

CURRICULUM VITAE: John Carlson Merriam, M.D.
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Date of Birth: June 20, 1949

Birthplace: New York City

Certified, American Board of Ophthalmology, 1983.

EDUCATION

1. Harvard College, A.B. 1971 (Magna cum laude)
2. Institut de Phonétique et Linguistique, Université de Paris, Diplôme d'Etudes, Paris, France, 1972.
3. Harvard Medical School, M.D. 1977 (Cum laude)

POST-GRADUATE EDUCATION

1. Surgical Internship, Harvard Surgical Service, New England Deaconess Hospital, Boston, Massachusetts, 1977-1978;
2. Junior Resident in Surgery (Plastic), Peter Bent Brigham Hospital and the Children's Hospital Medical Center, Boston, Massachusetts, 1978 - 1979;
3. Resident in Ophthalmology, Massachusetts Eye and Ear Infirmary Boston, Massachusetts, 1979 - 1982;
4. Clinical Fellow in Ophthalmology, Francis I. Proctor Foundation and the University of California at San Francisco, California, 1982 - 1983.
5. Visiting Fellow, Moorefields Eye Hospital, London, England, July - August 1988.

RESEARCH TRAINING

1. Pre-doctoral Fellow in Transplantation Immunology, Laboratory for Surgical Research, Peter Bent Brigham Hospital and the Harvard Medical School, Boston, Massachusetts, 1975-1976;
2. Research Fellow, Francis I. Proctor Foundation and the University of California, San Francisco, California; 1982-1983.
3. Visiting Research Scientist, St. Eriks Ögonsjukhuset, Karolinska Institutet, Stockholm, Sweden; 1998-1999

APPOINTMENTS

- 1) Clinical Professor of Ophthalmology, Columbia University
- 2) Attending Ophthalmologist, Columbia-Presbyterian Medical Center

PROFESSIONAL SOCIETIES

- 1) Aesculapian Club
- 2) American Academy of Ophthalmology
- 3) American Association for the Advancement of Science
- 4) American College of Surgeons

- 5) American Ophthalmological Society (1996)
- 6) American Society of Cataract and Refractive Surgery
- 7) American Society of Ophthalmic Plastic and Reconstructive Surgery
- 8) Association for Research in Vision and Ophthalmology
- 9) Edward S. Harkness Eye Institute Alumni Association
- 10) Massachusetts Eye and Ear Infirmary Alumni Association
- 11) New York Academy of Medicine
- 13) New York State Ophthalmological Society
- 14) Sigma Xi
- 15) Society of Heed Fellows
- 16) Society of Proctor Fellows

PUBLICATIONS

Peer – Reviewed Articles

- *1. Merriam JC and Tilney NL. Prolonged Survival of Alymphatic Skin Allografts in the Rat: A Humoral Component. Transplantation 1978; 26:87-90.
- *2. Merriam JC, Chylack LT, and Albert DM. Early-onset Pauciarticular Juvenile Rheumatoid Arthritis: A Histopathologic Study. Arch Ophthalmol 1983; 101:1085-1092.
- *3. Merriam JC, Lyon HS, Char DH. Toxicity of Monoclonal F(ab')₂: Ricin A Conjugate for Retinoblastoma in Vitro. Cancer Research 1984; 44:3178-3183.
- *4. Merriam JC, Stalneck MC, Merriam GR Jr. Reconstruction of the Lids of a Child with Microblepharon and Multiple Congenital Anomalies. Trans Am Ophthalmol Soc 1988; 86:55-93.
- *5. Ni C, Merriam JC, Albert DM. Irritated Seborrheic Keratosis of the Eyelid and Its Differential Diagnosis: An Electron Microscopic and Light Microscopic Study. Chinese Med J 1988; 101(8): 555-558.
6. Worgul BV, David J, Odrich S, Merriam GR Jr, Medvedovsky C, Merriam JC, Trokel SL, Geard CR. Evidence of Genotoxic Damage in Human Cataractous Lenses. Mutagenesis 1991; 6:495-499.
7. Krebs I, Krebs W, JC Merriam, P Gouras, IS Jones. Radiation Retinopathy: Electron Microscopy of Retina and Optic Nerve. Histol Histopath 1992; 7:101-110.
- *8. Stafford JR, Rosen TS, Merriam JC. Prenatal Cocaine Exposure and the Development of the Human Eye. Ophthalmology 1994; 101:301-308.
- *9. Jacobs JL, Merriam JC, Chadburn A, Hilal SK, Garvin J, Housepian EM. Mesenchymal Chondrosarcoma of the Orbit: Report of three new cases and review of the literature. Cancer 1994; 73:399-405.
- *10. Leventer DB, Merriam JC, Defendini R, Behrens MM, Housepian EM, LeQuerica S, Blitzler A. Enterogenous Cyst of the Orbital Apex and Superior Orbital Fissure. Ophthalmology 1994; 101:1614-1621.
- *11. Merriam JC, Wahlig JB, Konrad H, Zaider M. Extracapsular Cataract Extraction and Posterior Lip Sclerectomy with Viscoelastic. Ophthalmic Surgery 1994; 25:438-445.

- *13. Stafford JR, Rose TS, Merriam JC. Prenatal Cocaine Exposure and the Development of the Human Eye. Key Ophthalmology 1994; 9:16-17.
- *14. Konrad H, Merriam JC, Jones IS. Rehabilitation of a Child with Unilateral Cryptophthalmos and Multiple Congenital Anomalies. Trans Am Ophthalmol Soc 1995; 93:219-244,
15. Li W-C, Kuszak JR, Dunn, J, Wang R-R, Ma W, Wang G-M, Spector A, Leib M, Cotliar AM, Weiss M, Espy J, Howard G, Farris RL, Auran JD, Donn A, Hofeldt A, MacKay C, Merriam JC, Mittl R, Smith RT. Lens Epithelial Cell Apoptosis Appears to Be A Common Cellular Basis for Non-Congenital Cataract Development in Humans and Animals. J Cell Biol 1995; 130:169-181.
- *16. Naryanan P, Merriam JC, Vazquez ME, Dillon J: Experimental Model of Light Focusing of the Peripheral Cornea. Inves Ophthalmol Vis Sci 1996; 37:37-41.
- *17. Merriam JC. The concentration of light in the human lens. Trans Am Ophthalmol Soc 1996; 94:803-918. (Thesis for the American Ophthalmological Society)
- *18. Zheng L, Merriam JC, Zaider M. Astigmatism and visual recovery after “large” incision extracapsular cataract surgery and “small” incisions for phakoemulsification. Trans Am Ophthalmol Soc 1997; 45:387-415.
19. Dillon J, Zheng L, Merriam JC, Gaillard ER. The Optical Properties of the Anterior Segment of the Eye: Implications for Cortical Cataract. Exp Eye Res 68:785-795, 1999.
20. Gaillard E, Zheng L, Merriam JC, Dillon J. Age-Related Changes in the Absorption Characteristics of the Primate Lens. Inves Ophthalmol Vis Sci 41:1454-1459, 2000.
21. Dillon J, Zheng L, Merriam JC, Gaillard ER. Transmission Spectra of Light to the Mammalian Retina. Photochem Photobiol 71:225-229, 2000.
- *22. Merriam JC, Löfgren S, Michael R, Söderberg P, Dillon J, Zheng L, Ayala M. An Action Spectrum for UV-B Radiation and the Rat Lens. Inves Ophthalmol Vis Sci 41:2642-2647, 2000.
23. Merriam JC, Zheng L, Urbanowicz JE, Zaider M. Change on the horizontal and vertical meridians of the cornea after cataract surgery. Trans Am Ophthalmol Soc 2001;99:187-197.

Case Reports

- *1. Merriam JC. Reconstruction of the Lids of a Child with Microblepharon and Multiple Congenital Anomalies, *in* Specialist Surgery, Vol XII, Transactions of XXVI World Congress of the International College of Surgeons; Montorsi M and Granelli P (Eds); Monduzzi Editore, Bologna, 1988, pp 31-34.
- *2. Merriam JC, Rosskothan H, Benedek E. Right-Angled Peg for Hydroxyapatite Orbital Implant. Ophthalmic Surgery 1992; 23:564.
- *3. Merriam JC, Zheng L. Use of iris hooks for phakoemulsification of the subluxated lens. J Cataract Refract Surg 1997; 23:1295-1297.

*4. Ballesteros E, Greenebaum E, Merriam J. Fine-Needle aspiration diagnosis of enterogenous cyst of the orbit: A Case Report. Diagn Cytopathol 1997; 16:450-453.

C. Reviews, Chapters, Editorials, Letters

*1. Merriam JC. The Environmental Effect of Poisons Used to Control Predators on Grazing Lands of the American West. Natural Resources Defense Council, Inc; New York, New York, August 1971.

*2. Merriam JC. The Physiological Effects of Environmental Noise Pollution. The Natural Resources Defense Council, Inc. New York, September 1972.

*3. Schoenbrod D, Gluckstern H, Gollub J, Hall R, Merriam J, Raelson D, Spann G, Tompkins M. New York Can Quiet Its Noisy Subways. Position Paper for R. Abrams, Borough President of the Bronx and the New York City Transit Police Patrolmen's Benevolent Association; Natural Resources Defense Council, Inc; New York, January 1974.

*4. Merriam JC. "The Rabbit Model of Herpetic Keratitis", in Animal Models of Ocular Diseases, Springfield, Ill, Tabbara KR (Ed), Chas C Thomas, 1984:23-37.

*5. Merriam JC. Book Review: Thyroid Eye Disease by DH Char; Williams and Wilkins, Baltimore, 1984. New Engl J Med 1986; 325:327.

*6. Merriam JC. Book review: Vascular Birthmarks: Hemangiomas and Malformations by JB Mulliken and AE Young; WB Saunders, 1988. Arch Ophthalmol 1990; 108:650-651.

*7. Merriam JC, Book Review: A Manual of Systematic Eyelid Surgery, 2nd Ed, by JRO Collin, New York, Churchill Livingstone Inc, 1989. Arch Ophthalmol 1991; 109:929-930.

*8. Merriam JC, Stass-Isern ML. Congenital Lid and Skin Anomalies, in Decision Making in Pediatric Ophthalmology, Mosby-Year Book, 1993, pp 8-9.

*9. Merriam JC, Book Review: Leonardo da Vinci: The Anatomy of Man by M. Clayton; Little, Brown and Co. Boston, 1992; and The Neuroanatomy of Leonardo da Vinci, by E.M. Todd, American Association of Neurological Surgeons, Park Ridge, Illinois, 1991. Arch Ophthalmol 1994; 112:1412-1413.

*10. Stafford JR, Rosen TS, Merriam JC. Reply to Correspondence: Cocaine Exposure and the Development of the Human Eye. Ophthalmology 1994; 8:1321-1322.

*11. Stafford JR Jr, Rosen TS, Zaider M, Merriam JC: Prenatal Cocaine Exposure and the Development of the Human Eye. Ophthalmology 1994; 101:301-308, abstract in The Year Book of Ophthalmology 1995, Mosby-Year Book, St. Louis, pp 426-427.

*12. Dillon J, Merriam JC, Chignell CF, Reszka KJ. The Interaction of the Human Lens with Light. Proceedings of the 12th International Congress on Photobiology, Vienna, Austria, September 1-6, 1996.

*13. Merriam JC. Discussion of "Orbital Blow-Out Fractures: A correlation of preoperative computed tomography and postoperative ocular motility". Trans Am Ophthalmol Soc 1998; 96:347-349.

*14. Merriam JC, Jones IS. Obituary: Charles Allen Perera, M.D. Trans Am Ophthalmol Soc 1998; 96:13-15.

*15. Merriam JC, Zheng L, Letter to the Editor: "Microhooks in Phacoemulsification". J Cataract Refract Surg 2000; 26:1568-1569.

16. Merriam JC, Urbanowicz JE, Zheng L. Letter to the Editor: Effect of Optic Size on PCO. J. Cat Refract Surg 28:28,2002.

D. Abstracts

*1. Merriam JC and Tilney NL. A Humoral Component in Prolongation of Alymphatic Skin Allografts in the Rat. Surgical Forum 1976; 27:336-338.

*2. Merriam JC, Lyon H, and Char DH. Monoclonal F(ab')₂-Ricin Conjugate Toxic to Retinoblastoma. Inves Ophthalmol Vis Sci 1983; 24:37.

*3. Merriam JC and Char DH. Charged Particle Radiation-Induced Intraocular Vasculopathy: A Monkey Model. Inves Ophthalmol Vis Sci 1984; 25:159.

*4. Merriam JC and Char DH. Effect of Helium Ions on the Primate Retina. Inves Ophthalmol Vis Sci 1985; 26:209.

*5. Merriam JC, Perez-Emmanuelli JI, David JC, and Soutter AS. Orthotopic Keratoplasty in Presensitized Inbred Rats. Inves Ophthalmol Vis Sci 1987; 28:277.

*6. Krebs IP, Krebs W, Merriam JC. Structure of A Human Retina 13 Years after Radiation. Inves Ophthalmol Vis Sci 1989; 20:351.

7. Worgul BV, David J, Odrich SI, Merriam J, Merriam GR, Geard C. An Evaluation of *in situ* Mutagenic Damage in the Lens Epithelia of Cataract Patients. Inves Ophthalmol Vis Sci 1990; 31:435.

*8. "Orbital Tumors in Children: The Experience of the Edward S. Harkness Eye Institute, 1928-1990". Scientific Poster, American Academy of Ophthalmology, Atlanta, Georgia; October 28 - November 1, 1990.

9. Wang RH, Merriam JC, Dillon J. Molecular Changes During Aging and Cataractogenesis in the Human Lens. Inves Ophthalmol Vis Sci 1991; 32:748.

*10. Kraus DJ, Merriam JC, Chen LL, Merriam GR, Jones IS. Review of Childhood Orbital Tumors, 1929-1990. Inves Ophthalmol Vis Sci 1991; 32:1087.

*11. Merriam JC, Chen LL, Kraus DJ, Merriam GR, Jones IS. Orbital Tumors of Adults, 1929-1990. Inves Ophthalmol Vis Sci 1991; 32:1087.

*12. Wahlig JB, Konrad H, Merriam JC. Viscoelastic with Extracapsular Cataract Extraction, PC IOL, and Full-Thickness Filtering Procedure. Inves Ophthalmol Vis Sci 1993;30:736.

13. Worgul BV, David J, Toa F, Medvedovsky, CP, Burke P, Merriam JC, Merriam GR, Geard C. Genotoxic Damage and Cataracts: Gone FISHing. Inves Ophthalmol Vis Sci 1993; 34:1065.

14. Wang RH, Dillon J, Merriam JC. Molecular Changes During Nuclear Cataractogenesis in the Human Lens. Inves Ophthalmol Vis Sci 1994; 35:2136.
- *15. Merriam JC, Narayanan P, Vazquez M, Dillon, J. The Spatial Distribution of Light on the Human Lens. Inves Ophthalmol Vis Sci 1995; 36(4): S805, Abstract nr 3732.
- *16. Butler GAD, Narayanan P, Merriam JC. Safety and Efficacy of Combined Phakoemulsification, Posterior Chamber Lens Implant and Posterior Lip Sclerectomy. Vision Research 1995; 35(suppl); 209.
- *17. Merriam JC, Koester C, Narayanan P, Dillon J. The Energy Distribution of Light and the Human Lens. Inves Ophthalmol Vis Sci 1996; 37(3): S754, Abstract nr 3452.
- *18. Merriam JC, Zheng L, Zaider M. Astigmatism after Extracapsular Cataract Extraction: An eight-year study. Inves Ophthalmol Vis Sci 1997; 38:S182, Abstract nr 906.
- *19. Zheng L, Merriam JC, Zaider M. Induced Astigmatism after 6 and 3 mm Incisions for Phacoemulsification. Inves Ophthalmol Vis Sci 1997; 38:S182, Abstract nr 1997.
20. Li DWC, Spector A, Cotliar AM, Merriam JC. Analyses of viability of epithelial cells from transparent and cataract lenses. Inves Ophthalmol Vis Sci 1997; 38: S956.
- *21. Merriam JC, Zheng L. Analysis of Surgically Induced Astigmatism after ECCE and Three Small Incisions for Phacoemulsification. Inves Ophthalmol Vis Sci 1998; 39 (4): S50, Abstract nr 217.
- *22. Merriam JC, Zheng L. Surgically Induced Astigmatism after ECCE and Three Small Incisions for Phacoemulsification. Scientific Poster, American Academy of Ophthalmology, New Orleans, Louisiana, November 10 - 11, 1998.
- *23. Merriam JC, Zheng L. Analysis of Astigmatism and Visual Recovery after 3 mm Incisions. Inves Ophthalmol Vis Sci 1999; 40 (4): S288, Abstract nr 1521.
- *24. Zheng L, Dillon JP, Merriam JC. Transmittance of Ultraviolet Radiation by the Cornea. Inves Ophthalmol Vis Sci 1999; 40 (4): S342, Abstract nr 1815.
- *25. Merriam JC, Zheng L. Astigmatism and Visual Recovery after 3 mm Incisions for Phacoemulsification. Scientific Poster, European Society of Ophthalmology, Stockholm, Sweden, June 27 – July 1, 1999.
- *26. Söderberg PG, Ayala M, Löfgren S, Dong X, Stridh MR, Merriam, JC. In vivo Ultraviolet Radiation B Cataract. Exp Eye Res 2000; 71:S16
- *27. Söderberg PG, Michael R, Löfgren S, Ayala M, Merriam JC. Small Sample Estimation of Maximally Tolerable Dose to avoid UVR Cataract. Invest Ophthalmol Vis Sci 2000; 41(4): S205, Abstract nr 1074.
28. Dillon J, Zheng L, Merriam J, Gaillard E. Transmission Spectra of Light by the Anterior Segment. Invest Ophthalmol Vis Sci 2000; 41 (4): S426, Abstract nr 2254.
- *28. Merriam JC, Zheng L, Urbanowicz JE. Surgically Induced Astigmatism after 3 mm Incisions for Phacoemulsification. Scientific Poster, American Academy of Ophthalmology, Dallas Texas, October 22-23, 2000.

29. Söderberg PG, Ayala M, Löfgren S, Dong X, Michael R, Stridh M, Merriam J. In vivo ultraviolet radiation B cataract. *Exp Eye Res* 71: S16, 2000.
30. Merriam JC, Zheng Urbanowicz JE. Surgically induced astigmatism after 3 mm incisions for phacoemulsification. *Inves Ophthalmol Vis Sci* 42: S6, 2001. Abstract nr 36.
31. Huang M, Ellozy AR, Zhang L, Merriam JC, Dillon J. The diffusion of oxygen in the mammalian lens. *Inves Ophthalmol Vis Sci* 42: S 284, 2001. Abstract nr 1538.
32. Dillon J, Zheng L, Urbanowicz JE, Sparrow J, Merriam JC. Transmission spectra of light by the anterior segment of primates. *Inves Ophthalmol Vis Sci* 42: S 284, 2001. Abstract nr 1539.
33. Urbanowicz JE, Merriam JC, Zheng L, Change in the horizontal and vertical meridians of the cornea after cataract surgery. *Inves Ophthalmol Vis Sci* 42: S 900, 2001 Abstract nr 4837.
34. Merriam JC, Zheng L, Urbanowicz J, Dillon J. The Relation of Pre-operative corneal astigmatism to surgically-induced astigmatism after cataract surgery. *Inves Ophthalmol Vis Sci* 43: Abstract nr 396, 2002.
35. Söderberg PG, Dong X, Ayala M, Merriam J, Löfgren S, Kakar M, Vito M. Estimation of risk exposure for cataract development after exposure to ultraviolet radiation should correct for age and exposure time. *Inves Ophthalmol Vis Sci* 43: Abstract nr 3569, 2002.
36. Zheng L, Merriam JC, Spector A, Kleiman N, Dillon J. Absorption of light by the lens epithelial cell layer. *Inves Ophthalmol Vis Sci* 43: Abstract nr 3579, 2002.
37. Merriam JC, Zheng L, Merriam Joanna. The Relation of Pre-Operative Corneal Astigmatism to surgically induced astigmatism after cataract surgery. Scientific Poster, The American Ophthalmological Society Meeting May 19-22, 2002.
38. Change in the Axis of Corneal Astigmatism after Cataract Surgery. JC Merriam, L Zheng, JE Merriam. *Inves Ophthalmol Vis Sci*: Abstract nr 231, 2003.
39. Evaluation of Laminin Genes (LAMC1, LAMC2 and LAMB3) in Patients with Age-related Maculopathy. M. Hayashi, J.C. Merriam, G. Barile, S. Chang, R. Allikmets, J.E. Merriam. *Inves Ophthalmol Vis Sci*: Abstract nr 1753, 2003.
40. Detection of 3-Nitro-Tyrosine in the Cataractous Lens. D.C. Paik, S. Choi, J.C. Merriam, J.P. Dillon. *Inves Ophthalmol Vis Sci*: Abstract nr 2349, 2003.
41. Oxygen Tension in the Rabbit Vitreous and Lens: Changes With Vitrectomy. J.P. Dillon, I. Barbazetto, J. Liang, S. Chang, A. Spector, L. Zheng, J. Merriam. *Inves Ophthalmol Vis Sci*: Abstract nr 3501, 2003.

CATALOGUE

Merriam JC (Ed). The Medical Art Collection of the Edward S. Harkness Eye Institute of the Columbia-Presbyterian Medical Center, New York; compiled and edited 1989 –1993, 2001, Columbia University Printing Office.

VIDEOTAPES

1. Merriam JC, Roberts B (Eds.) "Ophthalmic Plastic Surgery: My Experience with Military and Civilian Cases" by AE Sherman. Center for Biomedical Communications, Columbia-Presbyterian Medical Center, April 1992.
2. Merriam JC, Lopez R. Rehabilitation of an Armenian Soldier Blinded by an Explosion in Karabagh. Center for Biomedical Communications, Columbia-Presbyterian Medical Center, April 1994.