

Samir Melki, M.D. Ph.D.

Curriculum Vitae

Name: Samir A. Melki

Work Phone: (617) 202-2020

Work FAX: (617) 734 - 3264

Education

1983-1986	BS	Biology	American University of Beirut, Beirut Lebanon
1986-1987	Med1	Medicine	American University of Beirut
1987-1991	PhD	Molecular Physiology and Biophysics Thesis advisor: Nada Abumrad, PhD	Vanderbilt University School of Medicine
1991-1994	MD		Vanderbilt University School of Medicine

Postdoctoral Training

1994-1995	Transitional Intern		Chestnut Hill Hospital, Thomas Jefferson University, Philadelphia, PA
1995-1998	Resident	Ophthalmology	Georgetown University Hospital, Washington DC
1998-2000	Clinical Fellow	Cornea and Refractive Surgery	Massachusetts Eye and Ear Infirmary
2010-2011		Managing Healthcare Delivery	Harvard Business School

Faculty Academic Appointments

2000-2008	Clinical Instructor	Ophthalmology	Harvard Medical School
2008-2015	Clinical Assistant Professor	Ophthalmology	Harvard Medical School
2015- present	Associate Prof, part time	Ophthalmology	Harvard Medical School

Appointments at Hospitals/Affiliated Institutions

Samir Melki, M.D. Ph.D. Curriculum Vitae

2014-present	Surgeon	Ophthalmology	Massachusetts Eye and Ear Infirmary
2000-2014	Assistant Surgeon	Ophthalmology	Massachusetts Eye and Ear Infirmary
2003-2016	Staff Surgeon	Ophthalmology	Brigham and Women's Hospital

Major Administrative Leadership Positions

Local

2020 – Now	Medical Director and Founder	Boston Vision
2000-2020	Director and Founder	Boston Eye Group. Founded an academically –oriented multispecialty ophthalmology practice. It offers a Fellowship training program since 2007

Regional

2011-2016	Board Member	Qualsight Inc. Provides quarterly feedback on laser vision correction operations. This includes medical, business and marketing aspects of laser vision correction.
2016-2022	Board Member	Surgisite Boston. Clinical and Management decision in surgery center performing >14000 cases yearly.
2015- 2022	Member	Sumaira Foundation to increase awareness for Neuromyelitis Optica (NMO)

National and International

2004-2013	Medical Director	UK Specialist Hospital. Set up a free standing outpatient surgical center in coordination with the UK Department of Health. Provided ongoing oversight of clinical operations including physician
-----------	------------------	---

Samir Melki, M.D. Ph.D.

Curriculum Vitae

recruitment, quality control, and surgical audits.

2010- Present	Visiting Corneal Surgeon	Beirut Eye Specialist Hospital. Introduced Keratoprosthesis surgery to Lebanon and regularly perform surgical sessions in coordination with local surgeons.
2023	Charter Fellow	World College of Refractive Surgery

Committee Service

Local:

1991-1992	International Health Committee Vanderbilt University.
1992-1993	Regional Coordinator for the International Health Task Force, American Medical Student Association.
1994-1995	Graduate Education Committee, Chestnut Hill Hospital, PA.
2008-Present	Fellowship Selection Committee, Cornea Department Massachusetts Eye & Ear Infirmary, Boston, MA.

National/International:

1995-1996	Vanderbilt Alumni Recruitment Committee.
2005-2013	Ophthalmic Service Improvement Committee, UK Specialist Hospital.
2010-2013	Strategic Development Group, collaborative group to enhance Ophthalmic delivery in South West England.

Professional Societies

2011-Present	The Cornea Society
1995-Present	American Academy of Ophthalmology.
1995-Present	American Society of Cataract and Refractive Surgery.
1996-Present	Association for Research in Vision & Ophthalmology.
1999-Present	International Society of Refractive Surgery.

Editorial Activities

Ad hoc Reviewer:

- *Cornea*

Samir Melki, M.D. Ph.D.

Curriculum Vitae

- *Journal of Cataract and Refractive Surgery*
- *Eye*

Other Editorial Roles:

2000-Present Pre-publication projects reviewer, Slack Inc.

2010 Member of Faculty 1000, a peer-review of Ophthalmology publications.

Honors and Prizes

1992	Microbes and Defenses Academic Society	Vanderbilt University	
1997	Worthen Center Award for Excellence in Eyecare Research	Georgetown University	
1997	Chief Resident	Georgetown University Dept. of Ophthalmology	
1998	Worthen Center Award for Excellence in Eyecare Research	Georgetown University	
1999	Chief Fellow	Cornea and Refractive Surgery, Harvard Medical School	
2003	Best Paper of Session	American Society of Cataract and Refractive Surgery	
2004	Runner-up, ASCRS video festival	Refractive Complications, San Diego, CA.	
2006	Runner-up, Best presentation, "Challenging Cararact Surgery Session"	American Society of Cataract and Refractive Surgery	
2009	Best paper award	European Association for Vision and Eye Research	
2010	Best paper of session	American Society of Cataract and Refractive Surgery	
2011	Achievement award	American Academy of Ophthalmology	
2013	Grand Prize of scientific video competition	ASCRS	
2013	Most Read Paper in IOVS in 2013	IOVS	Collagen Cross-Linking Using Rose Bengal and Green Light to Increase Corneal Stiffness May 01, 2013; 54:3426-3433

Samir Melki, M.D. Ph.D.

Curriculum Vitae

2016	Named Among Top 300 Refractive Surgeons in the World	Ocular Surgery News
------	--	---------------------

Report of Funded & Unfunded Projects

2007-2013	Principal Investigator. Investigating a novel device to wirelessly measure intraocular pressure through an implanted sensor, Massachusetts Eye & Ear Infirmary (MEEI-HMS). This is a collaborative project with Claes Dohlman MD and a German company (Implandata) which manufactures the device. We have completed animal experiments at MEEI. This has led to the implantation, by myself, of the first intraocular device to measure pressure by telemetry in a human in June of 2011.
2009-2016	Collaborating with Irene Kochevar Ph.D. at the Wellman Laboratory at Massachusetts General Hospital. The project involves studying a new modality for corneal collagen crosslinking.
2012-2016	Investigator in an FDA clinical trial to examine the effect of corneal collagen crosslinking on patients with Keratoconus and post-Lasik ectasia.

Report of Local Teaching & Training

Teaching of Students in Courses:

1997	Ophthalmology Skills Transfer for First Year Residents. Georgetown University, Washington, DC. Senior Instructor. Designed curriculum and supervised teaching.
1998	Introduction to Anterior Segment Surgery. Georgetown University, Washington, DC. Senior Instructor. Designed curriculum and supervised teaching.
2006-present	Advanced Ophthalmology OP508 M.8. Harvard Medical. Tutor.
2008-Present	Harvard Medical School PD2 Course. Tutor in a 3 hours course.

Samir Melki, M.D. Ph.D.

Curriculum Vitae

Formal Teaching of Residents, Clinical Fellows & Research Fellows (post-docs):

- 2008-2015 Yearly lecture to MEEI residents about cornea and refractive surgery topics.
- 2008-Present Monthly round-table discussion of Cornea clinical cases (Cornea Club) with MEEI fellows and residents.
- 2016 Round table advice to graduating residents: the business of ophthalmology. Boston University.

Clinical Supervisory and Training Responsibilities

- 2000-present Supervise Cornea & Refractive Surgery fellows in clinic and operating theatre to improve medical & surgical skills. Involves regular interaction in a didactic & clinical setting. Cornea Fellow: 5 days/week; MEEI fellow: 1 day/week

Formally Supervised Trainees

- 2007-2013 Supervise clinical research fellow in a project to study a novel device to wirelessly measure intraocular pressure through an implanted sensor. Principal investigator.
- 2009-present Master's Thesis Supervisor, Boston University Masters in Health Sciences.

Formal Teaching of Peers (e.g., CME & other continuing education courses):

- 2003-Present 1-hour quarterly course to optometrists on eye care related topics. Boston, MA.
- 2004 Surface Ablation in Refractive Surgery, Optometry EyeSaver Conference, Boston, MA

Report of Invited Teaching & Presentations

No presentations below were sponsored by outside entities

National:

- 2000-2008 101 Pearls in Cornea, Cataract & Refractive Surgery. American Society of Cataract & Refractive Surgery Yearly Course. Senior Instructor.
- 2000 LASIK Controversies. American Society of Cataract & Refractive Surgery Course. Participant

Samir Melki, M.D. Ph.D.

Curriculum Vitae

2009	Intractable Rainbow Glare after Intralase, Intralase Users meeting, San Francisco, CA.
2009	Extreme Cornea. American Academy of Ophthalmology. Instruction course. Participant.
2010	A case of Intractable Rainbow Glare after Intralase. American Academy of Ophthalmology. Refractive Surgery Subspecialty Day. Chicago, IL.
2010	Extreme Cornea. American Academy of Ophthalmology. Instruction Course. Participant.
2010	Invited Speaker, Georgetown University, Ophthalmology Department.
	Extreme Cornea. American Academy of Ophthalmology. Instruction Course. Participant.
2015	
2016	Invited Speaker. New England Ophthalmic Society
	Invited Session Moderator. New England Ophthalmic Society
2016	Invited Speaker. New England Ophthalmic Society
2018	Invited Session Moderator. Surgical Complications. New England Ophthalmic Society
2018	Visiting Professor, Georgetown University
2022	Distinguished Guest Faculty, Buffalo University Ophthalmology Department – Graduation

International:

2004	Fixing the LASIK Flap. European Society of Cataract & Refractive Surgery Course. Senior Instructor.
2012	Invited speaker at the Bristol Eye Hospital, UK.
2015	Invited speaker at the annual Canadian Ophthalmic Society, Montreal.
2016	Invited speaker at the World Ophthalmology Congress, Tokyo
2016	Invited speaker at the Lebanese Ophthalmic Society
2016	Invited Speaker at the World Ophthalmology congress
2016	Invited speaker at the Lebanese Ophthalmic Society
2016	Invited speaker at the Indian Intraocular and Implant and Refractive Surgery Convention
2016	
2016	Invited speaker at the World Ophthalmology Congress of the International Council of Ophthalmology, Mexico

Samir Melki, M.D. Ph.D.

Curriculum Vitae

2018	Invited speaker, International Society of Refractive Surgery meeting, Vienna, Austria
2018	Invited Speaker, Johnson and Johnson, Advances in Cataract Surgery, Cairo, Egypt
2021	Invited Speaker, Moorefield Eye Hospital, Dubai
2022	Invited Speaker, Omani Ophthalmic Society, Annual Meeting

Report of Clinical Activities and Innovations

Current Licensure and Certification

1998-present	Massachusetts Medical License
2005-present	General Medical Council certification, UK
2000- present	American Board of Ophthalmology

Practice Activities

2000- present	Ophthalmologist	Private practice, Boston Vision, Brookline, MA (80%)
2000- present	Ophthalmologist	Mass. Eye and Ear, Beth Israel Deaconess Medical Center, Boston, MA (20%)

Clinical Innovations

Developed and published the “Potential acuity pinhole”: a simple method to measure potential visual acuity in patients with cataracts. This was a method that was tested by myself when I was a resident at Georgetown University (1995-1998). I put together a prospective clinical trial to study its validity during that period of time. This culminated in a publication in the peer-reviewed literature. (**Melki SA**, Safar A, Martin J, Ivanova A, Adi M. Potential acuity pinhole: a simple method to measure potential visual acuity in patients with cataracts, comparison to potential acuity meter. Ophthalmology. 1999;106 (7):1262-7). It is difficult to know how widespread the use of this technique is in the ophthalmic community.

Designed a LASIK flap stabilizer to surgically manipulate the corneal flap when needed. This was developed in 2002 and was produced by a medical instruments company (Rhein Medical). It has been available for sale since then. I have no financial interest in this product nor am I aware of how widespread its use is.

Samir Melki, M.D. Ph.D.

Curriculum Vitae

Initiated the idea to use umbilical cord serum to treat persistent corneal epithelial defects. A clinical trial proved its efficacy and was published in the British Journal of Ophthalmology.

Was the first to perform human implantation of a device to measure intraocular pressure by telemetry. Led the team investigating the device from the ex-vivo experiments to animal studies until human implantation. Rabbit studies were published in IOVS.

Initiated the idea of using Rose Bengal Dye instead of Riboflavin to induce corneal collagen crosslinking. This may allow a safer and shorter procedure time in treating patients with corneal ectatic disorders.

Developed and validated a surgical checklist to minimize human errors during laser vision correction. A standardized list does not exist for the more than 800,000 procedures done in the US per year.

Submitted provisional patent application for an intraocular fixation device (April 2015).

Report of Education of Patients & Service to the Community

Activities

2000-2008 Regular (approximately on a monthly basis) seminars to patients about Cataract treatment strategies. Lecturer. Boston Vision.

Report of Scholarship

Publications

Peer reviewed publications in print or other media

Research Investigations

1. Abumrad NA, Melki SA, Harmon CM. Transport of fatty acid in the isolated rat adipocyte and in differentiating preadipose cells. Biochem Soc Trans. 1990;18(6):1130-2.
2. Abumrad NA, Forest C, Regen DM, Barnella US, Melki SA. Metabolism of oleic acid in differentiating BFC-1 preadipose cells. Am J Physiol. 1991;261(1 Pt 1):E76-86.
3. Melki SA, Abumrad NA. Glycerolipid synthesis in isolated adipocytes: substrate dependence and influence of norepinephrine. J Lipid Res. 1992;33(5):669-78.
4. Melki SA, Abumrad NA. Expression of the adipocyte fatty acid-binding protein in streptozotocin-diabetes: effects of insulin deficiency and supplementation. J Lipid Res. 1993;34(9):1527-34.
5. Melki SA, Safar A, Martin J, Ivanova A, Adi M. Potential acuity pinhole: a simple method to measure potential visual acuity in patients with cataracts, comparison to potential acuity meter. Ophthalmology. 1999;106(7):1262-7.

Samir Melki, M.D. Ph.D.
Curriculum Vitae

6. Melki SA, Safar A, Yaghouti F, Scharper P, Scharper M, Zeligs B, MacDowell AL, Goldberg MA, Lustbader J. Effect of topical povidone-iodine versus topical ofloxacin on experimental Staphylococcus keratitis. Graefes Arch Clin Exp Ophthalmol. 2000;238(5):459-62.
7. Mulroy L, Kim J, Wu I, Scharper P, Melki SA, Azar DT, Redmond RW, Kochevar IE. Photochemical keratodesmos for repair of lamellar corneal incisions. Invest Ophthalmol Vis Sci. 2000;41(11):3335-40.
8. Melki SA, Talamo JH, Demetriades AM, Jabbur NS, Essepian JP, O'Brien TP, Azar DT. Late traumatic dislocation of laser in situ keratomileusis corneal flaps. Ophthalmology. 2000;107(12):2136-9.
9. Vajpayee RB, Mukerji N, Tandon R, Sharma N, Pandey RM, Biswas NR, Malhotra N, Melki SA. Evaluation of umbilical cord serum therapy for persistent corneal epithelial defects. Br J Ophthalmol. 2003;87(11):1312-6.
10. Taneri S, Koch JM, Melki SA, Azar DT. Mitomycin-C assisted photorefractive keratectomy in the treatment of buttonholed laser in situ keratomileusis flaps associated with epithelial ingrowth. J Cataract Refract Surg. 2005 Oct;31(10):2026-2030.
11. Zerbe BL, Belin MW, Ciolino JB; Boston Type 1 Keratoprosthesis Study Group. Results from the multicenter Boston Type 1 Keratoprosthesis Study. Ophthalmology. 2006 Oct;113(10):1779.e1-7.
12. Dagher MA, Todani A, Melki SA. The LASIK Buttonhole: Classification and Management Algorithm. J of Cataract Refract Surg. 2008 Nov;34(11):1892-9.
13. Todani A, Melki SA. Pterygium: Current concepts in pathogenesis and treatment. Int Ophthalmol Clin. 2009 Winter ;49(1):21-30.
14. Todani A, Melki SA. LASIK interface fluid. Ophthalmology. 2009 Apr;116(4):815; author reply 816.
15. Harissi-Dagher M, Frimmel S, Melki SA. High Myopia as a risk factor for post-Lasik ectasia: a case report. Digital Journal of Ophthalmology. Vol 15:1. 2009
16. Todani A, Melki SA. Late-onset epithelial ingrowth after laser in situ keratomileusis. J Cataract Refract Surg. 2009 Nov;35(11):2022-3.
17. Todani A, Al-Arfaj K, Melki SA. Repositioning free laser in situ keratomileusis flaps. J Cataract Refract Surg. 2010 Feb;36(2):200-2.
18. Melki SA, Cherfan D. Inaccurate interchange of terms to define astigmatic cornea. J Cataract Refract Surg. 2010 Oct;36(10):1796.

Samir Melki, M.D. Ph.D.

Curriculum Vitae

19. Melki SA, Harissi-Dagher M, Wu S, Fava M. Viscoelastic-Assisted DSAEK. Melki SA, Harissi-Dagher M, Wu S, Fava MA. *Ophthalmology*. 2011 May;118(5):1003-4.
20. Melki SA, Harissi-Dagher M. The Coaxially Sighted IOL Light Reflex for Centration of the Multifocal Single Piece Intraocular Lens. Melki SA, Harissi-Dagher M. *Can J Ophthalmol*. 2011 Aug;46(4):319-21.
21. Maddox rod effect to confirm the visual significance of laser in situ keratomileusis flap striae. Choi CJ, Melki SA. *J Cataract Refract Surg*. 2011 Oct;37(10):1748-50.
22. Intraocular pressure measurement by radio wave telemetry. Todani A, Behlau I, Fava M, Cade F, Cherfan D, Zakka FR, Jakobiec F, Gao Y, Dohlman CH, Melki SA. *Invest Ophthalmol Vis Sci*. 2011.
23. Inadvertent LASIK Flap Creation Over a Soft Contact Lens. Sadaka A, Cherfan DG, Melki SA. *J Refract Surg*. 2011 Nov 10;1-2.
24. Risk factors for the development of retroprosthetic membranes with Boston keratoprosthesis type 1: multicenter study results. Rudnisky CJ, Belin MW, Todani A, Al-Arfaj K, Ament JD, Zerbe BJ, Ciolino JB; Boston Type 1 Keratoprosthesis Study Group. *Ophthalmology*. 2012 May;119(5):951-5.
25. Loose anchoring suture to secure a free flap after laser in situ keratomileusis. Choi CJ, Melki SA. *J Cataract Refract Surg*. 2012 Jul;38(7):1127-9.
26. Refractive surgical problem: September consultation. Galor A, Güell J, Hurmeric V, Kymionis GD, Lindfield D, Melki S, Ritterband D, Vaddavalli PK. *J Cataract Refract Surg*. 2012 Sep;38(9):1698-9.
27. Retention of the Boston keratoprosthesis type 1: multicenter study results. Ciolino JB, Belin MW, Todani A, Al-Arfaj K, Rudnisky CJ; Boston Keratoprosthesis Type 1 Study Group. *Ophthalmology*. 2013 Jun;120(6):1195-200. doi: 10.1016/j.ophtha.2012.11.025. Epub 2013 Mar 15.
28. Collagen cross-linking using rose bengal and green light to increase corneal stiffness. Cherfan D, Verter EE, Melki SA, Gisel TE, Doyle FJ Jr, Scarcelli G, Yun SH, Redmond RW, Kochevar IE. *Invest Ophthalmol Vis Sci*. 2013 May 13;54(5):3426-33.
29. Boston type I Keratoprosthesis for Treatment of Gelatinous Drop-Like Corneal Dystrophy After Repeated Graft Failure. Fadlallah A, Jakobiec FA, Mendoza PR, Pierre Zalloua P, Melki SA. *Semin Ophthalmol*. 2013 Oct 11.
30. Sandwich Fibrin Glue Technique for Attachment of Conjunctival Autograft during Pterygium Surgery. Fava M, Choi C, Mollayes G, Melki SA. *Can J Ophthalmol*. 2013 Dec;48 (6):516-20.

Samir Melki, M.D. Ph.D.

Curriculum Vitae

31. Gamma-irradiated Corneas as a Carrier for the Boston type 1 Keratoprosthesis: Advantages and Outcomes in a Surgical Mission Setting . Ali Fadlallah, Marwan Atallah, Georges Cherfan, Shady T. Awwad, Zeba A. Syed, Samir A. Melki SA, Cornea. 2014 Mar;33 (3):235-9
32. Reliable Intraocular Pressure Measurement Using Automated Radiowave Telemetry. Eleftherios Paschalis, MSc, PhD, Fabiano Cade, MD, MSc, Melki SA, MD, PhD, Louis R. Pasquale, MD, Claes H. Dohlman, MD, PhD, Joseph B. Ciolino, MD. Clin Ophthalmol. 2014 Jan 7;8:177-85.
33. Successful femtosecond LASIK flap creation despite multiple suction loss. Syed Z, Melki SA. Digital Journal of Ophthalmology. Volume 20, Number 1. Jan 2014.
34. Intraocular Pressure Fluctuation and Glaucoma Progression: What Do We Know? Matthew C. Leidl M.D, Catherine J. Choi, M.S, Zeba A. Syed., and Melki SA. Br J Ophthalmol. 2014 Mar 13. doi: 10.1136.
35. An Implantable Intraocular Pressure Transducer: Initial Safety Outcomes. Melki SA, Amit Todani, George Cherfan. JAMA Ophthalmol. 2014 Oct;132(10):1221-5. doi: 10.1001/jamaophthalmol.2014.1739.
36. Corneal Perforation by an Astigmatic Keratotomy performed with an OCT-Guided Femtosecond Laser. Daniel G. Cherfan, Melki SA. J Cataract Refract Surg. 2014 Jul;40(7):1224-7. doi: 10.1016/j.jcrs.2014.04.021.
37. Lasik Complications: Review. Deepikah Shah, Melki SA. Seminars in Ophthalmology Semin Ophthalmol. 2014 Sep-Nov;29(5-6):363-75.
38. Scleral Perforation during Routine Exaggerated Traction Test in a Patient with Osteogenesis Imperfecta. Salcone EM, Hamdy S, Melki SA, Hunter DG. J AAPOS. 2014 Dec;18(6):610-2.
39. Piggyback intraocular lens to shield the posterior capsular bag during lens exchange. Peggy Chang HY, Garrett K, Melki S. J Cataract Refract Surg. 2015 Jun;41(6):1319-21.
40. Anterior chamber gas bubble emergence pattern during femtosecond LASIK-flap creation. Robert MC, Khreim N, Todani A, Melki SA. Br J Ophthalmol. 2015 Sep;99(9):1201-5.
41. Avoidance of serious medical errors in refractive surgery using a custom preoperative checklist. Robert MC, Choi CJ, Shapiro FE, Urman RD, Melki S. J Cataract Refract Surg. 2015 Oct;41(10):2171-8.
42. Cataract surgery outcomes at a UK independent sector treatment centre. Syed ZA, Moayed J, Mohamedi M, Tashter J, Anthony T, Celiker C, Khazen G, Melki SA. Br J Ophthalmol. 2015 Nov; 99(11):1460-5.
43. Integrity of Intrastromal Arcuate Keratotomies Performed by Femtosecond Laser. Haque M, Jabbour S, Fadlallah A, Harissi-Dagher M, Chelala E, Melki S. J Refract Surg. 2016

Samir Melki, M.D. Ph.D.
Curriculum Vitae

Jan;32(1):67-8. doi: 10.3928/1081597X-20151207-02. No abstract available.

44. Visual Acuity Outcomes of the Boston Keratoprosthesis Type 1: Multicenter Study Results. Rudnisky CJ, Belin MW, Guo R, Ciolino JB; Boston Type 1 Keratoprosthesis Study Group..Am J Ophthalmol. 2016 Feb;162:89-98.e1.

45. Risk factors for loss of epithelial flap integrity in laser-assisted subepithelial keratectomy surgery. Galindo J, Fadlallah A, Robinson S, Chelala E, Melki SA. J Cataract Refract Surg. 2016 Apr; 42(4):591-5.

46. Risk Factors for Retreatment Following Myopic LASIK with Femtosecond Laser and Custom Ablation for the Treatment of Myopia. Kruh JN, Garrett KA, Huntington B, Robinson S, Melki SA. Semin Ophthalmol. 2016 Apr 6:0.

47. Corneal Crosslinking With Rose Bengal and Green Light: Efficacy and Safety Evaluation. Zhu H, Alt C, Webb RH, Melki S, Kochevar IE. Cornea. 2016 Sep;35(9):1234-41.

48. Ocular Manifestation of Leukemia Cutis. Choi CJ, Melki SA. Ophthalmology. 2016 Sep;123(9):1956.

49. Corneal Crosslinking With Rose Bengal and Green Light: Efficacy and Safety Evaluation. Zhu H, Alt C, Webb RH, Melki S, Kochevar IE. Cornea. 2016 Sep;35(9):1234-41.

50. Femtosecond laser intrastromal incisions as fiducial marks for alignment of toric IOLs. Fadlallah A, Chelala E, Robinson S, Melki S. Acta Ophthalmol. 2016 Nov;94(7).

51. Corneal Resistance to Keratolysis After Collagen Crosslinking With Rose Bengal and Green Light. Fadlallah A, Zhu H, Arafat S, Kochevar I, Melki S, Ciolino JB. Invest Ophthalmol Vis Sci. 2016 Dec 1;57(15):6610-6614.

52. Corneal Densitometry as a Tool to Measure Epithelial Ingrowth After Laser In Situ Keratomileusis. Adran D, Vaillancourt L, Harissi-Dagher M, Kruh JN, Syed ZA, Robinson S, Melki S. Cornea. 2017 Apr;36(4):406-410.

53. April consultation #4. Melki S. J Cataract Refract Surg. 2017 Apr;43(4):575. doi: 10.1016/j.jcrs.2017.04.016.

54. Accuracy of Visual Estimation of LASIK Flap Thickness. Brenner JE, Fadlallah A, Hatch KM, Choi C, Sayegh RR, Kouyoumjian P, Wu S, Frangieh GT, Melki SA. J Refract Surg. 2017 Nov 1;33(11):765-767.

55. Simple technique to avoid capsular block syndrome in femtosecond laser-assisted cataract surgery. Janbatian HY, Peng SL, Melki SA. Can J Ophthalmol. 2018 Jun;53(3):e90-e92.

Samir Melki, M.D. Ph.D.
Curriculum Vitae

56. Surgical adhesives in ophthalmology: history and current trends. Guhan S, Peng SL, Janbatian H, Saadeh S, Greenstein S, Al Bahrani F, Fadlallah A, Yeh TC, Melki SA. Br J Ophthalmol. 2018 Oct;102(10):1328-1335. Review.

56. Simple technique to avoid capsular block syndrome in femtosecond laser-assisted cataract surgery.

Janbatian HY, Peng SL, Melki SA. Can J Ophthalmol. 2018 Jun;53(3):e90-e92. doi: 10.1016/j.jcjo.2017.08.014. Epub 2017 Dec 1.

57. Potential Savings from Visit Reduction of Continuous Intraocular Pressure Monitoring. Dong J, Syed ZA, Fan K, Yahya AF, Melki SA. J Curr Glaucoma Pract. 2018 May-Aug;12(2):59-63. doi: 10.5005/jp-journals-10008-1246. Epub 2018 Aug 1.

58. Small Incision Lenticule Extraction (SMILE): Myths and Realities. Huang G, Melki S. Semin Ophthalmol. 2021 May 19;36(4):140-148. doi: 10.1080/08820538.2021.1887897. Epub 2021 Apr 6.

Non-peer reviewed scientific or medical publications/materials in print or other media

Reviews, Chapters, Monographs & Editorials

1. **Melki SA.** Patient Selection key to Good PTK Outcomes. Ophthalmology Times, Feb 1999.
2. **Melki SA.** PRK Pain Has Physical, Emotional Sides. Ophthalmology Times, Feb 1999.
3. **Melki SA.** Strategies Offer Hope for Management of Haze, Scars. Ophthalmology Times, Feb 1999.
4. **Melki SA.** High Accuracy Key in Avoiding Clear Lens Complications. Ophthalmology Times, Feb 1999.
5. **Melki SA.** 7 Pearls Can Help Avoid LASIK Complications. Ophthalmology Times, Mar 1999.
6. **Melki SA.** What Causes LASIK Flap Problems, How to Correct them. Ophthalmology Times, May 1999.
7. **Melki SA** and Azar DT. Secondary Posterior Chamber Intraocular Lenses: Bag and Sulcus Fixation. In Intraocular Lenses In Cataract and Refractive Surgery, Azar DT Ed., W.B. Saunders Publishing, 2001.
8. Vajpayee RB, **Melki SA**, Sharma N. Technique of Penetrating Keratoplasty. In Corneal Transplantation. Vajpayee RB Ed. Jaypee publishing, 2002.

Samir Melki, M.D. Ph.D.

Curriculum Vitae

9. Roque MR, **Melki SA**, Azar DA, Yeung E. Management of Flap Complications in LASIK. In LASIK: Fundamentals, Surgical Techniques and Complications. Azar DA, Koch DD Eds. Marcel Dekker publishing. 2003.
10. Khan B, Nguyen A, **Melki SA**. LASIK postoperative Complications. In Step by Step LASIK Surgery. Vajpayee RB Ed. Jaypee publishing, 2003.
11. **Melki SA**. A string of Lasik pearls. Review of Ophthalmology. April 2004
12. **Melki SA**. How to Get the Most of Lasik. Vol. No: 13:06Issue: 2006
13. **Melki SA**. The Case for the Large Lasik Flap. Ocular Surgery News. 2007.
14. **Melki SA**. Handle Complications Like an Expert. Review of Ophthalmology. Vol. No: 15:10Issue: 2008
15. **Melki SA**, Gatinel D, Nguyen A. The Lasik Buttonhole. Video Atlas of Advanced Ophthalmic Surgeries. Agarwal Ed. Slack inc. 2010
16. **Melki SA**. A String of Lasik Pearls. Review of Ophthalmology. 2010.
17. **Melki SA**. Contributor, Consultation Section. Journal of Cataract and Refractive Surgery. Vol 36:9, Sept 2010

Books/Textbooks for medical or scientific community:

1. Atlas of Clinical Wisdom, Cornea and Refractive. **Melki SA** & Fava M Eds. Slack Inc. 2011
2. 101 Pearls in Refractive Cataract and Corneal Surgery. Melki SA& Azar DT Eds. Slack inc. 2001 (1st ed.) 2006 (2nd ed.)
3. Step by Step LASIK Surgery. Vajpayee RB, Sullivan L, **Melki SA**, Sharma N. Eds. Jaypee, 2003
4. LASIK Emergencies. **Melki SA** & Fadlallah A. Slack Inc. 2017.

Thesis

1991 Doctoral Thesis: Lipid Metabolism In Adipocytes: I- Glycerolipid Synthesis; Kinetics and Influence of Norepinephrine. II- Effect of Streptozotocin-Diabetes On adipose-Specific Gene Expression. Ph.D. in Molecular Physiology and Biophysics. Vanderbilt University.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings (Last 5 years)

Samir Melki, M.D. Ph.D.
Curriculum Vitae

1. **Melki SA.** Telemetric IOP measurement for Keratoprosthesis. 8th Kpro study group meeting. Bascom Palmer Eye Institute. Miami. 2012
2. **Melki SA.** The Boston Kpro: Indications, Management, Results. Lebanese Ophthalmic Society. Beirut. 2012
3. **Melki SA.** A Novel Collagen Crosslinking Method. Lebanese Ophthalmic Society. Beirut. 2012
4. **Melki SA.** LASIK Complications and Management. Canadian Ophthalmic Society. Montreal. 2013
5. **Melki SA.** Does EMR make Refractive Surgery Safer. Canadian Ophthalmic Society. Montreal. 2013
6. **Melki SA.** LASIK Complications and Management. Canadian Ophthalmic Society. Montreal. 2013
7. **Melki SA.** Interactive Case Presentation. Canadian Ophthalmic Society. Montreal. 2013
8. **Melki SA.** Sandwich Glue Technique for Pterygium Surgery. Canadian Ophthalmic Society. Montreal. 2013
9. **Melki SA.** DSEK under Healon. Canadian Ophthalmic Society. Montreal. 2013
10. **Melki SA.** Scarring After Refractive Surgery. Frontiers in Corneal Research, Mass Eye and Ear Infirmary. Boston. 2013
11. Catherine Choi, Marie-Claude Robert, Fred E. Shapiro, **Melki SA.** Effect of a Surgical Safety Checklist for Refractive Procedures. American Academy of Ophthalmology. New Orleans. 2013
12. **Melki SA.** Interface Complications in Lamellar Refractive Surgery. World Ophthalmology Congress. Tokyo. 2014
13. **Melki SA.** Integrating Refractive Cataract Surgery into your Practice. New England Ophthalmology Society Debate. Boston 2015.
14. **Melki SA.** Multifocal IOLs provide significant advantage compared to monofocal IOLs. New England Ophthalmology Society Debate. Boston 2015
15. **Melki SA.** A tissue sparing technique For PTK w MMC for Intractable Corneal Haze. American Academy of Ophthalmology. Las Vegas. 2015.
16. **Melki SA.** Risk Factors for Poor Epithelial Flap Quality with LASEK. American Academy of Ophthalmology. Las Vegas. 2015.
17. **Melki SA.** Long Term Risk Factors for Dry Eyes and Visual Aberrations after Corneal Refractive Surgery. American Academy of Ophthalmology. Las Vegas. 2015

Samir Melki, M.D. Ph.D.
Curriculum Vitae

18. **Melki SA.** Integrity of Intrastromal Arcuate Keratotomies performed by femtosecond laser. American Academy of Ophthalmology. Las Vegas. 2015.
19. **Melki SA.** The ethics of learning a new surgical technique. New England Ophthalmology Society. Boston 2016
20. **Melki SA.** Continuous Ambulatory IOP Measurement Using a Sulcus-Based Transducer. World Ophthalmology Congress. Guadalajara, Mexico. 2016
21. **Melki SA.** Alignment of toric IOLS. Lebanese Ophthalmic Society. Beirut Lebanon. 2016
22. **Melki SA.** Femtosecond Cataract Surgery: Myths and Realities. Lebanese Ophthalmic Society. Beirut Lebanon. 2016
23. **Melki SA.** Management of LASIK complications. Lebanese Ophthalmic Society. Beirut Lebanon. 2016
24. **Melki SA.** Refractive Mishaps: From the Peculiar to the Unique. Indian Intraocular and Implant and Refractive Surgery Convention. Chennai, India. 2016
25. **Melki SA.** Intraoperative LASIK complications. Indian Intraocular and Implant and Refractive Surgery Convention. Chennai, India. 2016
26. **Melki SA.** Postoperative LASIK complications. Indian Intraocular and Implant and Refractive Surgery Convention. Chennai, India. 2016
27. **Melki SA.** Keratoprosthesis Technique, Wet lab instructor. European Society of Cataract and Refractive Surgery. Lisbon, Portugal 2018
28. Brenner J., Hopp, S., Yahya A., Cherfan D., **Melki SA.** A Combined Manual and Photorefractive Keratectomy for Intractable Scarring after Surface Refractive Procedure. American Academy of Ophthalmology. New Orleans. 2018
29. **Melki SA.** Retrospective Analysis of Visual Outcomes in Hyperopic Laser Vision Correction Using 2 FDA-Approved Excimer Lasers. ASCRS. Washington, DC. 2018.
30. **Melki SA.** Effect of Low Predicted/Calculated Postoperative Keratometry on Corrected Distance Visual Acuity After Corneal Refractive Laser Surgery. ASCRS. Washington DC. 2018
31. **Melki SA.** My Crazy LASIK Complications. International Society of Refractive Surgery. Vienna, Austria 2018
32. **Melki SA.** Keratoprosthesis Technique, Wet lab instructor. European Society of Cataract and Refractive Surgery. Vienna, Austria 2018.

Samir Melki, M.D. Ph.D.
Curriculum Vitae

33. Brenner J, **Melki SA**. A Combined Technique of Manual and Phototherapeutic Keratectomy for Intractable Scarring After Surface Refractive Procedure. AAO. Chicago, IL. 2018.
34. **Melki SA**. LASIK nightmares. American Academy of Ophthalmology. San Francisco. 2019
35. **Melki SA**. LASIK and SMILE Emergencies. A breathless video Bonanza. American Academy of Ophthalmology. San Francisco. 2019