normal human, and pseudophakic bullous keratopathy corneal tissue. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1998; 39:1597
44. Ahn CS, McMahon T, Zhou L, Sugar J, Mamalis N, Yue BYJT. Levels of alpha 1-proteinase inhibitor and alpha 2 – macroglobulin in the tear film of patients with keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1998; 30:1595
45. Blair NP, Garcia-Valenzuela E, Phillipotts B, Sugar J, Shapiro MJ, Gieser JP, Solomon MJ, McLeod SD, Resnick KI. Outcome of vitreoretinal surgery and penetrating keratoplasty using temporary keratoprosthesis. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1998; 30:1746
46. Li Y, Zhou L, Sugar J, Yue BYJT. Transcriptional regulation of human alpha 1 – proteinase inhibitor and acid phosphatase genes by SP 1 in the cornea. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1998; 39:2964
47. Li Y, Wentz-Hunter KK, Cheng EL, Sugar J, Yue BYJT. Keratoconus expression is increased in the stroma of keratoconus corneas. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1999; 40:1748
48. Cheng EL, Li Y, Sugar J, Yue BYJT. Cell density and expression of transcription factor SP1. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 1999; 40:1749
49. Maruyama Y, Wang X, Li Y, Sugar J, Yue BYJT. Sp1 regulation of the promoter activity of the human alpha 1-proteinase inhibitor gene. *Inves Ophthalmol Vis Sci*, ARVO Abstracts, 2000; 41:1389
50. Shen JF, McMahon TT, Cheng EL, Sugar J, Yue BYJT, Anderson R, Begley C, Zhou Z, The CLEK study group. Lysosomal hydrolase staining of impression cytology specimens in keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 2000; 40:1423.
51. McLeod SD, Kislak T, Sugar J. Corneal graft survival after phototherapeutic keratectomy. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 2000; 40:3643
52. Maruyama Y, Wang X, Li Y, Sugar J, Yue BYJT. Involvement of SP1 elements in the promoter activity of genes affected in keratoconus. *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 2001; 41:3153
53. Mendes F, Schaumberg DA, Navon S, Steinert R, Sugar J, Holland E, Dana MR. Quality of life assessment after corneal transplantation. *Invest Ophthalmol Vis Sci*, Arvo Abstracts, 2002;42:3069
54. Nakamura H, Huda J, Sugar J, Yue BYJT. Developmental expression of SP1 in the mouse cornea, *Invest Ophthalmol Vis Sci*, ARVO Abstracts, 2002;42:3204
55. hUda J, Li Y, Goh MS, Maruyama Y, Sugar J, Yue BYJT. A reporter gene construct contains 1.4 Kb alpha 1 – proteinase inhibitor promoter confers expression in the cornea of transgenic mice. *Invest Ophthalmol Vis Sci*, ARVO Abstracts 2002;42:3227
56. Nakamura H, Sugar J, Yue BYJT. Influence of cytokines on levels of transcription factor Sp1 in cultures of human corneal fibroblasts. *Invest Ophthalmol Vis Sci*, ARVO Abstracts 2003;43:849

57. Szczotko LB, McMahon TT, Lass J, Sugar J, Weissman BA, Stiegemeier M. Late stage progressive corneal astigmatism after penetrating keratoplasty for keratoconus. *Invest Ophthalmol Vis Sci*, Arvo Abstracts, 2003;43:4685
58. Sakai H, Nakamura H, Sugar J, Sapin V, Yue BYJT. Expression of Kruppel like factor 4 in the developing mouse cornea and conjunctiva. *Invest Ophthalmol Vis Sci*, Arvo Abstracts 2004;44:3787
59. Nakamura H, Chiambaretta F, Sugar J, Sapin V, Yue BYJT. Expression of KLF6 in the developing mouse cornea and lens. *Invest Ophthalmol Vis Sci*, Arvo Abstracts 2004;44:3788
60. Kapur R, Tu EY, Pendland SL, Sugar J, The effect of temperature on microbial activity in Optisol-GS. *Invest Ophthalmol Vis Sci*, Arvo Abstracts 2004;44:4908
61. Joslin CE, Tu EY, Sugar J, McMahon TT. IOL power calculation in eyes having undergone myopic refractive surgery and cataract surgery. *Invest Ophthalmol Vis Sci*, Arvo Abstracts, 2005;45:859
62. Yue B, Shen X, Sugar J. Effects of Sp1 overexpression on cultured human corneal fibroblasts. *Invest Ophthalmol Vis Sci*, Arvo Abstracts, 2005;45:4960

JOEL SUGAR, M.D.

**Publications**

1. Sugar J, Burde RM, Sugar A, Waltman SR, Kripalani KJ, Weliky I, Becker B: Tetrahydrotriamcinolone and triamcinolone: I. Ocular penetration. *Invest Ophthalmol* 1972 Nov; 11:890-893.
2. Sugar J, Sugar A, Burde RM: Tetrahydrotriamcinolone and triamcinolone: II. Effect on xenograft reaction in rabbits. *Invest Ophthalmol* 1972 Nov; 11:894-896.
3. Sugar J, Kaufman HE, Varnell ED: Effect of exogenous interferon on herpetic keratitis in rabbits and monkeys. *Invest Ophthalmol* 1973 May; 12:378-380.
4. Sugar J, Varnell ED, Centifanto Y, Kaufman HE: Trifluorothymidine treatment of herpetic iritis in rabbits and ocular penetration. *Invest Ophthalmol* 1973 Jul; 12:532-534.
5. Sugar J, Kaufman HE: Halogenated Pyrimidines in Antiviral Therapy. In Carter WA (ed): Selective Inhibitors of Viral Functions. *Cleveland, CRC Press, 1973; 295-311.*
6. Sugar J: Adrenochrome pigmentation of hydrophilic lenses. *Arch Ophthalmol* 1974 Jan; 91:11-12.
7. Chandler JW, Gebhardt BM, Sugar J, Kaufman HE: Immunological protection of rabbit corneal allografts: Survival of corneas pretreated with succinylated antilymphocyte globulin. *Transplantation* 1974 Jan; 17:146-148.
8. Chandler JW, Sugar J, Gasset AR: Experimental corneal wound strength: 7-0 silk versus 10-0 monofilament nylon. *Arch Ophthalmol* 1974 Aug; 92:155-156.
9. Sugar J, Chandler JW: Experimental corneal wound strength: Effect of topical corticosteroids. *Arch Ophthalmol* 1974 Sep; 92:248-249.
10. Chandler JW, Sugar J, Kaufman HE: Hemorrhages in the interface between corneal grafts and retrocorneal membranes. *Arch Ophthalmol* 1974 Oct; 92:299-300.
11. Abel R, Kaufman HE, Sugar J: Intravenous adenine arabinoside against herpes simplex keratouveitis in humans. *Am J Ophthalmol* 1975 Apr; 79:659-664.
12. Abel R, Kaufman HE, Sugar J: Effect of Intravenous Adenine Arabinoside on Herpes Simplex Keratouveitis in Humans. In Pavan-Langston D, Buchanan RA, Alford CA (eds): Adenine Arabinoside: An Antiviral Agent. New York, Raven Press, 1975; 393-400.
13. Freedman, H, Sugar J: Pseudomonas keratitis following cosmetic soft lens wear. *Contact Lens Journal* 1976 Jun; 10:21-25.

14. Goldberg MF, Krimmer B, Sugar J, Sewell J, Wong P: Variable expression in flecked (speckled) dystrophy of the cornea. *Ann Ophthalmol* 1977 Jul; 9:889-896.
15. Bennett TO, Sugar J, Sahgal S: Ocular manifestations of toxic epidermal necrolysis associated with allopurinol use. *Arch Ophthalmol* 1977 Aug; 95:1362-1364.
16. Sugar J, Podos SM: Oculocutaneous Diseases. In Demis DJ, et al (eds): *Clinical Dermatology*. Hagerstown, MD, Harper and Row, 1977 rev ed; 1-24.
17. Sugar J, Mitchelson J, Kraff M: The effect of phacoemulsification on corneal endothelial cell density. *Arch Ophthalmol* 1978 Mar; 96:446-448.
18. Sugar J, Mitchelson J, Kraff M: Endothelial trauma and endothelial cell loss from intraocular lens insertion. *Arch Ophthalmol* 1978 Mar; 96:449-450.
19. Sugar J, Burnett J, Forstot SL: Scanning electron microscopy of intraocular lens and endothelial cell interaction. *Amer J Ophthalmol* 1978 Aug; 86:157-161.
20. Sugar J: Corneal manifestations of the systemic mucopolysaccharidoses. *Ann Ophthalmol* 1979 Apr; 11:531-535.
21. Schwartz H, Sugar J: Adenovirus conjunctivitis in children. *Perspectives in Ophthalmol* 1979 Dec; 3:285-290.
22. Sugar J, Goldberg MF: Cornea Plana; Corneal Dystrophy (Congenital Hereditary, Endothelial, Granular, Juvenile Epithelial, Lattice, Macular, Polymorphous Posterior, Recurrent Erosive, Reis-Bucklers, Schnyder Crystalline); Keratoconus; Keratopathy, Band-shaped; Megalocornea; and Retinal Telangiectasia and Hypogammaglobulinemia. In Bergsma D (ed): *Birth Defects, Compendium*. New York, National Foundation - March of Dimes, Alan R. Liss Inc, 1979.
23. Bennett TO, Weisbaum JS, Sugar J: Effect of systemic indomethacin on corneal graft survival in rabbits. *Ophthalmic Surg* 1980 Mar; 11:197-199.
24. Homer PI, Peyman GA, Sugar J: Automated vitrectomy in eyes with vitreocorneal touch associated with corneal dysfunction. *Amer J Ophthalmol* 1980 Apr; 89:500-506.
25. Sugar J, Liff J: Bacterial contamination of corneal donor tissue. *Ophthalmic Surg* 1980 Apr; 11:250-252.
26. Sugar J, Stark W, Binder PS, Meyer R, Chandler JW, Waring GO, Hirst L, King DH: Trifluorothymidine treatment of herpes simplex epithelial keratitis and comparison with idoxuridine. *Ann Ophthalmol* 1980 Jun; 12:611-615.
27. Cyrlin MN, Pedvis-Leftick A, Sugar J: Cataract formation in association with ultraviolet photosensitivity. *Ann Ophthalmol* 1980 Jul; 12:786-790.
28. Sugar J: Discussion of "One-year observation of transplanted human corneal endothelium" by Bourne W. *Ophthalmology* 1980 Jul; 87:679.

29. Sumers KD, Sugar J, Levine R: Endogenous dissemination of genital herpesvirus hominis type 2 to the eye. *Brit J Ophthalmol* 1980 Oct; 64:770-772.
30. Sugar J, Bray R: Contact Lenses. In Peyman GA, Sanders D, Goldberg MF (eds): *Principles and Practice of Ophthalmology*. Philadelphia, WB Saunders, 1980, Vol I; 221-240.
31. Sugar J: Corneal Examination. In Peyman GA, Sanders D, Goldberg MF (eds): *Principles and Practice of Ophthalmology*. Philadelphia, WB Saunders, 1980, vol I; 390-398.
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#### GUEST LECTURESHIPS

1. Northwestern University, Chicago, Illinois, October 1976.

2. University of Colorado, Denver, Colorado, August 1977, 1978, 1979.
3. Louisiana State University Medical Center, New Orleans, Louisiana, October 1977.
4. Southern Illinois University, Springfield, Illinois, November 1977.
5. Eye Bank Meeting, Chicago, Illinois, June 1978.
6. Michael Reese Hospital, Chicago, Illinois November 1978.
7. Wayne State University, Detroit, Michigan, January 1979.
8. University of California, Davis, California, April 1979.
9. Eye Bank Meeting, Madison, Wisconsin, June 1979.
10. University of California, San Diego, California, July 1979.
11. Wayne State University, Detroit, Michigan, January 1980.
12. Evanston Hospital, Evanston, Illinois, March 1980.
13. Northwestern University, Chicago, Illinois, March 1980.
14. Aravind Eye Hospital, Madurai, India, November 1980.
15. Hong Kong Ophthalmology Society, Hong Kong, December 1980.
16. St. Joseph's Hospital, Chicago, Illinois, April 1980.
17. Northwestern University, Chicago, Illinois, January 1981
18. University of Iowa, Iowa City, Iowa, January 1981.
19. University of Wisconsin, Madison, Wisconsin, March 1981
20. Bethesda Hospital, Cincinnati, Ohio, August 1982.
21. American Academy of Ophthalmology Regional Update Course  
Philadelphia, Pennsylvania, March and September, 1982.
22. American Academy of Ophthalmology Regional Update Course,  
St. Louis, Missouri March 1983.
23. Ahmedabad Academy of Ophthalmology, Ahmedabad, India, September 1983.
24. Aravind Eye Hospital, Madurai, India, September 1983.

25. Medical College of Wisconsin and Milwaukee Ophthalmological Society, January 1985.
26. Rochester Eye Institute, Rochester, New York, December 1985.
27. St. Catherine's Hospital, Hammond, Indiana, January 1986.
28. American Academy of Ophthalmology Regional Update Course, Chicago, Illinois, April 1987.
29. American Academy of Ophthalmology Regional Update Course, Chicago, Illinois, April 1988.
30. Michigan Ophthalmological Society, Novi, Michigan, January 1990.
31. Medical College of Virginia Ophthalmology Conference, Williamsburg, Virginia, April 1990.
32. Albert Einstein Medical College, Montefiore Hospital  
Department of Ophthalmology, Bronx, N.Y. March 1991.
33. National Center for Advanced Medical Education, Chicago, IL, Oct., 1992.
34. University of Pennsylvania, Scheie Eye Institute, January, 1993.
35. International Conference on Cornea, Jerusalem, Israel, June, 1993.
36. Combined Cornea Societies, Toronto, Canada, June, 1994.
37. Medical College of Wisconsin, Milwaukee, WI, Oct., 1994.
38. University of Wisconsin, Madison, WI, March, 1996.
39. World Cornea Congress, Orlando, FL, April, 1996.
40. University of Michigan, Ann Arbor, MI, September 1996
41. University of California, Davis, January 1999
42. Ophthalmology Update, Punta Cana, D.R., March 2004, March 2005