

M a n o j M. T h a k k e r, M. D.

- Experience**
- Instructor, Division of Ophthalmic Plastic and Orbital Reconstructive Surgery, Department of Ophthalmology, Harvard Medical School, Massachusetts Eye and Ear Infirmary,
 - Assistant Professor, Director of Oculofacial Plastic Surgery, Division of Ophthalmology, University of Vermont/Fletcher Allen Health Care, 111 Colchester Avenue, Burlington, VT 05401
 - Consultant, Eye Care Associates, 1330 Exchange Street, Middlebury VT 05753

Postgraduate Medical Training

- Fellowship:**
- Ophthalmic Plastic and Reconstructive Surgery, University of Washington, Seattle, WA

- Residency:**
- Ophthalmology: Massachusetts Eye & Ear Infirmary, Harvard Medical School Boston, MA

- Internship:**
- Transitional: St. Vincent's Hospital, New York, NY

- Education**
- M.D., Mount Sinai School of Medicine, New York, NY
 - B.A., Boston College, Chestnut Hill, MA

- Board Certification:**
- American Board of Ophthalmology
 - American Society of Ophthalmic Plastic and Reconstructive Surgery

- Memberships:**
- American Academy of Ophthalmology
 - American Society of Ophthalmic Plastic and Reconstructive Surgery

Honors/Awards:

- Postgraduate:**
- Elected to *Best Doctors in America* 2010-2011
 - Elected to *Best Doctors in America* 2009-2010
 - Included in *America's Top Ophthalmologists* 2009, 2010
 - Merrill Reeh Pathology Award, presented by the American Society of Ophthalmic Plastic and Reconstructive Surgery

- Medical School:**
- Basic Sciences Achievement Award
 - John A. Hartford/AFAR Geriatrics Research Fellowship

- Undergraduate:**
- Presidential Scholarship
 - Summa Cum Laude
 - Phi Beta Kappa
 - Honors Program graduate
 - Dean's Scholar (1992-1995)
 - Dean's List (1991-1995)
 - Psychology Honor Society

- Alpha Epsilon Delta, the premedical honor society

Research Experience:

Fellowship:

- Sympathetic nervous system pathways of the orbit and ocular adnexae.*
Using immunolabeling techniques, we have mapped the pathways of the sympathetic neurons in the orbits and ocular adnexal structures of monkeys and humans.

Residency:

- Causes of visual limitation in zones I, II, and III open globe injuries.*
Using the Ocular Trauma Classification System of open globe injuries, we determined the vision limiting complications in relation to zone (zone I vs. zones II and III) and mechanism of injury (penetrating vs. rupture) at 2-3 months post-injury.
- Orbital and adnexal trauma associated with open globe injuries.*
A retrospective study demonstrating that orbital/adnexal injuries are common in patients with open globes and are associated with more posterior globe injuries and a worse visual prognosis.
- Fibrovascular ingrowth into hydroxyapatite and porous polyethylene orbital implants wrapped with acellular dermis*
Using an animal model, we demonstrated the ability of acellular dermis to support fibrovascular ingrowth into hydroxyapatite and porous polyethylene orbital implants.
- Results of retinal detachment surgery in open globe injuries.*
Using the Ocular Trauma Classification System of open globe injuries, we showed that mechanism of injury (penetrating vs. rupture) was predictive of the anatomical success rate of retinal detachment surgery at 5-7 months follow-up.

Medical School:

- Glaucoma research*
Neuronal degeneration within the lateral geniculate nucleus of monkeys with experimental glaucoma. Advisor: Patrick R. Hof, M.D., Neurobiology of Aging Department, Mount Sinai School of Medicine

Undergraduate:

- Research in visual processing and memory*
Showed that human visual processing tasks and memory retention are more efficiently accomplished with symmetric as opposed to asymmetric objects. Advisor: Kavitha Srinivas, Ph.D., Department of Psychology, Boston College

Publications:

1. Jakobiec FA, Stacy RC, Thakker MM. Blue nevus of the tarsus as the predominant component of a combined nevus of the eyelid. *Ophthalmic Plastic and Reconstructive Surgery* 2010 Oct 11 [Epub ahead of print]
2. Zakka FR, Jakobiec FA, Thakker MM. Eyelid varix with phlebolith formation, thrombus recanalization, and early intravascular papillary endothelial hyperplasia. *Ophthalmic Plastic and Reconstructive Surgery* 2010 Aug 9 [Epub ahead of print]
3. Wu A, Thakker MM, Wladis, E, Weinberg DA. Eyelash excision for severe, recurrent cicatricial entropion. *Ophthalmic Plastic and Reconstructive Surgery* 2010 Jan;26(2):112-116.
4. Jakobiec F, Mehta M, Iwamoto M, Hatton M, Thakker M, Fay A. Intratarsal Keratinous Cysts of the Meibomian Gland: Distinctive Clinicopathologic and Immunohistochemical Features in Six Cases. *American*

- Journal of Ophthalmology* 2010 Jan;149(1):82-94.
5. Barrett RV, Meyer DR; ASOPRS Acquired Lacrimal Sac Fistula Study Group. Acquired lacrimal sac fistula after incision and drainage for dacryocystitis: a multicenter study. Collaborators: Bersani TA, Dale D, Hartstein ME, Hildebrand LA, Kahn N, Long JA, Mannor G, Thakker M. *Ophthalmic Plastic and Reconstructive Surgery* 2009 Nov-Dec;25(6):455-7.
 6. Thakker M. Evaluation and Management of Orbital Floor Fractures: Oculoplastic Trauma Course, AAO website (9/2009).
<http://one.aao.org/CE/EducationalContent/Courses.aspx>
 7. Thakker M. Evaluation and Management of Medial Orbital Wall Fractures: Oculoplastic Trauma Course, AAO website (9/2009),
<http://one.aao.org/CE/EducationalContent/Courses.aspx>
 8. Thakker MM, Huang J, Possin D, Ahmadi AJ, Mudumbai R, Orcutt JC, Tarbet KJ, Sires BS. Human orbital sympathetic pathways. *Ophthalmic Plastic and Reconstructive Surgery* 2008 Sept-Oct;24 (5):360-6.
 9. Singh CN, Thakker MM, Sires BS. Pyogenic granuloma associated with chronic actinomyces canaliculitis. *Ophthalmic Plastic and Reconstructive Surgery* 2006 May-Jun;22(3):224-5.
 10. Thakker MM, Usha KR. Orbital foreign body and ruptured globe after needfish impalement. *Archives of Ophthalmology* 2006;22(2): 284.
 11. Thakker MM, Ray S. Vision-limiting complications in open globe injuries. *Canadian Journal of Ophthalmology* 2006;41(1):86-92.
 12. Thakker MM, Rubin PAD, Chang E. Pre-B-cell acute lymphoblastic leukemia presenting as an orbital mass in an 8-month old. *Ophthalmology* 2006;112(1): 343-346.
 13. Thakker MM, Zhang J, Sires BS. Chronic inflammation from polycarbonate motility peg inhibits osteogenesis in a human hydroxyapatite orbital implant. *Ophthalmic Plastic and Reconstructive Surgery* 2005;21(5): 399-401.
 14. Thakker MM, Tarbet KJ, Sires BS. Postoperative chemosis after cosmetic eyelid surgery: surgical management with conjunctivoplasty. *Archives of Facial Plastic Surgery* 2005;7(3):185-188.
 15. Thakker MM, Fay A, Pieroth L, Rubin PAD. Fibrovascular ingrowth into hydroxyapatite and porous polyethylene orbital implants wrapped with acellular dermis. *Ophthalmic Plastic and Reconstructive Surgery* 2004;20(5) 368-373.
 16. Thakker MM, Rubin PAD. Pharmacology and clinical applications of Botulinum toxins A and B. *International Ophthalmology Clinics*, Summer 2004: 147-163.
 17. Thakker MM. A 40 year old woman with decreased vision for one year. *Digital Journal of Ophthalmology* 8 (2), 2003 (www.djo.harvard.edu, Grand Rounds)
 18. Thakker MM, Perez VL, Moulin A, Cremers SL, and Foster CS. Multifocal nodular scleritis and episcleritis with undiagnosed Hodgkin's lymphoma. *Ophthalmology* 2003;110:1057-1060.
 19. Hatton MP, Thakker MM, Ray SK. Orbital and adnexal trauma associated with open globe injuries. *Ophthalmic Plastic and Reconstructive Surgery* 2002; 18 (6):458-461.
 20. Thakker MM and Rubin PAD. Mechanisms of acquired blepharoptosis. *Ophthalmology Clinics of North America* 2002; 15: 101-111.
 21. Thakker MM, Jacobs DS. A 72 year old male with progressive, bilateral

decrease in vision. *Digital Journal of Ophthalmology* 7 (1), 2002
(www.djo.harvard.edu, Grand Rounds)

22. Thakker M, Park J, Carey V, and Lee JC. Staphylococcus aureus serotype 5 capsular polysaccharide is antiphagocytic and enhances bacterial virulence in a murine bacteremia model. *Infection and Immunity* 1998; 66(11): 5183-5189.
23. Gazzaley AH, Thakker MM, Hof PR, Morrison JH. Preserved number of entorhinal cortex layer II neurons in aged macaque monkeys. *Neurobiology of Aging* 1997; 18 (5):549-553.

Book Chapter: •Thakker MM, Orcutt JC. Chapter 29: Neuro-ophthalmic aspects of orbital disease. In: *Duane's Clinical Ophthalmology*. Lippincott, Williams and Wilkins, 2004.

Presentations:

- Auerho A, Hatton MP, Thakker MM. Microbiologic features of canaliculitis. Poster presented at the American Society of Ophthalmic Plastic and Reconstructive Surgery annual conference (2009), San Francisco, CA.
- Wu A, Thakker MM, Wladis, E, Weinberg DA. Eyelash excision for severe, recurrent cicatricial entropion. Poster presented at the American Society of Ophthalmic Plastic and Reconstructive Surgery annual conference (2007).
- Krawitz S, Thakker MM. Pre-B-cell acute lymphoblastic leukemia presenting as an orbital mass in an 8-month old. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (4/04).
- Spitellie P, Thakker MM, Sires BS. Chronic inflammation from polycarbonate motility peg inhibits osteogenesis in a human hydroxyapatite orbital implant. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (2004). Ft. Lauderdale, FL.
- Thakker MM, Zhang J, Francis J, Sires BS. Histology of eyelid capillary hemangiomas treated with pulsed-dye laser and intralesional steroid. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (2004). Ft. Lauderdale, FL.
- Thakker MM, Ray S, Hart L, D'Amico DA. Ultrasound characteristics of eyes with endophthalmitis. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (2003), Ft. Lauderdale, FL.
- Thakker MM. Results of Retinal Detachment Surgery in Zones I, II & III Open Globe Injuries. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (2002), Ft. Lauderdale, FL.
- Thakker MM, Ray S. Causes of Visual Limitation in Zones I, II, & III Open Globe Injuries. Poster presented at the Association for Research in Vision and Ophthalmology annual conference (2001), Ft. Lauderdale, FL.
- Thakker MM, Gazzalley A, Morrison J, Hof P. Preserved Number of Entorhinal Cortex Layer II Neurons in Aged Macaque Monkeys. Poster presented at American Federation of Aging Research annual conference (1997), Atlanta, GA

Journals Reviewed:

- Archives of Ophthalmology
- Ophthalmic Plastic and Reconstructive Surgery
- Ophthalmology
- Digital Journal of Ophthalmology (2009-present)

Educational Experience/Lectures

- Faculty:**
- Infections and Inflammations of the Orbit. Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School (December 2009)
 - Evaluation and Management of Orbital Fractures. Department of Otolaryngology Grand Rounds, Massachusetts Eye and Ear Infirmary, Harvard Medical School (August 2009)
 - The Eye Exam: Harvard Medical School (September 2009)
 - Organizer/preceptor, Facial Anatomy Dissection. Division of Ophthalmic Plastic Surgery, Massachusetts Eye and Ear Infirmary, Harvard Medical School (August 2009).
 - Member of ASOPRS committee to redesign and update website (2008-present)
 - Faculty representative for Medical Student Surgical Education Committee, University of Vermont School of Medicine (2007-present)
 - Director of oculoplastic/orbital surgery rotation for otolaryngology residents University of Vermont (2006-2009).
 - Preceptor for procedural dermatology fellows in periocular reconstruction. University of Vermont (2006-2009).
 - Diagnosis and Management of Orbital Floor Fractures. Oculoplastic Trauma Course for American Academy of Ophthalmology website.
 - Diagnosis and Management of Medial Orbital Wall Fractures. Oculoplastic Trauma Course for American Academy of Ophthalmology website
 - The Eye Exam. University of Vermont School of Medicine (May 2008)
 - Diagnosis and Management of Thyroid Orbitopathy. Department of Endocrinology Grand Rounds, University of Vermont (January 2008)
 - Techniques of Periorbital and Eyelid Reconstruction. Multidisciplinary Plastic Surgery Conference, University of Vermont (December 2007)
 - Common Causes of Vision Loss. University of Vermont School of Medicine (December 2007)
 - Preceptor for Medical Student Gross Anatomy Facial Dissection Lab (Nov. 2007)
 - Medical and Surgical Management of Thyroid Orbitopathy. Ophthalmology Grand Rounds, University of Vermont (September 2007)
 - The Eye Exam. University of Vermont School of Medicine (May 2007)
 - Thyroid Orbitopathy: An update on diagnosis and management. Department of Surgery Grand Rounds, University of Vermont (April 2007)
 - Common Causes of Vision Loss. University of Vermont School of Medicine (April 2007)
 - Mohs Reconstruction of the Eyelid. Multidisciplinary Plastic Surgery Conference, University of Vermont (December 2006)
 - Granular Cell Tumor of the Eyelid. Department of Ophthalmology Grand Rounds, Dartmouth University (December 2006)
 - Eye Trauma. University of Vermont School of Medicine (September 2006)
 - Eyelid Trauma and Reconstruction. Division of Ophthalmology Grand Rounds, University of Vermont (July 2006).
 - Eye Emergencies. University of Vermont School of Medicine (May 2006)
 - The Eye Exam. University of Vermont School of Medicine (May 2006)
- Fellowship:**
- Trauma of the eyelids and lacrimal system. Department of Ophthalmology, University of Washington (August 2003)
 - Preceptor: Orbital Dissection Course. University of Washington (August 2003)
 - Monthly orbital/eyelid tumor clinicopathologic correlation conferences

(July 2003-July 2005)

Medical School:

- Co-director of Embryology Review Course
- Physiology Teaching Assistant
- Basic Cardiac Life Support Instructor

Undergraduate:

- Tutor for high school students at Nativity Preparatory School, Boston, MA
- Organic Chemistry Tutor, Boston College

Volunteer

Residency

- Organized vision screening program for Indian Medical Association of New England Diwali Festival, Boston, MA

Medical School:

- Mount Sinai Scholars Mentoring Program
A youth outreach program for inner city high school students interested in science and medicine.

Undergraduate:

- New York Department of Juvenile Justice
- Haley House Soup Kitchen
- Boston Food Bank

Interests

- Skiing, hiking, swimming