

Terry E. Burris, M.D.

Curriculum Vitae

January 10, 2003

Work Address: Northwest Corneal Services
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Telephone: Work: (503) 624-4814
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Date of Birth: 26 January, 1952

Family: Wife, 4 children;

Place of Birth: Enid, Oklahoma, USA

Hobbies: Mineral collecting, music writing, fitness training

Education: Pittsburg State University, Pittsburg, KS 66762
Bachelor of Arts, Chemistry (American Chemical Society, Certified)
& Biology, May 1974

Post Graduate Education:

Medical School: University of Kansas School of
Medicine, Kansas City, KS 66103; M.D. June 1977

Internship: Menorah Medical Center, Kansas City, MO 64110, First Year Internal Medicine Residency, June, 1978

Residency: Naval Regional Medical Center, Oakland, CA 94627, affiliated with the University of California, San Francisco Medical Center, 94143, Ophthalmology, July, 1981

Fellowship: Dean A. McGee Eye Institute, University of Oklahoma Health Science Center, Oklahoma City, OK 73104. Cornea and External Diseases, July 1982 -- with J. James Rowsey, M.D.

Honors, Awards, Scholarships:

College: Graduated with Highest Honors, 1974

American Institute of Chemists Student Medal Award, 1974

O.W. Chapman Award, 1973 (Chemistry)
Freshman Achievement Award, 1971 (Chemistry)

Postgraduate: Department of Pharmacology/University of Kansas School of Medicine Endowment Association Award and Plaque for instruction course (see publications), 1977

Armed Forces Health Professions Scholarship Program (1974-1977)

Diplomate, National Board of Medical Examiners, 1978

Diplomate, American Board of Ophthalmology, 1982

First Prize Honors, Contact Lens Association of Ophthalmomogists (CLAO) Scientific Poster Presentation, January 13-16, 1988.

Outstanding Humanitarian Service to the Sight and Hearing Impaired of Oregon, Devers Eye Institute, Portland, Oregon, 1991.

Outstanding service on the Board of Directors, EyeBank Association of America, 1991.

Appreciation of Service to the EyeBank Certification Committee, EyeBank Association of America, 1992.

First Prize Honors, International Society of Refractive Surgery Pre-Academy Conference, Scientific Poster Presentation, November 6-8, 1998.

Society Memberships:

Honor Societies: Omicron Delta Kappa (Academic & Leadership), 1973-4

Beta Beta Beta (biology), 1973-4

Kappa Mu Epsilon (mathematics), 1971-4

Scholastic Honor Society, 1973-4

Professional Memberships:

Association for Research in Vision and Ophthalmology (ARVO), 1981-present

American Academy of Ophthalmology (AAO), 1981-present

American Medical Association (AMA), 1975-present

Ocular Microbiology and Immunology Group (OMIG), 1981-present

Association of Military Surgeons of the United States (AMSUS), 1983-present

Society of Military Ophthalmologists (SMO), 1982-present

The Castroviejo Society (Member, 1995-present; associate member 1984-1995)

American Society of Cataract and Refractive Surgery (ASCRS), 1984-present

Contact Lens Association of Ophthalmologists, (CLAO) 1984-present

International Eye Foundation, Society of Eye Surgeons, 1985-present

Eye Bank Association of America (EBAA), Paton Society, 1982-present

International Society of Refractive Surgery (ISRS), (Formerly ISRK) 1988-present

Pediatric Keratoplasty Association, 1993-present

Oregon Medical Association, 1986-present

Oregon Academy of Ophthalmology, 1986-present

Multnomal County Medical Society, 1986-present

Professional Appointments:

Clinical Instructor of Ophthalmology,
University of Oklahoma, Oklahoma City, OK
73104, July 1981-July 1982

Director, Corneal and External Disease
Services, and Director of Ophthalmic Research,
Dept. of Ophthalmology, Naval Hospital,
Oakland, CA 94627, July 1982-1986

Consultant, Corneal & External Diseases, Dept.
of Ophthalmology, The Pacific Medical Center,
San Francisco, CA 94115, 1984-July 1986

Chief and Founder, Cornea & External Disease
Service, Devers Eye Institute, Good Samaritan
Hospital & Medical Center, Portland, OR 97210
Sept. 1986-October 1990

Medical/Surgical Director, Lions Eyebank of
Oregon, Devers Eye Institute, Portland, Oregon
97210, September 1986-October 1990; Currently
Co-Medical Director;

Director and Founder, Eyebank Research Laboratory,
Lions Eyebank of Oregon, December 1986-October
1990

President, Western Region, Eyebank Association
of America (EBAA), and Board of Directors,
1989-91

Eye Bank Accreditation Committee, Eye Bank Assn.
of America (EBAA) 1990-present

Founder and Medical Director, Northwest Corneal
Services, 1990-present

Adjunct Institute Staff, R.S. Dow Neurological
Sciences Institute, Portland, OR 97210, 1990-present

Clinical Assistant Professor of Ophthalmology,
Oregon Health Sciences University, Casey Eye
Institute, Portland, OR 97201, February 1992-
October 1998

Clinical Associate Professor of Ophthalmology,
Oregon Health Sciences University, Casey Eye Institute,
Portland, OR 97201, November 1998-present

Consultant Services:

KeraVision, Inc., Scientific Medical Advisory
Board, 1987-1992; KeraVision, Inc., Consultant,
1987-present;

KeraVision, Inc., Principal Investigator,
Intrastromal Corneal Ring FDA phase II protocol,
1993; 1995-present.

KeraVision, Inc., Principal Investigator,
Intrastromal Corneal Ring Segments FDA phase III protocol,
1996-present.

Chiron Ophthalmics, Technical Consultant, 1988-
Present

Wavefront Sciences, Technical Consultant, 2001-present

Santen, Inc., 2002-3

Scientific Journal Peer Reviews:

Cornea
Journal of Refractive Surgery
Journal of Cataract and Refractive Surgery

Book Chapters:

Corneal Devices and Beyond, In: Krachmer, JH, Mannis, MJ, Holland, EJ, eds: Cornea: Surgery of the Cornea and the Conjunctiva, St. Louis, MO: Mosby-Year Book, Inc; 1997:2225-2232.

Refractive Correction with an Intracorneal Device. In: Agarwal, S, Pallikaris, IG, Agarwal, A, Neuhann, TH, Knorz, MC, Agarwal, A, eds: Refractive Surgery, New Delhi, India: Jaypee Brothers Med. Pub., Ltd; 1999:556-565.

INTACS™ Refractive Correction with an Intracorneal Device. In: Boyd, B, Agarwal, S, Agarwal, A, Agarwal, A eds: LASIK and Beyond LASIK: Wavefront Analysis and Customized Ablation, Bogota, Colombia: Highlights of Ophthalmology; 2001:513-521.

Acute Follicular Conjunctivitis. In: Singh K, Smiddy WE, Lee, AG eds: Ophthalmology Review: a case study approach. New York: Thieme Medical Publisher, Inc.; 2001:1-6.

Chronic Follicular Conjunctivitis. In: Singh K, Smiddy WE, Lee, AG eds: Ophthalmology Review: a case study approach. New York: Thieme Medical Publisher, Inc.; 2001:7-9.

Scientific Presentations:

Growth and Comparison of Ecologically Related Iron-oxidizing Bacteria at Various Initial Iron (II) Concentrations. Presented at Kansas Academy of Sciences Spring Meeting, (abstracted), Spring, 1974

Free Radical Mechanisms of Tissue Injury and the Eye. American Chemical Society, Southeast Kansas Section, Pittsburg, KS, 17 Sept. 1981

Rowsey, J.J., Burriss, T.E., Garabet, T., McCay, P.B., Poyer, L.J.: Free Radical Mechanisms of Tissue Injury in the Anterior Segment. Castroviejo Society Annual Meeting, Las Vegas, Nevada, October, 1982

Burriss, T.E., Baker, P.C., Mathis, N.M., Silvestrini, T.A., Loomas, B.E.: Corneal Topography of Intrastromal Corneal Rings (ICR's) in Human Eyes: A Computerized Laser Holographic Interferometry Study. American Society of Cataract & Refractive Surgery Annual Meeting, San Diego, California, April 1992

Burriss, T.E., Ayer, C.T., Silvestrini, T.A.: Intrastromal Corneal Ring (ICR®) instrumentation: channel dissection in cadaver eyes. American Society of Cataract & Refractive Surgery Annual Meeting, Seattle, Washington, May 1993

Burriss, T.E., Ayer, C.T.: Preparation of Eyebank Eyes for Corneal Topography Research. Eyebank Association of American Semi-Annual Meeting, San Diego, California, June 1993.

Burriss, T.E., Silvestrini, T.A., Scholl, J, Mathis, M., Proudfoot, R.A., Baker, P.C., Ayer, C.T.: Impact of Intrastromal Corneal Ring (ICR®) Thickness on Flattening of Anterior Corneal Curvature: An Eyebank Eye Study. American Society of Cataract & Refractive Surgery Annual Summer Symposium, Los Angeles, California, August 1993.

Burriss, T.E., Silvestrini, T.A., Scholl, J, Mathis, M., Proudfoot, R.A., Ayer, C.T., Baker, P.: Intrastromal Corneal Rings Flatten Human Corneas: A Laser Holographic Topography Study. International Society of Refractive Keratoplasty, November 1993.

Burriss, T., Silvestrini, T., Mathis, M., Scholl, J., Proudfoot, A., Baker, P.: Corneal Asphericity and the Intrastromal Corneal Ring (ICR) A

Laser Holographic Interferometer Eyebank Eye Topography Study. Castroviejo Cornea Society Annual Meeting, November 1993.

Burris, T. et al. ICR Performance Studies in Cadaver Eyes. International Anterior Segment Congress/ ISRK; Toronto, Canada; June 23, 1994

Burris, T., Belfort, R., Nosé, W, et al. 24 Month Results of the Intrastromal Corneal Ring in Myopic Eyes. International Anterior Segment Congress/ISRK; Toronto, Canada; June 23, 1994

Burris, T., Silvestrini, T., Baker, P., Durrie, D., Schanzlin, D.: Intrastromal Corneal Ring (ICR) Performance Studies in Cadaver Eyes. International Anterior Segment Congress, Toronto, Ontario, Canada, May 1994.

Nosé, W., Neves, R., Burris, T., Belfort, R., Schanzlin, D.: Two-year evaluation of the Intrastromal Corneal Ring (ICR) in Myopic Eyes. International Anterior Segment Congress, Toronto, Ontario, Canada, May 1994.

Burris, T.: The "Hands On" Medical Director. Eye Bank Association of America Annual Meeting, Toronto, Ontario, Canada, May 1994.

Burris, T., Holmes-Higgin, D., Silvestrini, T., Scholl, J., Proudfoot, R., Baker, P., Asbell, P., Durrie, D., Schanzlin, D.: Corneal asphericity in patient eyes following ICR implantation. ASCRS Symposium on Cataract, IOL and Refractive Surgery (abstracted), April 2, 1995

Burris, T., Holmes-Higgin, D., Asbell, P., Durrie, D., Schanzlin, D.: Corneal flattening and asphericity in sighted patient eyes following ICR (Intrastromal Corneal Ring) implantation. International Society of Refractive Surgery, October 1995.

Burris, T.: The intrastromal corneal ring. Oregon Academy of Ophthalmology, October 1995.

Burris, T.: Epithelial downgrowth. Oregon Academy of Ophthalmology, October 1995.

Burris, T., Holmes-Higgin, D.K., Silvestrini, T.A., Baker, P.C., Asbell, P.A., Durrie, D.S., Schanzlin, D.J.: Corneal asphericity in sighted patient eyes following ICR (Intrastromal Corneal Ring) implantation. World Congress on the Cornea IV, April 1996.

Burris, T., Holmes-Higgin, D.K., Asbell, P.A., Durrie, D.S., Schanzlin, D.J.: Corneal asphericity in Phase II ICR patients. ASCRS Symposium on Cataract, IOL and Refractive Surgery (abstracted), June 4, 1996

Burris, T., Holmes-Higgin, D.K., Asbell, P.A., Durrie, D.S., Schanzlin, D.J.: Corneal astigmatism in Phase II patients following ICR implantation. ASCRS Symposium on Cataract, IOL and Refractive Surgery (abstracted), June 4, 1996

Burris, T.E., Holmes-Higgin, D.K., Asbell, P.A., Durrie, D.S., Schanzlin, D.J. Month 3 corneal topography analysis of patients with the ICRS (Intrastromal Corneal Ring Segments), American Academy of Ophthalmology, October 29, 1996

Burris, T.E., Holmes-Higgin, D.K., Asbell, PA, Durrie, DS, Schanzlin, DJ. Stability of topographic corneal flattening, PCA (predicted corneal acuity and BSCVA with the ICRS (Intrastromal Corneal Ring Segments). American Academy of Ophthalmology, October 27, 1997

Burris, T.E., Holmes-Higgin, D.K. and the ICRS Phase III Study Group. Preoperative and month 6 corneal topography in ICRS clinical trial participants. ASCRS Symposium on Cataract, IOL and Refractive Surgery (abstracted), April 21, 1998

Burris, T E, Holmes-Higgin, D K, Torres, A R, and the Phase III ICRS Study Group. The Association Between Anterior Corneal Surface Topography and Visual Performance with the ICRS (Intrastromal Corneal Ring Segments). International Society of Refractive Surgery, November 7,1998.

Burris, T E, and the Phase III ICRS Study Group. Reversibility of Refractive Effect after Removal of the ICRS (Intrastromal Corneal Ring Segments). International Society of Refractive Surgery, November 7,1998.

Holmes-Higgin, DK, Burris, TE, Silvestrini, TA, Baker, PC, Torres, AR and the Phase III ICRS Study Group. Topographic Corneal Asphericity and Visual Outcome with the ICRS (Intrastromal Corneal Ring Segments). Scientific Poster Presentation. International Society of Refractive Surgery, November 7, 1998.

Burris, TE, Holmes-Higgin, DK, Torres, AR and the Phase II ICRS Study Group. Anterior corneal surface topography and visual outcome with the ICRS (Intrastromal Corneal Ring Segments).

Symposium on Cataract, IOL and Refractive Surgery (abstracted),
April 13, 1999

Burris, TE and the Phase III ICRS Study Group. Two year clinical trial results of Intacs. Nebraska Academy of Eye Physicians, October 1, 1999.

Burris, TE, Holmes-Higgin, DK and the Phase III ICRS Study Group. Corneal topography with Intacs. Nebraska Academy of Eye Physicians, October 2, 1999.

Burris, TE, Holmes-Higgin, DK, Baker, PC, Silvestrini, TA and the Phase III ICRS Study Group. Prolate asphericity with Intacs. World Refractive Surgery Symposium, October 23, 1999.

Burris, TE and the Phase III ICRS Study Group. ICRS: Intrastromal corneal ring segments. American Academy of Ophthalmology, October 26, 1999.

Burris, TE, Holmes-Higgin, DK, Baker, PC, Silvestrini, TA. Prolate corneal surface asphericity and spherical aberration with Intacs. American Society of Cataract and Refractive Surgeons, May 23, 2000.

Burris, TE, Holmes-Higgin, DK, Hobbs, SR III, Dolney, AM, Mathers, WD. In vivo confocal microscopy of lamellar channel deposits observed with Intacs for myopia. American Society of Cataract and Refractive Surgeons, May 23, 2000. (Best Paper of Session Award)

Instruction Courses:

1. Ophthalmic Microsurgery, Theory and Laboratory Course, Naval Hospital, Oakland, CA Microsurgical Laboratory Facility, 1982-1985
2. Refractive Ocular Reconstruction Courses, Theory and Practice, Naval Hospital, Oakland, CA, Microsurgical Laboratory Facility, 1986
3. Northwest Keratorefractive Surgery Symposium, Dec. 4,5, 1986, Portland, OR, Co-Chairman
4. Treatment of Endophthalmitis and Controversies. Presented at Northwest Retina Symposium, Sunriver, OR, January 22,1987
5. Devers Eye Institute, Quarterly Microsurgery Course

6. Ophthalmic Infections. Presented at Northwest Medical Laboratory Symposium, Seattle, WA, October 23, 1990
7. Kerato-Refractive Surgery: An Update on Modern Refractive Surgery Presented at Oregon Academy of Ophthalmology (OAO) Post Grad Convention, Ophth Tech/Asst. Program, Portland, OR March 4, 1994
8. "Leading Edge Optometry", Pacific University, Portland, OR March 14, 1998

Publications:

1. Burris, T.E.: Pharmacology of Reversible Obstructive Pulmonary Diseases. University of Kansas Medical Center, Computer-Assisted Instruction Course in Pharmacology, 1977
2. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Model of Epithelial Downgrowth. Invest Ophthalmol Vis Sci, Supplement 22(3):21, 1982
3. Rowsey, J.J., Burris, T.E., Isaac, M.S., Rabinovitch, B.R.: Predictive Factors, Results and Complications of Radial Keratotomy. Invest Ophthalmol Vis Sci Supplement, 22(3):239, 1982
4. Burris, T.E., Newsom, D.L., Rowsey, J.J.: Treatment of Pseudomonas Corneal and Corneoscleral Ulcers by Hessburg Subpalpebral Lavage. Cornea, 1(4):347-355, 1982
5. Rowsey, J., Balyeat, H., Rabinovitch, B., Burris, T., Hays, J.: Predicting the Results of Radial Keratotomy. Ophthalmology, 90(6):642-654, 1983
6. Rowsey, J., Balyeat, H., Rabinovitch, B., Burris, T., Hays, J.: Complications of Radial Keratotomy. In: Henkind, P., ed. International Congress of Ophthalmology (24th: 1982: San Francisco, CA) Acta. Philadelphia: J.B. Lippincott, 1983; 1223-1229
7. Burris, T., Newsom, D., Rowsey, J.: Hessburg Subpalpebral Antibiotic lavage: An Alternative Treatment of Pseudomonas Corneal and Corneoscleral Ulcers. Ocular Microbiology and Immunology Group Seventeenth Annual Meeting San

Francisco, CA (abstracted) 30 October, 1982

8. Burris, T.E., Rowsey, J.J., Nordquist, R.E.: Models of Epithelial Downgrowth. Invest Ophthalmol Vis Sci, \Supplement 24 (3):12, 1983
9. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Model of Epithelial Downgrowth I. Clinical Correlations and Light Microscopy. Cornea 2(4):277-287, 1983
10. Marx, D.W., Burris, T.E., McCay, P.B., Rowsey, J.J., Gavin, M.: Evidence for Free Radical Activity in Corneal Alkali Burns. Invest Ophthalmol Vis Sci, Supplement 25(30):329, 1984
11. Burris, T.E., Rowsey, J.J., Nordquist, R.E.: Owl Monkey Model of Epithelial Downgrowth: Treatment Results with Cryopexy. Invest Ophthalmol Vis Sci, Supplement 25(3):331, 1984
12. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Model of Epithelial Downgrowth II. Scanning and Transmission Electron Microscopy of Corneal Epithelialization. Cornea 3(2):141-151, 1984
13. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Model of Epithelial Downgrowth III. Scanning and Transmission Electron Microscopy of Iris Epithelialization. Cornea 4:249-255, 1985/86
14. North, R., Burris, T.E.: Irregularity of Rabbit Corneal Pachymetry. Invest Ophthalmol Vis Sci (Supplement) 26(3):149-1985
15. Fulcher, S.F.A., Burris, T.E.: A Computerized Recall System for Clinical Trials. Annals of Ophthalmology 20:10-16, 1988
16. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Cryopexy of Epithelial Downgrowth. Cornea 5(3):173-180, 1986
17. Burris, T.E., Nordquist, R.E., Rowsey, J.J.: Long-term Evaluation of Epithelial Downgrowth Models. Cornea 5(4):211-221, 1986
18. Mehlum, D.L., Parker, G.S., Strom, C.G., Marx, D.W., Burris, T.E.: Metastatic Conjunctival Squamous Cell Carcinoma. Otolaryngology 94(2):246-249, 1986
19. Reifschneider, S., Terry, M.A., Burris, T.E., Peloquin, W.H.: An Animal Model of Astigmatism. Invest Ophthalmol Vis Sci (Supplement) 27(3):63, 1986

20. Fulcher, S., Lui, G., Ramakrishnan, S., Houston L., Burris, T., Polansky, J., Alvarado, G.: Effect of an Immunotoxin Containing Ricin A Chain and Monoclonal Antibody Against the Tranferrin Receptor on the Proliferation of Human Corneal Endothelium. Invest Ophthalmol Vis Sci (Supplement) 27(3):69, 1986
21. Burris, T.E., Fulcher, S.F.A., North, R.B., Gavin, M.: Identification of Confounding Variables in Corneal Alkali Burn Modeling. Invest Ophthalmol Vis Sci 27(3):207, 1986
22. Pasternak, J., Burris, T.: Critical Effect of Focusing in Corneascopy and Measurement of Astigmatism. Invest Ophthalmol Vis Sci (Supplement) 28(3):223, 1987
23. Burris, T.E., Marquette, M., Gordon, M.: Impact of "Routine Inquiry" Legislation in Oregon on Eye Donations. Cornea 6(3):226-230, 1987
24. Lass, J., Walter, E., Grossniklaus, H., Burris, T., Singer, M., Iwata, R., Hyder, D., Skelnik, D., Roat, M.I., and Medof, M.E.: Expression of Complement Decay Accelerating Factor (DAF) in the Normal Human Eye and Lacrimal Gland. Invest Ophthalmol Vis Sci (Supplement) 29(15):269, 1988
25. Fleming, J., Reynolds, A.E., Kilmer, L., Burris, T., Abbot, R., Schanzlin, D.: The Intrastromal Corneal Ring: Two Cases in Rabbits. Journal of Refractive Surgery 3(6):227-232, 1987
26. Fulcher, S., Geming, L., Houston, L.L., Ranakrishnan, S., Burris, T., Polansky, J., Alvarado, J.: Use of Immunotoxin to Inhibit Proliferating Human Corneal Endothelium. Invest Ophthalmol Vis Sci 29(5):755-759, 1988
27. Burris, T.E., Iwata, R.T.: Association of Mechanical Stress with cell death in Chondroitin Sulfate-Containing Corneal Preservation Media. Invest Ophthalmol Vis Sci (Supplement) 30(3):343, 1989
28. Iwata, R.T., Burris, T.E.: Impression Cytology Immunohistochemistry Techniques. Invest Ophthalmol Vis Sci (Supplement) 30(3):521, 1989
29. Burris, T.E., Ayer, C.T., Fleming, J.F.: Intraoperative Corneascopy: A New Quantitative Topography Technique. Invest Ophthalmol Vis Sci 31(4):480, 1990

30. Lass, J., Walter, E., Burris, T., Roat, M., Skelnik, D., Needham, L., Singer, M., Ratnoff, W., Medof, M.E.: Converse Regulatory Activity in Ocular Tissues Resides in Decay-Accelerating Factor. *Invest Ophthalmol Vis Sci* 31(4):511, 1990
31. Lass, J., Walter, E., Burris, T., Grossniklaus, H., Roat, M., Skelnik, D., Needham, L., Singer, M., Medof, M.E.: Expression of Two Molecular Forms of the Complement Decay-Accelerating Factor in the Eye and Lacrimal Gland. *Invest Ophthalmol Vis Sci* 31(6):1136-1148, 1990
32. Lass, J., Walter, E., Roat, M., Burris, T., Grossniklaus, H., Skelnik, D., Needham, L., Singer, M., Medof, M.E.: Ocular Complement Decay Accelerating Factor in Health and Disease. In Usui, M., Ohno, S., Aoki, K. (eds): *Ocular Immunology Today. Proceedings of 5th International Symposium on Immunology and Immunopathology of the Eye.* Elsevier Science Publishers, Amsterdam, 1990, pp 297-300
33. Burris, T.E., Ayer, C.T., Evensen, D.A., Davenport, J.M.: Intrastromal Corneal Rings: Finite Element Analysis and Experimental Results. *Refractive and Corneal Surgery* 7(1): 46-50, 1991
34. Burris, T.E., Ayer, C.T., Evensen, D.A., Davenport, J.M.: Intrastromal Corneal Rings: Finite Element Analysis and Experimental Results. *Invest Ophthalmol Vis Sci* 32(4):921, 1991
35. Nelson, J.D., Gordon, J. and the Chiron Ophthalmics KCS Study Group: Results of a Prospective, Multi-Centered, Randomized Vehicle and Placebo-Controlled Clinical Trial of Fibronectin Ophthalmic Solution in Patients with Keratoconjunctivitis Sicca (KCS). *Invest Ophthalmol Vis Sci* 32(4):726-1991
36. Gordon, J., Johnson, P.J., and the Fibronectin Study Group: Discontinuation of Topical Ophthalmic Medications Promotes Healing of Nonhealing Corneal Defects. *Invest Ophthalmol Vis Sci* 32(4):1071, 1991
37. Burris, T.E., Ayer, C.T., Loomas, B.E., Mathis, M.A., Silvestrini, T.A.: Flattening of Human Corneas by Intrastromal Corneal Rings of Various Thicknesses. *Invest Ophthalmol Vis Sci* 33(4):998, 1992
38. Ayer, C.T., Iwata, R., Burris, T.E.: Corneal Deturgescence Techniques in Intact Eyebank Eyes for Corneal Topography Research. *Invest Ophthalmol Vis Sci* 1992;33(4):995.

39. Lindstrom, L., Laing, R.A., Lass, J.H., Musch, D.C., Trousdale, M.D., Reinhart, W.J., Burris, T.E., Sugar, A., Davis, R.M., Hirokawa, K., Smith, T., Gordon, J.F.: Optisol Corneal Storage Medium. *Am. J. Ophthalmol* 1992;114:345-356.
40. Nelson, J.D., Gordon, J.F., and the Chiron KCS Study Group: Topical Fibronectin in the Treatment of Keratoconjunctivitis Sicca (KCS) *Am. J. Ophthalmol* 1992;114:441-447.
41. Burris, T.E., Baker, P.C., Ayer, C.T., Loomas, B.E., Mathis, M.A., Silvestrini, T.A.: Flattening of Central Corneal Curvature with Intrastromal Corneal Rings of Increasing Thickness: An Eyebank Eye Study. *J. Cataract Refract. Surg.* 1993;19(supplement):182-187.
42. Burris, T.E., Baker, P.C., Proudfoot, R.A., Mathis, M.L., Silvestrini, T.A., Ayer, C.T.: Corneal Topography of Intrastromal Corneal Rings (ICR) by Laser Holographic Interferometry: An Eyebank Eye Study. *Invest Ophthalmol Vis Sci* 1993;34(4):1240.
43. Ayer, C.T., Burris, T.E., Ousley, P.J., Terry, M.A.: Corneal Deturgescence and Topography Techniques for Cadaver Eye Surgery: Considerations for Reduction of Artifacts. *Invest Ophthalmol Vis Sci* 1993;34(4):1219.
44. Burris, T., Silvestrini, T., Mathis, M., Scholl, J., Proudfoot, A., Baker, P.: Corneal Asphericity and the Intrastromal Corneal Ring (ICR): A Laser Holographic Interferometer Eyebank Eye Topography Study. *Cornea* 1994;13(1):96.
45. Burris, T., Courtney, C., Silvestrini, T., Scholl, J. Mathis, M., Proudfoot, R., Baker, P.: Positive Corneal Asphericity and the Intrastromal Corneal Ring. *Invest Ophthalmol Vis Sci* 1994;35(4): 3556.
46. Silvestrini, T., Mathis, M., Loomas, B., Burris, T.: A Geometric Model to Predict the Change in Corneal Curvature from the Intrastromal Corneal Ring (ICR). *Invest Ophthalmol Vis Sci* 1994;35(4):2023.
47. Gordon, J., Johnson, P., Musch, D., Chiron Vision Fibronectin Study Group: Topical Fibronectin Ophthalmic Solution in the Treatment of Persistent Defects of the Corneal Epithelium. *Am J Ophthalmol* 1995;119:281-287.
48. Asbell, P., Durrie, D., Ginsburg, A., Burris, T., Baker, P., Schanzlin, D.: The ICR (Intrastromal Corneal Ring) & Functional

Vision: Preliminary Findings. Invest Ophthalmol Vis Sci 1995;36(4):S168.

49. Burris, T., Holmes-Higgin, D., Silvestrini, T., Scholl, J., Proudfoot, R.: Corneal Topography in Eye Bank Eyes Implanted with Intrastromal Corneal Rings Developed to Reduce Astigmatism: A preliminary investigation. Invest Ophthalmol Vis Sci 1995;36(4):S989.
50. Nosé, W., Neves, R.A., Burris, T.E., Schanzlin, D.J., Belfort, R. Jr.: Intrastromal Corneal Ring: 12 month Sighted Myopic Eyes. J Ref Surg 1996;12(1): 20-28. Troutman Award Winner.
51. Burris, T.E., Holmes-Higgin, D.K., Silvestrini, T.A., Scholl, J.A., Proudfoot, R.A.: Preliminary eye bank eye topography studies with variable cone angle ICR prototypes developed to reduce astigmatism. Invest Ophthalmol Vis Sci 1996;37(3):S66.
52. Holmes-Higgin, D.K., Burris, T.E., Silvestrini, T.A., Scholl, J.A., Proudfoot, R.A.: Evaluation of topographic corneal astigmatism change in eye bank eyes with variable thickness ICR prototypes. Invest Ophthalmol Vis Sci 1996;37(3):S66.
53. Krueger, R. and Burris, T.E. Intrastromal corneal ring technology. Int'l Ophthalmol Clinics 1996;36(4):89-106.
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Multicenter Clinical Trials Publications:

1. O'Brien TP, Maguire MG, Fink NE, Alfonso E, McDonnell P, the Bacterial Keratitis Study Research Group. Efficacy of ofloxacin vs cefazolin and tobramycin in the therapy for bacterial keratitis. Arch Ophthalmol 113(10):1257-65, 1995
2. Helms, H., Rapoza, P., Stern, K., Burk, C., Rosenthal, A., Reis, B.; Cornea Consultants, Boston, MA; Allergan, Inc., Irvine, CA. A randomized double-masked clinical trial to assess the safety and comparative efficacy of three concentrations of a cyclosporine-containing ophthalmic ointment vs. placebo in patients with keratoconjunctivitis sicca (KCS). Submitted for Publication, 1996.

Submitted for Publication:

Garabet, T., Burris, T., Rowsey, J., Poyer, L., McCay, P.: Evidence for Free Radical Activity in the Rabbit Cornea. Submitted for Publication, 1983

Burris, T.E., Fulcher, S.F.A., Gavin, M.: Superoxide Dismutase and Catalase Can Worsen Corneal Alkali Burn Ulceration. Submitted for Publication, 1985

Fleming, J., Burris, T., Schanzlin, D.: Corneal Asphericity: Its Predictive Role in Radial Keratotomy. Submitted for Publication, 1989

Moran M. and the Iloprost Clinical Trials Study Group: Prevention of Corneal Perforation by the Matrix Metalloproteinase Inhibitor Iloprost in Patients with Infected Corneal Ulcers. Submitted for Publication, NEJM

Baker, P.C., Silvestrini, T.A., Holmes-Higgin, D.K., Burris, T.E. Validation of a real ray tracing eye model with visual performance in ICRS patients: A preliminary case study. Submitted for Publication, 1998.

Ousley, P.J., Burris, T.E., Scholl, J.A., Chiorini, P.R., Holmes-Higgin, D.K., Terry, M.A. Keratoconus in a Transplanted Donor Cornea. Submitted for Publication, 1998.

Abbott, R.L., Asbell, P.A., Assil, K.K., Burris, T.E., Durrie, D.S., Fouraker, B., Lindstrom, R.L., McDonald II, J.E., Schanzlin, D., Verity, S., Waring III, G.O. One Year Results of the ICRS from the Phase III Study for the Correction of Myopia. Submitted for Publication, 1998.

Asbell, PA, and the Phase III ICRS Study Group. ICRS (The Intrastromal Corneal Ring Segments): Reversibility of Refractive Effect. Submitted for Publication, 1998.

Waring, GO III, Abbott, RL, Asbell, PA, Assil, KK, Burris, TE, Durrie, DS, Fouraker, BD, Lindstrom, RL, McDonald, JE II, Verity, S, Schanzlin, DJ. One Year Outcomes of Intrastromal Corneal Ring Segments for the Correction of -1.0 to -3.5 Diopters of Myopia. Submitted for Publication, 1998.

Research Grant Awards:

1. National Eye Institute, 1 RO3 EYO 4275-01
"Treatment of Epithelial Downgrowth in an Animal Model" Co-investigator 1982.
2. Health Sciences Education and Training Command, U.S. Navy CIP #83-48-1800 "An Animal Model of Epithelial Downgrowth" Chief Investigator, 1983-1984
3. CIP #83-48-1821, U.S. Naval Medical Corps
"Clinical Investigation of Intraocular Microscissors, Forceps and Cutting Cystotome" Associate Investigator 1983
4. CIP #83-48-1859, U.S. Naval Medical Corps
"Surgical Induction and Manipulation of Corneal Astigmatism" Chief Investigator, Phase I, II, & III 1983-1986
5. CIP #83-48-1878-00, U.S. Naval Medical Corps
"Treatment of Corneal Alkali Burns" Chief Investigator, 1983-1986
6. CIP #83-48-1921-00, U.S. Naval Medical Corps
"Efficacy of Amies Microbial Transport Media for Isolation of Aerobic Bacteria from Conjunctival and Eyelid Specimens" Associate Investigator, 1983-1986

7. CIP #84-48-1947, U.S. Naval Medical Corps
"Prospective Evaluation Intraocular Lens
Implantation; Visual Results and Complications"
1983-1986
8. CIP #84-48-2008-00, U.S. Naval Medical Corps
"Ocular Penetration of Gentamicin Administered
by Hessburg Subpalpebral Lavage" Associate
Investigator, 1984-1986
9. CIP #84-48-2007-00, U.S. Naval Medical Corps
"The Role of Free Radical Mechanisms on
Endothelial Cell Viability of Donor Corneas"
Associate Investigator, 1984-1986
10. CIP #85-48-2098, U.S. Naval Medical Corps
"Modulation of Proliferation of Ocular Tissue
by Growth Factors and Growth Inhibitors"
Associate Investigator, 1985-1986
11. CIP #86-48, U.S. Naval Medical Corps
submitted. "Epikeratophakia for Myopia, Adult
Aphakia, Aphakia in Children and Keratoconus"
Principle Investigator, 1985-1986
12. Oregon Lions Sight and Hearing Foundation
Eyebank Research Grant, 1986-1990
13. Lions Club International Foundation: Eyebank
Research Start-Up Grant, 1987-1988
14. 8601A EGF/CD, Chiron Ophthalmics Inc.
"A Multicentered Randomized Double-Masked
Placebo-Controlled Study to Evaluate the Use of
Human Epidermal Growth Factor in Non-Healing
Corneal Defects" Principal Investigator, 1987
15. 8603 EGF/PK, Chiron Ophthalmics Inc.
"A Multicentered Randomized Double-Masked
Placebo-Controlled Study to Evaluate the Use of
Human Epidermal Growth Factor in Penetrating
Keratoplasty" Principal Investigator, 1987-1988

16. 8701, Chiron Ophthalmics Inc. A Multicentered Randomized Double-Masked Placebo-Controlled Study to Evaluate the Use of Fibronectin Drops in Recurrent Corneal Erosion" Principal Investigator, 1987-1988
17. 8702A, Chiron ophthalmics Inc. "A Open Label Study to Evaluate the Use of Fibronectin Drops in Non-Healing Corneal Defects" Principal Investigator, 1987-88
18. 88-08-02-060 EGF/ITS, Chiron Ophthalmics Inc. "Evaluation of the Effects of EGF/ITS, Aprotinin and SOD in KSOL on Donor Corneal Preservation" Principal Investigator, 1988
19. DAF In Keratoconjunctivitis Sicca, Chiron Ophthalmics Inc. "Collection of Five Body Fluids from Patients with Idiopathic PrimaryorSecondary Sjogren's Syndrome Having Symptoms and Signs of Moderate or Severe Keratoconjunctivitis Sicca" Co-Investigator, 1988
20. 8703 Keratoconjunctivitis Sicca, Chiron Ophthalmics; "A Multicentered Randomized Placebo-Controlled Study to Evaluate the Safety and Efficacy of Fibronectin Ophthalmic Solution in Patients with Keratoconjunctivitis Sicca" Principal Investigator, 1988-1989
21. 88-1002H, Pharmaceutical Development Associates of New England. "Evaluation of Tretinoin Ointment for Treatment of Dry Eye Manifestation of Inactive Ocular Pemphigoid" Principal Investigator, 1988-1989
22. 88-1003H, Pharmaceutical Development Associates of New England. "Evaluation of Tretinoin Ointment for Treatment of Dry Eye Manifestation of Stevens-Johnson Syndrome" Principal Investigator, 1988-1989
23. 8702A Non-Healing Corneal Defects, Chiron Ophthalmics Inc. "A Multicentered Randomized Double-Masked Placebo-Controlled Study to Evaluate the Safety and Efficacy of Fibronectin Ophthalmic Solution" Principal Investigator, 1989-1990
24. 8901 Optisol, Chiron Ophthalmics Inc. "A Pilot Clinical Trial to Evaluate the Safety of a New Medium for Corneal Preservation" Principal Investigator, 1989-1990

25. NEI-2ROEYOX018-04, NEI, Brookwood Eye Institute. "A Randomized Double-Masked Placebo-Controlled Study of Ascorbic Acid in the Treatment of Alkali Burns of the Eye" Collaborating Investigator, 1986-present
26. Quin-110-7651, Allergan Pharmaceuticals. "A Clinical Study Evaluating the Ocular Safety and Efficacy of 0.3% Ofloxacin Solution in the Treatment of Acute Bacterial Corneal Ulcers" Principal Investigator, 1990-92
27. K-203, Sandoz Pharmaceuticals Corporation. A Randomized Double-Masked Clinical Trial to Assess the Safety and Comparative Efficacy of Three Concentrations of Sandimmune Ophthalmic Ointment Vs. Placebo in Patients with Keratoconjunctivitis Sicca" Principal Investigator, 1991-1992
28. 92-C-1006-01, KeraVision, Inc. "Evaluation of the Intrastromal Corneal Ring in Patients with Myopia" Principal Investigator, 1992.
29. OC-03, Telios Pharmaceuticals, Inc. "A Double-Masked Evaluation of Two Concentrations of OcuNex for Attenuating Ocular Surface Disease in Patients with Severe Dry Eyes" Principal Investigator, 1993
30. Chiron Ophthalmics, Inc. "Preservation of Corneal Epithelium in Donor Corneas" Pilot study grant Principal Investigator, 1993.
31. GM 6001 , Glycomed, Inc. "Adjunctive Therapy with Galardin Matrix Metalloproteinase Inhibitor in Patients with Corneal Ulcers Caused by Infection. Principal Investigator, 1993.
32. 95-C-1009-01, KeraVision, Inc. "Evaluation of the Extended Intrastromal Corneal Ring Segments for Correction of Myopia" Principal Investigator, 1995-present.
33. 96-C-1012-01, KeraVision, Inc. "Evaluation of Intrastromal Corneal Ring Segments for the Correction of Myopia" Principal Investigator, 1996-present.
34. Open Grant, KeraVision, Inc. Corneal Topography

Reading/Analysis Center, Nationwide and Phase II and Phase III ICRS Studies and Worldwide Studies. 1995-2001

35. Oregon Lions Sight and Hearing Foundation Eyebank Research Grant, 1998. "Eyebank Laser Interferometer Screening Device."
36. 192371-011-02 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 Sicca. Principal Investigator 2001-3.

Research Projects and Interests:

Primate Model of Epithelial Downgrowth

Monoclonal antibody/ immunotoxin therapy of epithelial downgrowth and proliferative vitreoretinopathy

Free Radical Activity in the Alkali-Burned Rabbit Cornea

Treatment of Corneal Melting Syndromes with Free Radical Inhibitors

Pharmacokinetics of Antibiotics Administered by Subpalpebral Lavage

Animal Model of Corneal Astigmatism

Evaluation of Keratorefractive Surgery in an Animal Model of Corneal Astigmatism

Efficacy of Boron Microsurgical Blades

Improved Methods of Ocular Microbiological Diagnosis and Treatment

Radial Keratotomy for Myopia

Transferrin Receptors in Ocular Tissues

Epikeratophakia for Hyperopia, Myopia and Keratoconus

Intrastromal Corneal Ring (ICR) Implants for
Astigmatism Modulation, Myopia and Hyperopia Correction

Topographic Analysis of the Cornea/ Laser Holographic
Interferometry

Refractive Modulation by Tectonic Sclero-Keratoplasties

Eyebank Preservation Media and Antisepsis

Free Radical Mechanisms of Corneal Endothelial Degeneration

Quality Assurance in Eyebanking

Fibronectin for Epithelial Adhesion

Growth Factors for Ophthalmic Use

In Situ Keratomileusis/ ALK for Myopia/ Hyperopia

Excimer Laser Photorefractivekeratectomy, LASIK

Donor Screening Devices for Eyebank Donor Corneas

Visual outcomes Associated with Corneal Topography
after Refractive Surgery

Intralamellar Tattoo as Artificial Iris

Through the eye Wavefront Analysis of Ocular Diseases
and in Refractive Surgery
