

Aaron M. Fay, MD

PART I: General Information

Office Address: Massachusetts Eye & Ear Infirmary
 Oculoplastic and Orbital Surgery
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Place of Birth: New York, NY

Education:

1986	BSME, <i>cum laude</i>	Tufts University College of Engineering
1986	BA, <i>cum laude</i>	Tufts University College of Liberal Arts
1993	MD	Columbia University College of Physicians & Surgeons

Postdoctoral Training:

1994	Intern	Medicine and Surgery	Overlook Hospital, Summit NJ Columbia University
1997	Resident Physician	Ophthalmology	Edward S. Harkness Eye Institute Columbia University
1998	Clinical Fellow	Ophthalmic Pathology	Mass. General Hospital Harvard University
1999	Clinical Fellow	Oculoplastic & Orbital Surgery	Mass. Eye & Ear Infirmary Harvard University

Licensure and Certification:

1994 Medical License: New Jersey, New York, Massachusetts
 1998 Certified by the American Board of Ophthalmology

Academic Appointments:

2005 Assistant Clinical Professor Harvard Medical School

Hospital or Affiliated Institution Appointments:

1999-	Assistant Surgeon in Ophthalmology	Massachusetts Eye & Ear Infirmary
2000-	Clinical Instructor in Ophthalmology	Brigham & Women's, Beth Israel Hospitals
2005-	Clinical Associate in Surgery	Massachusetts General Hospital
2005-	Attending	St. Luke's Hospital (NYC)

Principal Clinical and Hospital Service Responsibilities:

2006- Director, Oculoplastics and Orbital Surgery, Massachusetts Eye and Ear Infirmary

Professional Societies:

1995	Association for Research in Vision and Ophthalmology	Member
1999	American Academy of Ophthalmology	Diplomate
2000	New England Oculoplastics Society	Program Committee
2002	Mass. Society of Eye Physicians & Surgeons	Member
2005	Amer Society of Ophthalmic Plastic and Reconstruction Surg	Fellow
2005	New England Oculoplastics Society	Acting President

Editorial Boards:

1993	Founder, Editor-in-Chief	P&S Medical Review
1998	ad hoc reviewer	Ophthalmology
1999	ad hoc reviewer	Ophthal Plast Reconstr Surg
2002	ad hoc reviewer	Mideast J Ophthalmol
2003	ad hoc reviewer	Archives Ophthalmol
2005	ad hoc reviewer	Lasers Med Surg

Part II: Research, Teaching, and Clinical Contributions**Narrative report of Research, Teaching, and Clinical Contributions:**

I am primarily a clinician. My position at a major academic hospital has provided the opportunity to expand the nature of my professional career. Most of my practice is occupied with typical subspecialty consultations in ophthalmic-facial reconstructive surgery. In addition, since 1999, I have been a member of the Massachusetts General Hospital Hemangioma and Vascular Malformations Clinic, founded in 199 and headed by Martin Mihm, MD. Periocular vascular tumors have become the focus of my subspecialty expertise and research. The MGH HVMA clinic meets monthly on a Saturday. I have been asked to speak on occasion on the clinical considerations of periocular vascular lesions, and have had the opportunity to operate at the Arkansas Children's Hospital in this capacity. In addition, I was honored as Physician of the Year by the Vascular Birthmark Foundation of New York in 2006.

I have twice been overseas with ORBIS international, a major philanthropic organization dedicated to the eradication of preventable blindness. Recently, as a result of this exposure, I have received a

growing number of international consultations. In addition to these patients, I receive several email inquiries each day from around the world.

My teaching responsibilities are primarily clinical, although I do lecture the residents three to four times each year. An individual first year ophthalmology resident is assigned to me for 6 week clerkships, during which we interact intensively in the clinic and operating room. I continue to make myself available for medical student preceptorships, although my outlying subspecialty does not always make this a particularly good field for medical students to observe for more than one week. I am shadowed, from time to time, by various students and international observers.

My research initially focused on advancing techniques in minimally-invasive oculo-nasal (tear-duct) surgery. As my focus has shifted to pediatric vascular lesions, my research has also shifted. Currently, I am evaluating the effects of congenital and neonatal vascular lesions on orbit development, and the sequelae of these lesions on eyelid and visual development.

Report of Current Research Activities

1. Primary Investigator, Development of the infantile face and skull in native North Americans. This investigation of the Harvard University Anthropology collection at the Peabody Museum involves volumetric and linear caniofaciometry of infantile specimens as it pertains to expansive (hemangioma) and destructive (retinoblastoma) pediatric lesions.
2. Co-investigator, Vascular lesions of the Orbit and Ocular Adnexa. This investigation involves immunohistopathologic identification of previously unstained orbit and eyelid specimens in an effort to classify ophthalmic vascular lesions in accordance with current medical understanding of these lesions.
3. Primary Investigator, Endocanalicular Nd:YAG Laser Dacryocystorhinostomy. A retrospective outcome study of this 5-year-old technique by the original developers of the technique.

Report of Teaching

Local contributions

1. 1994-7 *Ophthalmology* Major Clinical Year Columbia
University College of Physicians & Surgeons
Lecturer for 150 medical students, 2 weeks preparation for a 1-hour lecture
2. 1994-7 Science Basic to the Practice of Medicine and Dentistry Columbia
University College of Physicians & Surgeons
Dissection instructor for 150 medical students
3. 1999 *Orbital Anatomy and Emergency Oculoplastic Surgery for Otolaryngologists*
Lecturer for 10 otorhynolaryngology residents
2 days preparation leading to a 2 hour lecture
4. 2000, 2002 *Orbital and Ophthalmic Plastic Surgery Dissection Course*
Lecturer for 25 residents and fellows
3 weeks preparation for a 2-hour lecture, three cadaver dissection laboratories

5. 2002 Preceptor, visiting medical students
1-month individual clinical rotations at Harvard Medical/Mass Eye & Ear Infirmary
6. 2005 Preceptor, HMS students, 1-month clinical rotations in ophthalmology

Invited Lectures-Local

2003 *Ophthalmic considerations in the management of pediatric vascular malformations.*
Grand Rounds, Brigham & Women's Hospital

Advisory and supervisory responsibilities

1999- Supervise ambulatory clinic in oculofacial surgery with first and second-year residents, and first and second year fellows 2 days a week. Supervise surgical instruction in the operating room and outpatient procedure rooms with residents and fellows 2 days a week.

Names of advisees or trainees:

1999-2000	Rahmin Tayani, MD	Private practice oculoplastics
1999-2001	Gabriel Garza, MD	Oculoplastic/Orbit Surgery (Mexico)
2000-2001	Alex Tan, MD	Oculoplastic/Orbit Surgery (Manila)
2000-2002	Arun Jain, MD	Private practice oculoplastics
2001-2003	Eli Chang, MD	Oculoplastic/Orbit Surgery, UCLA
2002-2004	Carlo Bernardino, MD	Oculoplastic/Orbit Surgery, Emory
2003-2004	John Mandeville, MD, PhD	Private practice, oculoplastics
2003-2005	Mark Hatton, MD	Private practice, oculoplastics
2004-2005	Patrick Boulos, MD	Oculofacial Surgery, U. Montreal
2005-2007	James Kirsztrot, MD	Part-time Staff, MA Eye and Ear
2005-2007	Calliope Allen, MD	Oculoplastic/Orbit Surgery, US Navy
2007-	John Nguyen, MD	Fellow, MA Eye and Ear
2007-	Kristine Lo, MD	Fellow, MA Eye and Ear

Invited Lectures-National

- 2002 Contemporary Management of Hemangiomas and Vascular Malformations of the Head and Neck: Orbital and Periorbital Lesions
American Academy of Pediatrics Section on Bronchoscopy and Otolaryngoscopy
- 2005 Ophthalmic Considerations of Port Wine Stains
Port Wine Stain Conference, Beckman Laser Institute, University of California Irvine

Invited Lectures-International

1997	Visiting Faculty	Seva Foundation, Madurai, India
2000	Charter Faculty	MGH Vascular Anomalies Clinic
2001	Visiting Faculty	Orbis Internat'l, Urumqi City Hospital, China
2002	Visiting Faculty	Arkansas Children's Hospital
2003	Visiting Faculty	Queen Elizabeth Hospital, Barbados
2004	Oculoplastic Manifestations of Orbital and Periorbital Vascular Tumors	Indian Medical Society, Dahod Branch, Gujarat, India
2005	Visiting Faculty	Drashti Natralaya Eye Hospital, Dahod, India

Report of Clinical Activities

1. My current academic practice is limited to eyelid, orbit, lacrimal, and facial reconstruction, and also includes a minor component of cosmetic facial surgery. I have special concentrations in clinical treatment of vascular lesions of the eyelid, face, and orbit, as well as laser treatment of lacrimal obstructions. I attend half the week at MEEI as described above. The other half of my work week is spent in private practice with my father, including general ophthalmology and ophthalmic-facial surgery. One Saturday a month I conduct a clinic at MGH for hemangiomas and vascular anomalies.
2. The patients I see range from mundane, including benign eyelid lesions and chalazia, to life-threatening, including massive arteriovenous malformations and craniofacial malignancies.
3. I am responsible for introducing endocanalicular laser DCR to New England. I have aided in the design of orbital implants and other reconstructive elements. I am involved in pioneering surgical approaches to periocular vascular anomalies.

Part III: Bibliography

Original Articles

1. Fay AM, Trokel SL, Myers JA. Pupil Diameter and the Principal Ray. *J Cataract and Refractive Surgery* 1992;4:348-351
2. Raizman MB, Fay AM, Weiss JS. Dapsone-Induced Neutropenia in Patients Treated for Ocular Cicatricial Pemphigoid. *Ophthalmology* 1994; 101:1805-1807
3. Fay AM, Kane SA, Kazim M, Odel JG. Magnetic Resonance Imaging of Optic Perineuritis. *Journal of Neuro-Ophthalmology*. 1997;17(4):247-249
4. Fay AM, Leib ML, Fountain K. Multiple Myeloma Involving the Orbit. *Ophthalmic Plastic and Reconstructive Surgery*. 1998;14(1):67-71
5. Fay AM, Michalos P, Rubin PAD. Endocanalicular Neodymium:YAG Laser Dacryocystorhinostomy. *International Ophthalmology Clinics*. 1999;39(1):177-84

6. Rubin PAD, Fay AM, Remulla HD, Maus M. Ophthalmic Plastic Applications of Acellular Dermal Allografts. *Ophthalmology* 1999;106:2091-7
7. Rubin PAD, Fay AM, Remulla HD. Primary Placement of Motility Coupling Post in Porous Polyethylene Orbital Implants. *Archives of Ophthalmology* 2000;118:826-32
8. Fay AM, Pieroth L, Rubin PAD. An Animal Model of Lower Eyelid Spacer Grafting with Acellular Dermis. *Ophthalmic Plastic and Reconstructive Surgery* 2001;17:270-5
9. Fay AM, Lee LC, Pasquale LR. Dermatochalasis Causing Apparent Bitemporal Hemianopsia. *Ophthalmic Plastic and Reconstructive Surgery* 2003;19:151-3
10. Thakker M, Fay AM, 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):368-73
11. Hong J, Hatton M, Leib ML, Fay AM. Endocanalicular Laser Dacryocystorhinostomy: A Review of 118 Consecutive Surgeries. *Ophthalmology* 2005;112:1629-33

Proceedings of Meetings

1. Florakis GJ, Fay AM, Srinivasan BD. Corneal Tattooing to Treat Glare Symptoms Following Radial Keratotomy. *World Congress on the Cornea IV*, April 1996
2. Fay AM, Braunstein RE, Cotliar AC, Gorman BD, Peterson KS, Jacobs JC. High-dose pulse intravenous corticosteroids to treat uveitis in children. *Ocular Microbiology and Immunology Group*, October 1996
3. Fay AM, Braunstein RE, Cotliar AM, Weiss MJ, Srinivasan BD. Vitreous Extrusion through Anterior Chamber Paracenteses. *American Society of Cataract and Refractive Surgery*, April 1997
4. Leib ML, Fay AM. Endocanalicular Neodymium:YAG Laser Dacryocystorhinostomy. *American Society of Ophthalmic Plastic & Reconstructive Surgery Annual Scientific Symposium*, October 1997
5. Fay AM, Michalos P, Rubin PAD. Endocanalicular Neodymium:YAG Laser Dacryocystorhinostomy. *Surgical Advances in Ophthalmology*, Massachusetts Eye and Ear Infirmary, February 1998
6. Fay AM, Rubin PAD, Gliklich R. Modified Temporoparietal Fascial Flap for Anophthalmic Orbital Reconstruction. *American Academy of Ophthalmology*, November 1998
7. Rubin PAD, Fay AM, Remulla HD, Maus M. Ophthalmic Plastic Applications of Acellular Dermal Allografts. *American Academy of Ophthalmology*, November 1998

Textbook Chapter and Major Review Articles

1. Florakis GJ, Fay AM, Darrell RW, Srinivasan BD. Corneal Tattooing to Treat Glare Symptoms Following Radial Keratotomy in Lass (ed.) *Advances in Corneal Research*, 1997, Plenum Press, New York
2. Fay AM, Jakobiec FA. Diseases of the Visual System. in Goldman L (Ed.). *Cecil Textbook of Medicine 21st Ed.* 2000 Saunders, Philadelphia
3. Garza G, Fay AM, Rubin PAD. Vascular lesions of the Orbit and Eyelids. *International Ophthalmology Clinics* 2001;41:43-55
4. Fay AM. External/Orbit in: Friedman N, Pineda R, Kaiser P (Eds.) *Massachusetts Eye and Ear Infirmary Illustrated Manual of Ophthalmology* 2003 Saunders, Philadelphia
5. Fay AM. Lids/Lashes/Lacrimal in: Friedman N, Pineda R, Kaiser P (Eds.) *Massachusetts Eye and Ear Infirmary Illustrated Manual of Ophthalmology* 2003 Saunders, Philadelphia
6. Fay AM, Jakobiec FA. Diseases of the Visual System in: Goldman L (Ed.). *Cecil Textbook of Medicine 22nd Ed.* 2004 Saunders, Philadelphia
7. Fay AM, Rubin PAD. Oculoplastic Considerations in Facial Paralysis. in McKenna MJ, Nadol JB (Eds.) *Surgery of the Ear and Temporal Bone.* 2004 Lippincott Williams & Wilkins, Philadelphia
8. Fay AM. Periocular Vascular Anomalies in: Albert D, Jakobiec F (eds). *Principles and Practice of Ophthalmology*, 3rd Ed 2007

Clinical Communications and Case Reports

1. Rubin PAD, Fay AM, Remulla HD. Application of Acellular Dermal Allografts: Author's reply. *Ophthalmology* 2000;107:1967
2. Rubin PAD, Fay AM, Remulla HD. Pegging Porous Polyethylene Implants: Author's reply. *Archives of Ophthalmology* 2001;119:1394-5
3. Fay AM. The Facts are Clear. *Ophthalmology* 2002;109:1411
4. Fay AM, Rubin PAD. Pitfalls of the HA Pegging System. *Ophthalmology* 2002;109:1413
5. Fynn-Thompson N, McKiernan JM, Fay AM. Transitional Cell Carcinoma of the Urinary Bladder Metastatic to the Orbit. *Ophthalmic Plastic and Reconstructive Surgery* 2003;19:165-7
6. Fay AM, Fynn-Thompson N, Ebb D. Klippel-Trénaunay Syndrome and Rhabdomyosarcoma in a 3-Year-Old. *Archives of Ophthalmology* 2003;121:727-9
7. Fay AM, Varvares M, Fynn-Thompson N. Letter: Orbital exenteration for rhabdomyosarcoma in children. *Archives of Ophthalmology* 2003;121:1662

8. Vavvas D, Fay AM, Watkins L. Two cases of orbital lymphangioma associated with vascular abnormalities of the retina and iris. *Ophthalmology* 2004;111:189-92
9. Andreoli CM, Hatton M, Semple JP, Soukiasian SH, Fay AM. Perilimbal conjunctival schwannoma. *Archives of Ophthalmology* 2004; 122:388-9
10. Vavvas D, Fay AM. Orbital Lymphangioma: authors' reply. *Ophthalmology* 2004;111:1436
11. Fay AM. Botulinum Toxin Type A for Dysthyroid Upper Eyelid Retraction. *Ophthalmic Plastic and Reconstructive Surgery* 2005;21(1):81
12. Fay AM. Juvenile Hemangiomas: New Concepts and Management Strategies. *Current Opinion*, American Academy of Ophthalmology January 2006
13. Bernardino CR, Mihora LD, Fay AM, Rubin PAD. Orbital complications of hydrogel scleral buckles. *Ophthal Plast Reconstr Surg* 2006;22:206-8

Educational Material

Editor-in-Chief and Founder, *P&S Medical Review*, 1991-1993

Numerous patient education brochures

Nonprint Materials

Fay AM, *Digital J Ophthalmol* (www.djo.harvard.edu)

Abstracts

1. Hong J, Hatton M, Fay AM. Retrospective Review of 48 Consecutive Endocanalicular Nd:YAG Laser DCRs. *Investigative Ophthalmology and Visual Science* 2003
2. Kim E, Bernardino CR, Fay AM, Rubin PAD. Hydrogel Spheres for Evisceration Implants. *Investigative Ophthalmology and Visual Science* 2003
3. Bernardino CR, Fay AM, Rubin PAD. Complications of Hydrogel in Ophthalmology. *Investigative Ophthalmology and Visual Science* 2003
4. Singer M, Fay AM. Lysozyme testing in sarcoidosis. *Investigative Ophthalmology and Visual Science* 2005