

David William Meltzer, Ph.D., M.D.

Curriculum Vitae

Education

1973-75	M.D.	University of Miami, FL (Ph.D. to M.D. program)
1965-70	Ph.D.	University of Rochester, NY (Quantum Optics)
1961-65	A.B.	Princeton University, NJ (Physics)

Positions

1983-Present	Private Practice of Ophthalmology
1980-83	Asst. Prof. Ophth., Washington Univ., St. Louis, MO
1981-82	Glaucoma Fellowship at Washington Univ. while Asst. Prof.
1979-80	Instructor Ophth., Washington Univ., St. Louis, MO
1976-79	Resident Ophth., Washington Univ, St. Louis, MO
1975-76	Intern Medicine, Jewish Hospital of St. Louis, MO
1971-73	Assoc. Scientist, Xerox Corp., Rochester, NY
1970-71	Postdoctoral Fellow, Naval Research Lab., Washington, DC
1965	Fellow Physics Dept., RAND Corp., Santa Monica, CA

Certification: American Board of Ophthalmology, October, 1980

Hospital Affiliation: Presbyterian Hospital of Dallas

Other: Past Chairman Am. Acad. Ophth. ANSI Z80 Committee to set IOL manufacturing standards
Associate Examiner American Board of Ophthalmology
Member, National Advisory Board, National ESCA and Surface Analysis Center for Biomedical Problems, Univ. of Washington, Seattle, WA
Past Chairman, Am. Acad. Ophth. Section II BCSC (Optics, Refraction, and Contact Lenses)
Past member AAO OKAP Committee to produce questions for written exam.
Past Member, Editorial Board American Intraocular Implant Society Journal
Past Chairman, Quality Assurance Committee Am. Intraocular Implant Soc.

Societies: American Academy of Ophthalmology
American Society for Cataract and Refractive Surgery
American Glaucoma Society
Sigma Xi
American Association for the Advancement of Science
Texas Medical Association
Texas Ophthalmological Association
Dallas County Medical Association
Dallas Ophthalmological Association

Honors: Sigma Xi Assoc. 1965, Full Member 1969
National Research Council Postdoctoral Fellow 1970
National Defense Education Act Fellow 1965-68
Princeton University Alumni Scholarship 1961-65
Princeton University Scholar 1961-65
Prof. John A. Wheeler Prize for best paper applying physics to the national defense:
"Application of the Laser to Ballistic Missile Defense" 1961
Undergraduate junior thesis included in Gravitation Theory and Gravitational Collapse. Harrison, Thorne, Wakano, and Wheeler, 1965, Univ. of Chicago Press.
Undergraduate senior thesis published (see pubs 1 & 2).
Discussed in Scientific American 218:4, p. 42 (April 1968).
Cited by Hewish, et al., Nature 217, p. 70 (1968) in which Pulsars were first reported and for which Hewish was awarded the Nobel Prize. Included in Gravitation. Misner, Thorne, and Wheeler, 1973, W.H. Freeman.
Ph.D. research included in Optical Coherence and Quantum Optics. Mandel and Wolf, 1995, Cambridge U. Press.

PUBLICATIONS:

1. Bardeen JM, Thorne KS, and Meltzer DW: A catalogue of methods for studying the normal mode of radial pulsation of general relativistic stellar models. Astrophysical Journal 145:505-513, 1966
2. Meltzer DW, and Thorne KS: Normal modes of radial pulsation of stars at the end point of thermonuclear evolution. Astrophysical Journal 145:514-543, 1966
3. Mandel L, and Meltzer DW: Theory of time-resolved photoelectric detection of light. Physical Review 188:1980-1982, 1969
4. Meltzer DW, and Mandel L: Determination of intensity correlation functions from photoelectric counting distributions. IEEE Journal of Quantum Electronics QE-6, 661-668, 1970
5. Meltzer DW, and Mandel L: Measurement of photoelectric counting distributions for a laser near threshold. Appl. Physics Ltrs. 17:242-245, 1970
6. Meltzer DW, and Mandel L: Time-dependent photoelectric counting statistics for a Q-switched laser near threshold. Phys. Rev. Ltrs. 25:1151-1154, 1970
7. Meltzer DW, and Mandel L: Dynamics of a Q-switched laser near threshold. Physical Rev. A 3:1763-1772, 1971
8. Meltzer DW, and Goldberg LS: Tunable IR difference-frequency generation in Lithium Iodate. Optics Communications 5:209-211, 1972
9. Meltzer DW: Sterile Hypopyon following intraocular lens surgery. Arch. Ophthalmol. 98:100-104, 1980
10. Meltzer DW: Gamma ray sterilization and its effect on intraocular lenses. Am. Intraocular Implant Soc. J. 7:126-129, 1981
11. Meltzer DW, Drews RC, and Hajek AS: Millipore filters in ophthalmic surgery: A caution concerning their use. Am. Intraocular Implant Soc. J. 7:143-146, 1981
12. Pardos GJ, and Meltzer DW: Particulate contamination of disposable corneal trephines. Arch. Ophthalmol. 101:562-563, 1983
13. Meltzer DW: Ophthalmic aspects. IN, Steinberg F (ed): Care of the Geriatric Patient in the Tradition of E.V. Cowdry. C.V. Mosby, St. Louis (1983)
14. Meltzer DW, and Drews RC: Complications of intraocular lens implantation. In, Iliff N (ed): Complications of Ophthalmic Surgery. Churchill Livingstone, New York (1983)
15. Meltzer DW: Clean Technique and its Application in the Operating Theatre. IN: Drews

- RC and Steele A (eds): Ophthalmology-Vol II Cataract Surgery, Butterworth, England (1984)
16. Tennant JL, Smirmaul HJ, and Meltzer DW: Use of the Piezo-Electric gun to Remove Surface Charge from AISLE's and Other Materials. Am Intra-Ocular Implant Soc. J. 10:486-487 1984
 17. Kass MA, Meltzer DW, and Gordon MO: A Miniature Compliance Monitor for Eyedrop Medication. Arch. Ophthalmol. 102:1550-1554, 1984
 18. Kass MA, Meltzer DW, and Gordon MO: The Compliance Factor. IN: Drance SM and Neufeld AH (eds): Glaucoma: Applied Pharmacology in Medical Treatment, Grune and Stratton, New York (1984), p. 537
 19. Kass MA, Meltzer DW, Gordon MO, et al: Compliance with Topical Pilocarpine Treatment. Am. J. Ophth. 101:515-523, 1986
 20. Kass MA, Gordon MO, Meltzer DW: Can Ophthalmologists Correctly Identify Patients Defaulting from Pilocarpine Therapy? Am. J. Ophth. 101:524-530, 1986
 21. Meltzer DW et al: Optics Refraction and Contact Lenses. American Academy of Ophthalmology, Basic and Clinical Science Course, Section 2, 1986-1987.

UNITED STATES PATENTS:

1. #3,984, 842 with J. Trainor
"Device for Continuous Electrostatic Reproduction of an Optical Image"
2. #3,994,000 with J. Trainor
"Device for Electrostatographic Reproduction of an Optical Image Using a Storage Grid"
3. #4,005,438 with N. Goel
"Device with Control Grid for Electrostatographic Reproduction of an Optical Image"

PRESENTATIONS:

1. Meltzer DW: Microprobe Chemical Analysis with Scanning Electron Microscopy of Intraocular lenses.
Presented to the Fifth Academy Program of the American Intraocular Implant Society. San Francisco, November, 1979.
2. Meltzer DW: Surface Analysis of Lens Implants: A Search for Causes of Inflammation.
Presented to the American Intraocular Implant Society Meeting. Los Angeles, March 1980.
3. Meltzer DW: Sterile Hypopyon Following Lens Implant Surgery.
Presented to the Association for Research in Vision and Ophthalmology Meeting. Orlando, Florida, May 1980.
4. Meltzer DW: Gamma Ray Sterilization and Its Effect on Intraocular Lenses.
Presented to the American Intraocular Implant Society Meeting. Los Angeles, March 1981.
5. Meltzer DW, Drews RC, and Hajek AS: Millipore Filters in Ophthalmic Surgery: A Caution Concerning Their Use.
Presented to the American Intraocular Implant Society Meeting. Los Angeles, March 1981.
6. Meltzer DW: Gamma Ray Sterilization of Intraocular Lenses.
Presented to the Association for Research in Vision and Ophthalmology meeting. Sarasota, Florida, May 1981.
7. Pardos GJ, and Meltzer DW: Particulate Contamination in Disposable Corneal Trephines.
Presented to the Castroviejo Society. Atlanta, Georgia, November 6, 1981.
8. Meltzer DW; The Surface of the Intraocular Lens.
Presented to the American Society of Contemporary Ophthalmology. Orlando, Florida, March 14, 1982.
9. Meltzer DW: Surface Chemical Quality Control of Intraocular Lenses. Presented to the U.S. Intraocular Lens Symposium (AIOIS). Los Angeles, April 21, 1982.
10. Meltzer DW: Ophthalmologic Implants. Invited speaker to the 8th Annual Meeting of the Society of Biomaterials. Orlando, Florida, April 16, 1982.
11. Meltzer DW, and Kass MA: Electronic Compliance Monitor for Topical Ophthalmic Medication. Presented to the Association for Research in Vision and Ophthalmology. Sarasota, Florida, May 5, 1982.
12. Meltzer DW; Intraocular Lens Contaminants. IN, Jaffe N, et al: "AISLE Update '82". Presented to the American Academy of Ophthalmology. San Francisco, California, November 3, 1982.

13. Meltzer DW: Aphakic Spectacles. American Academy of Ophthalmology Regional Update Course. St. Louis, Missouri, March 13, 1983.
14. Meltzer DW: Clean Technique in the Operating Room. Presented to the U.S. Intraocular Lens Symposium (AIOIS). New Orleans, March 24, 1983.
15. Meltzer DW: Physics of the YAG Laser. Course of instruction Washington University. St. Louis, April 30, 1983.
16. Kass MA, Meltzer DW and Gordon MO: Compliance to Topical Pilocarpine Therapy. Presented to the Association for Research in Vision and Ophthalmology. Sarasota, Florida, May 5, 1983.
17. Meltzer DW: Physics of YAG Lasers, Mode Locked and Q-Switched. Course of instruction. Houston, May 16, 1983.
18. Meltzer DW: Cataract and Implant Surgery. Presented to MultiOptics Corporation. San Francisco, June 13, 1983.
19. Meltzer DW: Intraocular Lenses and Glaucoma. Presented to American Academy of Ophthalmology. Regional update course. St. Louis, August 26, 1983.
20. Meltzer DW: Physics of the YAG Laser. Eye Sat Video Tape 1983.
21. Meltzer DW: Physics of the YAG Laser. Presented to Contact Lens Assoc. of Ophthalmologists. Las Vegas, January 13, 1984.
22. Meltzer DW: The Laser and its Application to Ophthalmic Surgery. Invited speaker, St. Luke's Hospital. St. Louis, February 9, 1984.
23. Meltzer DW: Intraocular Lenses and Glaucoma. Eye Sat Video Tape 1984.
24. Meltzer DW: YAG Laser Physics. Quintessence of Ophthalmology. Amarillo, Teas, August 15, 1984.
25. Meltzer DW: Aphakic Spectacles I & II. American Academy of Ophthalmology - Regional Update. St. Louis, August 26, 1984.
26. Meltzer DW: The Dissatisfied Refraction Patient. American Academy of Ophthalmology - Regional Update St. Louis, August 26, 1984.
27. Meltzer DW: Intraocular Lenses and Glaucoma. American Academy of Ophthalmology - Regional Update. Houston, September 25, 1984.
28. Meltzer DW: Pigment Dispersion and Pseudoexfoliation Glaucoma. American Academy of Ophthalmology - Regional Update. Houston, September 15, 1984.

29. Meltzer DW: The YAG Laser - Principles and Practice. Course of instruction. Presbyterian Hospital, Dallas, Texas, October 20, 1984, repeated December 15, 1984.
30. Meltzer DW: Clean Environment for Outpatient Surgery. Fifth Annual Meeting of the Outpatient Ophthalmic Surgical Society, Dallas, TX, March 1, 1985.
31. Meltzer DW: A Comparison of Bifocal and Progressive Addition Lenses for Correction of Pseudophakia. Third International Symposium on Presbyopia, Haiti, March 22, 1985.
32. Meltzer DW: Theory and Use of the YAG Laser. Course of instruction, Waco, Texas, April 27, 1985.
33. Karlin K, Kass MA, Gordon MO, and Meltzer DW: Consistency of Compliance with Pilocarpine. ARVO Sarasota, Florida, May 1985. abstract Invest. Ophthalmol. 26 (3) Suppl: 125-1985.
34. Siegel LI, Kass MA, Gordon, MO and Meltzer DW; Compliance with Topical Timolol. ARVO Sarasota, Florida, May, 1985. abstract Invest. Ophthalmol. 26 (3) Suppl: 125-1985.
35. Gordon MO, Kass MA, Meltzer DW: Adherence to Eyedrop Therapy. Sixth Annual Meeting of the Society for Clinical Trials. New Orleans, May 12-15, 1985.
36. Meltzer DW: Lasers-How They Work, YAG Laser Theory and Design, Capsulotomy. YAG/Argon Workshop for Ophthalmologists, Presbyterian Hospital of Dallas, TX, May 24-25, 1985.
37. Meltzer DW: An Electronic Monitor for Studying Patient Compliance with Prescribed Therapy. Charlottenlund Conference, Copenhagen, October 1985.
38. Meltzer DW: New Clinical Results from Electronic Compliance Testing. UTHSC Dallas, January 15, 1986.
39. Meltzer DW; YAG Laser Capsulotomy. Presbyterian Hospital Dallas, May 23, 1986.

VISITING PROFESSORSHIPS:

1. Bascom Palmer Eye Institute
University of Miami
Miami, Florida
November 19-21, 1981.
2. Washington University
St. Louis, Missouri
August 8-9, 1985.