

CURRICULUM VITAE

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MEDICAL LICENSURE:

Connecticut #17056

BOARD CERTIFICATION:

National Board of Medical Examiners	March 1972
American Board of Neurological Surgery	January 1980

EDUCATION:

B.S. Grinnell College, Grinnell, Iowa	6/1967
B.M.S. University of South Dakota Medical School, Vermillion, South Dakota	6/1969 M.D.
Washington University School of Medicine, St. Louis, Missouri	6/1971

TRAINING:

Intern in Surgery, Barnes Hospital, St. Louis, MO	7/1971-6/1972
Resident in Neurosurgery, Yale-New Haven Hospital	7/1972-12/1975
Chief Resident in Neurosurgery, Yale-New Haven Hospital, New Haven, CT	1/1976-12/1976

POSITIONS:

Postdoctoral Fellow, Neurosurgery, Yale Univ School of Medicine	7/1973 - 11/1974
Research Associate, Neurosurgery, Yale Univ School of Medicine	12/1974 - 12/1975
Instructor, Neurosurgery, Yale Univ School of Medicine	1/1976 - 12/1976
Assistant Professor, Neurosurgery, Yale Univ School of Medicine	1/1977 - 6/1981
Associate Neurosurgeon, Yale-New Haven Medical Center	1/1977 - 6/1980
Consulting Neurosurgeon, Veterans Administration Hospital West Haven, CT	7/1977 -
Consulting Neurosurgeon, Yale University Health Services	7/1977 -

Attending Neurosurgeon, Yale-New Haven Medical Center	7/1980 -
Associate Professor, Neurosurgery, Yale Univ School of Medicine	7/1981 - 6/1985
Chief of Neurosurgery, Veterans Administration Hospital	7/1981 - 6/1982
Acting Chief, Section of Neurosurgery, Yale Univ School of Medicine	8/1982 - 1/1983
Acting Chief, Section of Neurosurgery, Yale Univ School of Medicine	11/1984 - 2/1987
Professor of Neurosurgery, Yale Univ. School of Medicine	7/1985 -
Chief, Section of Neurosurgery, Yale Univ. School of Medicine	3/1987 - 12/1996
The Nixdorff-German Professor of Neurosurgery, Yale University School of Medicine	6/1987 - 12/1994
The Harvey and Kate Cushing Professor of Neurosurgery, Yale University School of Medicine	12/1994 -
Chairman, Department of Neurosurgery, Yale Univ School of Medicine	1/1997 -
Interim Dean, Yale University School of Medicine	7/1/2003 - 5/31/2004

AWARDS AND HONORS:

Mosby Scholarship Award for Scholastic Excellence, 1969
 Joseph J. and Charlotte E. Gitt prize for best original research in clinical and therapeutic medicine, Washington University School of Medicine, St. Louis, MO, 1971
 Fellow, Calhoun College, Yale University, 1999-
 American Epilepsy Society Milken Family Foundation 1999 Clinical Investigator Award
 American Epilepsy Society 2000 William G. Lennox Lecturer
 Visiting Professor at 17 Universities (since 1992)
 Multiple keynote speaker invitations both domestic and abroad (Japan, Korea, Australia, Spain, France, Denmark, Germany, Turkey, Switzerland, UK)
 Invited speaker at Council of Deans, spring 2004
 Grass Foundation Award, Society of Neurological Surgeons, 2006

PROFESSIONAL SOCIETIES:

American Academy of Neurological Surgeons
 American Association of Neurological Surgeons (Harvey Cushing Society)
 American Association for the Advancement of Science (Science)
 American Epilepsy Society
 American Medical Association
 American Society for Stereotactic and Functional Neurosurgery
 Association for Research in Nervous and Mental Diseases
 Connecticut State Medical Society
 Connecticut State Medical Society, Section of Neurosurgery
 Eastern Association of Electroencephalography
 Epilepsy Foundation of America
 Epilepsy Foundation of Connecticut
 National Association of Epilepsy Centers
 New England Neurosurgical Society
 New Haven County Medical Association
 North American Skull Base Society
 Research Society of Neurological Surgery
 Sigma Xi
 Society of Neurological Surgeons
 Society for Neuroscience

COMMITTEES:Yale University School of Medicine

Task Force on Chair Searches
 Task Force on Clinical Investigation
 Emergency Medicine Proposal Committee
 Committee on Biostatistics and Data Management
 Faculty Search Committee for Sr. Biostatistician
 Neurosurgery Liaison to Biomedical Engineering Committee Task Force
 Steering Committee for Graduate Program in Investigative Medicine
 Ad Hoc Committee on Medical Education
 Technology Transfer Review Committee
 Yale Medical Group Principles Committee
 Yale Medical Group Board of Governors
 YMG Clinical Initiatives Committee
 YMG Finance Committee
 YMG Clinical Chairs
 Incentive Compensation Committee
 Dean Selection Advisory Committee
 Ophthalmology Chair Search Committee (Chair)
 Surgery Chair Search Committee
 Neuropathology Faculty Search Committee
 Orthopedics Search Committee
 Robert Wood Johnson Fellowship Advisory Committee
 Institute for Social and Policy Studies Bioethics Committee
 Pediatric Chair Search Committee (Chair)
 Committee on Cooperative Research
 Educational Policy and Curriculum Committee
 Amistad Steering Committee
 MRRC Advisory Committee
 Diagnostic Radiology Chair Search Committee
 Child Study Center Chair Search Committee (Chair)
 Clinical Practice Program Committee
 Strategic Planning/Clinical Practice Infrastructure Committee
 Psychiatry Chair Search Committee
 MCIC Perioperative Patient Safety program
 MCIC VT Perioperative Clinical Leadership Committee
 Medical Humanities Committee
 Movement Disorders Program Committee
 Fulton-Cushing Advisory Committee

Yale-New Haven Hospital

Clinical Chiefs
 Surgical Chiefs
 Medical Board
 Medical Board Joint Conference Commission
 Medical Board Administrative Committee
 Operating Room Committee
 Education Committee
 Neurosciences Joint Service Line Committee (co-chair)
 Surgical Services Steering Committee

Boards and Societies:**American Board of Neurological Surgery:**

Director, The American Board of Neurological Surgery, 5/1996-2002
 Committee on Educational Requirements and Subspecialization in Neurosurgery
 Credentials Committee
 Primary Examination Committee
 Recertification Committee
 Chairman, The American Board of Neurological Surgery, 2001-2002
 Recommendation Committee for New Directors
 ABNS Member of Residency Review Committee for Neurological Surgery,
 1/03-6/05

Society of Neurological Surgeons

ABNS Representative 1996-2002
 Scientific Program Committee
 Research Training Subcommittee of Residency Education Committee
 Research Committee
 Membership Committee (Chair 1999-00)
 Constitution & Bylaws Committee
 Vice President
 President Elect 2007-08

American Epilepsy Society

Long range Planning Committee
 Scientific Program Committee
 Research Recognition Awards Committee
 Research Infrastructure Awards Committee
 Translational Research Task Force
 Epilepsy Surgery Special Interest (Chair, 1996-99)
 Board of Directors, 2002-2005
 1st Vice President
 President Elect 2007-08

American Association of Neurological Surgeons

Nominating Committee
 Representative to AAMC Council of Academic Societies (CAS)
 Representative to Committee for Innovation in the Learning Environment (CILE)

Advisory Boards

PULSE!! The Virtual Clinical Learning Lab
 Donaghue Advisory Committee

Editorial Boards

Advances in Neurology – Editorial Advisory Board
 Journal of Neurosurgery – Editorial Board/Board of Directors

INVITED TALKS AND KEYNOTE PRESENTATIONS: (Last 5 years and abridged)

- 1/26-2/2/02 speaker, 35th Annual Winter Conf on Brain Research, Aspen, CO
 3/21/02 NIH/NINDS scientific review "Deep Brain Stimulation Special Emphasis Panel on Mechanisms"
- 4/6-10/02 AANS Annual Meeting, Chicago, IL
 4/30-5/5/02 Invited speaker, Temporal Lobe Epilepsy (MTLE-HS) Workshop, Istanbul, Turkey
- 5/11-14/02 Society of Neurological Surgeons annual meeting, Toronto, Canada
 7/11/02 Visiting Professor, Northern Westchester Hospital, NY
 11/7-8/02 Visiting Professor, UCSF Dept. Neurosurgery, San Francisco, CA
 11/16-17/02 speaker, Epilepsy Symposium, Houston Neurological Society, Houston, TX
 12/6/02 Visiting Professor, NYU, New York, NY
 12/8-11/02 AES annual meeting, Seattle, WA
- 2/25-3/2/03 International Symposium on Epilepsy Surgery, Madrid, Spain
 3/19-20/03 Visiting Professor, SUNY Upstate Med Univ., Syracuse, NY
 4/9-10/03 Visiting Professor, University of Pittsburgh
 4/10/03 Moderator, NINDS Imaging Markers of Epileptogenesis: New Research Directions, Washington, DC
- 4/25/03 speaker, AANS Joint Symposium, San Diego, CA
 4/26-29/03 speaker, moderator, AANS Annual Meeting, San Diego, CA
 5/14-17/03 guest examiner, ABNS spring exams, Cincinnati, OH
 5/17-20/03 speaker, SNS annual meeting, Cincinnati, OH
 5/21/03 speaker, ASSFN meeting, New York, NY
 6/5-8/03 Practical Anatomy Workshop, St. Louis, MO
 9/19-20/03 speaker, New Frontiers in Epilepsy symposium, Omaha, Nebraska
 9/24/03 speaker, CT State Neurosurgery Society Annual mtg., New Haven, CT
 10/20-22/03 speaker, CNS annual meeting, Denver, CO
 11/15/03 speaker, ARNMD annual meeting, New York, NY
 12/6-9/03 speaker, AES annual meeting, Boston, MA
- 4/27/04 Panelist, AAMC Council of Deans, Key Biscayne, FL
 5/24-25/04 speaker, SNS annual meeting, New Orleans, LA
 6/3-5/04 Practical Anatomy Workshop, St. Louis, MO
 6/16-18/04 Visiting Professor, UCSD San Diego, CA
 11/17/04 Invited speaker, 1st annual Franklin Robinson Memorial Lecture, Yale University School of Medicine, New Haven, CT
 12/3-7/04 speaker, AES annual meeting, New Orleans, LA
- 1/12/05 Invited Speaker, Leadership in Biomedicine lecture series, Yale University School of Medicine, New Haven, C
 3/2/05 Commentary on lecture by Michael Bliss, PhD @ Axion Research Foundation, Hamden, CT
 3/5/05 speaker, Advances in Medical and Surgical Treatment of Refractory Epilepsy Course, Indiana University Sch Med, Indianapolis, IN
 3/15-16/05 VP, Mayo Clinic, Rochester, MN
 4/4/05 VP, NY Weill-Cornell Med Center, New York, NY
 4/17/05 speaker, AANS annual meeting, New Orleans, LA
 4/27-29/05 speaker, Translational Neuroscience Conf on Brain Interactive Devices, University of Kentucky, Lexington KY
 5/10-11/05 participant, Ethical Issues Symposium, Library of Congress, Washington, DC

5/20-24/05 speaker, SNS annual meeting, Palo Alto, CA
 5/25-28/05 Guest examiner, ABNS exams, Houston, TX
 6/2-5/05 Faculty, Operative Techniques Course, Practical Anatomy Workshop, St. Louis University, St. Louis, MO
 8/28-9/1/05 speaker, International Epilepsy Congress, Paris, Fr
 10/11-12/05 speaker, CNS annual meeting, Boston, MA
 12/2-6/05 speaker, AES annual meeting, Washington, DC

 1/14/06 speaker, Association of Yale Alumni, Boston, MA
 4/6/06 Visiting Professor, Mass General Hospital, Boston, MA
 4/11/06 featured speaker, Harvey Cushing Lecture Series, Axion Research Foundation, Hamden, CT

 4/20-21/06 Visiting Professor, Stanford University Medical Ctr., Stanford CA
 4/22-26/06 speaker, AANS annual meeting, San Francisco, CA
 5/14-15/06 Visiting Professor, Baylor College of Medicine, Houston, TX
 5/21-23/06 speaker, Society of Neurological Surgeons annual mtg, Durham NC
 5/21/06 Grass Award & lecture, Society of Neurological Surgeons annual mtg
 11/20-12/4/06 speaker, AES annual meeting, San Diego, CA

 1/11/07 The McGovern Lecture, The Program for Humanities in Medicine, Yale University School of Medicine, New Haven CT
 3/29-30/07 speaker and organizer, CURE Conference, Bethesda, MD
 4/14-19/07 speaker, AANS annual meeting, Washington, DC
 5/5-8/07 speaker, Society of Neurological Surgeons annual mtg, San Francisco CA
 5/12/07 speaker, Epilepsy Foundation Spring Conference, Hartford, Ct
 5/30-6/3/07 Faculty, Operative Techniques w/Masters course, St. Louis MO
 6/1/07 speaker, NIBIB Scientific Symposium, NIH, Washington DC
 7/5-12/07 speaker, International Epilepsy Congress, Singapore
 7/12-13/07 speaker and co-organizer and co-chair, The Publicizing of Biomedical Research conference, Yale University

GRANTS**Correlation of Thin Section Polytomography and Histology of the Sella Turcica and Pituitary Obtained at Autopsy (D. Spencer)**

NIH CA27875

1981-82

Frontal Lobe Kindling in the Cat (D. Spencer)

Epilepsy Foundation of America

1985-86

NMR Spectroscopy of Human Epilepsy (H. Hetherington/D. Spencer)

Brookhaven Subcontract #062968 (PI - H. Hetherington)

12/01/97 - 11/30/99

Yale Epilepsy Center Grant (R. Mattson)

NIH/NINDS PO1NS #06208

04/01/97 - 03/30/02

Structure and Function of Subcortical White Matter Neurons (A. Williamson)

NIH RO1 NS38287

09/01/99 - 06/30/04

Energy and Metabolism in Temporal Lobe Epilepsy (D. Spencer)

NIH PO1 NS39092

08/13/99 - 06/30/05

Hypoglycemia in the Central Nervous System (R. Sherwin, MD)

Juvenile Diabetes Foundation

05/01/00 - 04/30/05

A Multicenter Study for Epilepsy Surgery (S. Spencer, MD)

NIH-NINDS 1RO1 NS32375

06/15/02 - 05/31/06

ONGOING**Bioimaging and Intervention in Neocortical Epilepsy (J. Duncan)**

(D. Spencer, CoPI)

NIH 1RO1 ED00473

04/15/02 - 03/15/07

To lead to the improvement of our understanding and treatment of patients with neocortical epilepsy through the use of integrated imaging.

Origin of Extracellular Glutamate in Human Temporal Lobe Epilepsy (Spencer, Dennis)

NIH - NINDS 1 R01 NS054038

09/01/06 – 03/31/2011

To better understand the cellular and metabolic mechanisms that underlie the elevations of glutamate seen in the hippocampus of patients with mesial temporal sclerosis (MTS).

PENDING GRANTS

NIH (Rothman, Douglas R.)	07/01/06 – 06/30/07	No effort
Acquisition of a 7T Human MR System		\$2,000,000
Role: Co- Investigator		

The development of MR technology has allowed biomedical researchers to make major advance in understanding and treating human disease. The goals are to purchase and install a Varian/Magnex 7T 68 system with gradients and shims optimized for whole brain dynamic shimming. To develop quantitative whole brain and limb ultra high resolution MRSI and fMRI using dynamic shim technology and parallel imaging approaches. To apply this technology to allow the programs at Yale in diabetes, image guided neurosurgery, and psychiatry to continue to make important strides in the understanding and treatment of human disease.

NIH 1 R01 NS 052462-01A2 (Williamson, Anne)	12/01/06 – 11/30/07	.6
calendar		
Glutamate Metabolism in Epileptic Human Hippocampus		\$255,456
Role: Co-Investigator		

The goal of this grant is to determine how glutamate metabolism is altered in epileptic tissue using both an animal model and human material.

Clinical Trials:

Neuropace (R. Duckrow MD) Neurostimulator Study, 09/01/04-04/13/07
 Neuropace (R. Duckrow MD) Pivotal Study, 04/01/06-11/07/07
 Neuropace (R. Duckrow MD) Long-term Treatment, 09/20/06-09/20/07

BIBLIOGRAPHY**ORIGINAL ARTICLES:**

Lehman RAW and Spencer DD: Hand preference and hemispheric learning in the monkey. *Exp Neurol* 36: 88-100, 1972.

Lehman RAW and Spencer DD: Mirror-image shape discrimination: Interocular reversal of responses in the optic chiasm sectioned monkey. *Brain Res* 52: 233-241, 1973.

Sasaki CT, Allen WE, Spencer DD: Cerebral cortical veins in otologic surgery. *Arch Otolaryngol* 103: 730-734, 1977.

Geehr RB, Allen WE, Rothman SLG, Spencer DD: Pluridirectional tomography in the evaluation of pituitary tumors. *Am J Roentgenol* 130:105-109, 1978.

Venes JL, Shaywitz BA, Spencer DD: Management of severe cerebral edema in the metabolic encephalopathy of Reye-Johnson syndrome. *J Neurosurg* 48: 903-915, 1978.

Sasaki CT, Milmoie G, Spencer DD, Ariyan S: Cancer of the ear and temporal bone. *Conn Med* 43:547-552, 1979.

Spencer SS, Williamson PD, Spencer DD, Mattson RH: Value of depth electroencephalography in 21 patients with refractory epilepsy. *Trans Amer Neurol Assoc* 104: 241-243, 1979.

Soloway SS, Williamson PD, Spencer DD, Mattson RH: Surgery for epilepsy: Role of depth electroencephalography. *Conn Med* 44:70-75, 1980.

Wood CC, Allison T, Goff WF, Williamson PD, Spencer DD: On the neural origin of P300 in man. *Prog Brain Res* 54: 51-56, 1980.

Ariyan S, Sasaki CT, Spencer DD: Radical enblock resection of the temporal bone. *Amer J. Surg* 142: 443-447, 1981.

Spencer SS, Spencer DD, Williamson PD, Mattson RH: Ictal effects of anticonvulsant medication withdrawal in epileptic patients. *Epilepsia* 22: 297-307, 1981.

Elefteriades JA, Spencer DD, Gusberg RJ: Vertebral artery stenosis with brain stem ischemia: anatomic and therapeutic implications. *Conn Med* 46(11): 628-632, 1982.

Spencer SS, Spencer DD, Williamson PD, Mattson RH: The localizing value of depth electroencephalography in 32 patients with refractory epilepsy. *Ann Neurol* 12: 248-253, 1982.

Spencer SS, Spencer DD, Williamson PD, Mattson RH: Sexual automatisms in complex partial seizures. *Neurology* 33: 527-533, 1983.

Bhimani S, Virapongse C, Spencer D, Kim J: CT appearance of cerebellar glioblastoma multiforme. *Case Report. J Comp Assist Tomography* 7(5): 889-891, 1983.

Augustine EA, Novelty RA, Mattson RH, Glaser GH, Williamson PD, Spencer DD, Spencer SS: Occupational adjustment following neurosurgical treatment of epilepsy. *Ann Neurol* 15: 68-72, 1984.

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- Novelly RA, Augustine EA, Mattson RH, Glaser GH, Williamson PD, Spencer DD, Spencer SS: Selective memory improvement and impairment in temporal lobectomy for epilepsy. *Ann Neurol* 15: 64-67, 1984.
- Spencer SS, Spencer DD, Glaser GH, Williamson PD, Mattson RH: More intense focal seizure types after callosal section: the role of inhibition. *Ann Neurol* 16: 686-693, 1984.
- Spencer DD, Spencer SS, Mattson RH, Williamson PD, Novelly R: Access to the posterior medial temporal lobe structures in the surgical treatment of temporal lobe epilepsy. *Neurosurgery* 15: 667-671, 1984.
- Sostman HD, Spencer DD, Gore JC, Spencer SS, Holcomb W, Williamson PD, Prichard J, Camputaro C, Greenspan RH, Mattson RH: Preliminary observations on magnetic resonance imaging in refractory epilepsy. *Magn Reson Imaging* 2:301-306, 1984.
- Sasaki CT, Ariyan S, Spencer D, Buckwalter J: Pectoralis major myocutaneous reconstruction of the anterior skull base. *Laryngoscope* 95: 162-166, 1985.
- Williamson PD, Spencer DD, Spencer SS, Novelly R, Mattson RH: Episodic aphemia and epileptic focus in nondominant hemisphere relieved by section of corpus callosum. *Neurology* 35: 1069-1071, 1985.
- Spencer SS, Williamson PD, Bridgers SL, Mattson RH, Cicchetti DV, Spencer DD: Reliability and accuracy of localization by scalp ictal EEG. *Neurology* 35: 1567-1575, 1985.
- Spencer SS, Spencer DD, Williamson PD, Mattson RH: Effects of corpus callosum section on secondary bilateral synchronous interictal EEG discharges. *Neurology* 35: 1689-1694, 1985.
- Goodman RN, Williamson PD, Reeves AG, Spencer SS, Spencer DD, Mattson RH, Roberts DW: Interhemispheric commissurotomy for congenital hemiplegics with intractable epilepsy. *Neurology* 35: 1351-1354, 1985.
- Williamson PD, Mattson RH, Spencer SS, Spencer DD: Complex partial status epilepticus: A depth electrode study. *Ann Neurol* 18: 647-654, 1985.
- Williamson PD, Mattson RH, Spencer SS, Novelly RA, Spencer DD: Complex partial seizures of frontal lobe origin. *Ann Neurol* 18: 497-504, 1985.
- Bridgers SL, Spencer SS, Spencer DD, Sasaki CT. A cerebral effect of carotid sinus stimulation. Observation during intraoperative electroencephalographic monitoring. *Arch Neurol*. 42: 574-577, 1985.
- Fernandez LA, Spencer DD, Kaczmar T: Angiotensin II decreases mortality rate in gerbils with unilateral carotid ligation. *Stroke* 17(1): 82-85, 1986.
- Tucker DM, Novelly RA, Isaac W, Spencer D: Effect of simultaneous vs sequential stimulus presentation on memory performance following temporal lobe resection in humans. *Neuropsychologia* 24(2): 277-281, 1986.

Spencer SS, Williamson PD, Spencer DD, Mattson RH: Human hippocampal seizure spread studied by depth and subdural recording: The hippocampal commissure. *Epilepsia* 28(5): 479-489, 1987.

Yu RK, Holley JAJ, Macala LJ, Spencer DD: Ganglioside changes associated with temporal lobe epilepsy in the human hippocampus. *Yale J Biol & Med* 60: 107-117, 1987.

Carlson RD, Sasaki CT, Friedman SI, Spencer D. Glomus tympanicum tumor with middle cranial fossa extension. Case Report. *Otolaryngol. - Head and Neck Surgery* 96(2): 186-189, 1987.

Bloomgarden G, Byrne T, Spencer DD, Heafner M: Meningioma associated with aneurysm and subarachnoid hemorrhage: case report and review of the literature. *Neurosurgery* 20: 24-26, 1987.

Spencer SS, Spencer D, Williamson P, Sass K, Novelly RA, Mattson R. Corpus callosotomy for epilepsy. I: Seizure effects. *Neurol* 38: 19-24, 1988.

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Wood CC, Spencer DD, Allison T, McCarthy G, Williamson PD, Goff WR. Localization of human sensorimotor cortex during surgery by cortical surface recording of somatosensory evoked potentials. *J Neurosurg.* 68: 99-111, 1988.

Sass KJ, Spencer SS, Novelly RA, Spencer D. Mnestic and attention impairments following corpus callosum section for epilepsy. *J Epil.* 1: 61-66, 1988.

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Allison T, McCarthy G, Wood CC, Williamson PD, Spencer DD. Human cortical potentials evoked by stimulation of the medial nerve. II. Cytoarchitectonic areas generating long-latency activity. *J Neurophysiol.* 62: 711-722, 1989.

Spencer DD, Spencer SS: Corpus callosotomy in the treatment of medically intractable secondarily generalized seizures of children. *Cleve Clin J of Med.* 56S, pt 1: S69-S78, 1989.

deLanerolle NC, Kim JH, Robbins RJ, Spencer DD. Hippocampal interneuron loss and plasticity in human temporal lobe epilepsy. *Brain Res.* 495: 387-395, 1989.

Gray RS, Abrahams JJ, Hufnagel TJ, Kim JH, Lesser RL, Spencer DD: Ghost-cell tumor of the optic chiasm. Primary CNS lymphoma. *J Clin Neuro Ophthalmol* 9: 98-104, 1989.

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