

CURRICULUM VITAE
The Johns Hopkins University School of Medicine

5/5/2026

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

University

2023-present Associate Professor, Department of Ophthalmology, Johns Hopkins University School of Medicine
2016-2023 Assistant Professor, Department of Ophthalmology, Johns Hopkins University School of Medicine

Hospital

2016-present Attending Physician/Surgeon, Johns Hopkins Hospital

Education and Training

Undergraduate

2004 B.Med.Sc, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Doctoral/graduate

2008 Medical Doctor degree, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Postdoctoral

2013 Ophthalmology residency, Tel Aviv Medical Center, Tel Aviv, Israel
2014 Research fellowship, Center for Nanomedicine, Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD
2016 Clinical and research fellowship, Cornea Division, Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD

Professional Experience

2016-present Attending physician/Surgeon, Johns Hopkins Hospital
2016-2018 Attending physician/Surgeon, Johns Hopkins Bayview Medical Center

PUBLICATIONS

Original Research [OR]

1. Melamed N, Chen R, **Soiberman U**, Ben-Haroush A, Hod M, Yoge Y. Spontaneous and indicated preterm delivery in pregestational diabetes mellitus. Etiology and risk factors. *Arch Gynecol Obstet.* 2008;278: 129-134.
2. **Soiberman U**, Stolovitch C, Balcer IJ, Regenbogen M, Constantini S, Kesler A. Idiopathic intracranial hypertension in children: visual outcome and risk of recurrence. *Childs Nerv Syst.* 2011;27: 1913-1918.
3. Goldenberg D, **Soiberman U**, Loewenstein A, Goldstein M. Heidelberg Spectral-Domain Optical Coherence Tomographic Findings in Retinal Artery Macroaneurysm. *Retina.* 2012;32: 990-995.
4. Michaeli A, **Soiberman U**, Loewenstein A. Outcome of Iris-fixation of subluxated intraocular lenses. *Graefes Arch Clin Exp Ophthalmol.* 2012;250: 1327-1332.
5. Trauzettel-Klosinski S, Dietz K, and the IReST study group. Standardized Assessment of Reading Performance: The New International Reading Speed Texts IReST. *Invest Ophthalmol Vis Sci.* 2012;53: 5452-5461.
6. Shemesh G*, **Soiberman U***, Kurtz S. Intraocular pressure measurements with Goldmann applanation tonometry and dynamic contour tonometry in eyes after intraLASIK or LASEK. *Clin Ophthalmol.* 2012;6:1967-70. *The first two authors contributed equally.
7. **Soiberman U**, Levy R, Leibovitch I. Adiponectin concentration in the orbital fat of patients with Graves' ophthalmopathy. *Clin Ophthalmol.* 2013;7:1723-1726.
8. Kurtz S, **Soiberman U**, Shemesh G. Comparison of Dynamic Contour Tonometry, Goldmann Applanation Tonometry and Tonopen for Measuring Intraocular Pressure in Normal Tension Glaucoma. *Harefuah.* 2013;152:643-646.
9. **Soiberman U**, Levy R, Schwartz S, Goldstein M, Loewenstein A, Barak A. Serum Ischemia Modified Albumin levels and Vascular Endothelial Growth Factor Following Intravitreal Bevacizumab Injections. *European J Ophthalmol.* 2014; 24:570-575.
10. **Soiberman U**, Goldstein M, Pianka P, Loewenstein A, Goldenberg D. Preservation of the Photoreceptor Layer Following Subthreshold Laser Treatment for Diabetic Macular Edema as Demonstrated by SD-OCT. *Invest Ophthalmol Vis Sci.* 2014;55:3054-3059.
11. **Soiberman U**, Pan Q, Daoud Y, Murakami P, Stark WJ. Iris suture fixation of subluxated intraocular lenses. *Am J Ophthalmol.* 2015;159:353-359.

12. McClellan SF, **Soiberman U**, Gehlbach PL, Murakami PN, Stark WJ. Outcomes Associated with Concurrent Iris-Sutured Intraocular Lens Placement and Subluxated Crystalline Lens Extraction. *JAMA Ophthalmol.* 2015;133(8):867-873.
13. **Soiberman U**, Gehlbach PL, Murakami P, Stark WJ. Pars plana vitrectomy and iris suture fixation of posteriorly dislocated intraocular lenses. *J Cataract Refract Surg.* 2015;41(7):1454-1460.
14. **Soiberman U**, Shai D, Loewenstein A, Barak A. Macular Hole Surgery with Internal Limiting Membrane Peeling Facilitated by Membrane-Blue versus Membrane-Blue-Dual: A Retrospective Comparative Study. *J Ophthalmol.* 2016;1292735.
15. **Soiberman U***, Kambhampati SP*, Wu T, Mishra MK, Oh Y, Sharma R, Wang J, Al Towerki AE, Yiu S, Stark WJ, Rangaramanujam KM. Subconjunctival injectable dendrimer-dexamethasone gel for the treatment of corneal inflammation. *Biomaterials.* 2017;125:38-53. *The first two authors contributed equally. [SI]
16. Foster JW, Shinde V, **Soiberman U**, Sathe G, Liu S, Wan J, Qian J, Daoud Y, Pandey A, Jun AS, Chakravarti AS. Integrated stress response and decreased ECM in cultured stromal cells from keratoconus corneas. *Invest Ophthalmol Vis Sci.* 2018;59(7):2977-2986.
17. **Soiberman U**, Shehata AEM, Lu MX, Young T, Daoud YJ, Chakravarti S, Jun AS, Foster JW. Small molecule modulation of the integrated stress response governs the keratoconic phenotype in vitro. *Invest Ophthalmol Vis Sci.* 2019;60(10):3422-3431.
18. Shehata AEM, Foster JW, Jun AS, **Soiberman U**. The Correlation between Corneal Findings and Disease Severity in Keratoconus per Scheimpflug Corneal Tomography. *J Ophthalmol.* 2020:4130643.
19. Wang X, Majumdar S, **Soiberman U**, Webb JN, Chun L, Scarcelli G, Elisseeff JH. Multifunctional synthetic Bowman's membrane-stromal biomimetic for corneal reconstruction. *Biomaterials.* 2020:119880.
20. Zhou L, Xu Z, Castiglione GM, **Soiberman U**, Eberhart CG, Duh EJ. ACE2 and TMPRSS2 are expressed on the human ocular surface, suggesting susceptibility to SARS-CoV-2 infection. *Ocul Surf.* 2020;18(4):537-544. Role: recruited subjects, data analysis and interpretation, manuscript editing.
21. Ansh DO, Li X, Gehlbach PL, Jun AS, **Soiberman U**. Prediction error in iris suture fixated intraocular lenses and long-term stability. *Clin Exp Ophthalmol.* 2020;48(9):1175-1182. Doi: 10.1111/ceo.13851.
22. Ansah DO, Wang J, Lu K, Jabbour S, Bower KS, **Soiberman U**. Post-FDA Approval Results of Epithelium-Off, Full-Fluence, Dresden Protocol Corneal Collagen Crosslinking in the USA. *Ophthalmology and Therapy.* 2020;9(4):1023-1040. DOI:10.1007/s40123-020-00306-1. [QI]
23. Shehata AEM, Kambhampati SP, Wang J, **Soiberman U**. Burst pressures in eyes with clear corneal incisions treated with ReSure glue. *J Ophthalmol.* 2021;6691489. Doi: 10.1155/2021/6691489. eCollection2021.
24. Foster JW, Parikh RN, Wang J, Bower KS, Matthaei M, Chakravarti S, Jun AS, Eberhart CG, **Soiberman U**. Transcriptomic and immunohistochemical analysis of progressive keratoconus reveal altered WNT10A in epithelium and Bowman's layer. *Invest Ophthalmol Vis Sci.* 2021;62(6):16. Doi: 10.1167/iovs.62.6.16.
25. Thanitcul C, Varadaraj V, Canner JK, Woreta FA, **Soiberman U***, Srikumaran D. Predictors of Receiving Keratoplasty for Keratoconus. *Am J Ophthalmol.* 2021;S0002-9394(21)00306-8. doi: 10.1016/j.ajo.2021.05.013. *Dr. Soiberman is a co-corresponding author together with Dr. Srikumaran.
26. Li G, Di Meglio L, Wang J, Woreta FA, Bower KS, Jhanji V, Srikumaran D*, **Soiberman U***. Crosslinking vs. Observation in Fellow Eyes of Keratoconus Patients. *J of Ophthalmol.* 2022: PMID: 35692966. *Dr. Soiberman is a co-corresponding author together with Dr. Srikumaran.
27. Son HS, Rigi M, Srikumaran D, Eberhart CG, Jun AS, **Soiberman U**. "Groove and Peel" Deep Anterior Lamellar Keratoplasty: How Deep Can You Go? *Cornea.* 2023;42(1):105-109.
28. Xiao G, Tsou BC, **Soiberman U**, Prescott CR, Srikumaran D, Woreta FA. Keratoplasty in the United States: Trends and Indications From 2015 to 2020. *Cornea.* 2022: PMID 36730420.
29. Rigi M, Son HS, Moon L, Matthaei M, Srikumaran D, Jun AS, Eberhart CG, **Soiberman U**. Collagen XII is undetectable in keratoconus Bowman's layer. *Br J Ophthalmol.* 2023: PMID 3674661.
30. Son HS, Moon L, Wang J, Eberhart CG, Jun AS, Srikumaran D, **Soiberman U**. Histological Comparative Analysis of Bowman's Layer Grafts Procured Using 3 Different Techniques. Accepted for publication in *Cornea.* 2023;42(7):888-893.
31. Mgboji GE, Varadaraj V, Thanitcul C, Canner JK, Woreta FA, **Soiberman U**, Srikumaran D. Deep anterior lamellar keratoplasty and penetrating keratoplasty for keratoconus: A claims-based analysis. *Cornea.* 2023;42(6):663-669.
32. Nugent L, Son HS, Wang J, Varadaraj V, Smith K, **Soiberman U**, Srikumaran D. Racial Variation in Visual Impairment of Patients With Keratoconus at Presentation. *Cornea.* 2023; doi: 10.1097/ICO.0000000000003302.
33. Son HS, Nugent L, Wang J, Varadaraj V, Smith K, Bower KS, Mgboji G, **Soiberman U**, Srikumaran D. Factors Associated With Receipt of Crosslinking for Keratoconus. *Cornea.* 2023; doi: 10.1097/ICO.0000000000003353.
34. Ali M, Dun C, Cho K, **Soiberman U**, Woreta F, Makary MA, Jhanji V, Srikumaran D. Infectious Keratitis After Keratoplasty in the United States: Analysis of a National Medicare Claims Data Set. *Cornea.* 2024;43(4):452-458.

35. Ali M, Dun C, Yenokyan G, **Soiberman U**, Jeng BH, Makary MA, Woreta F, Srikumaran D. Corneal Transplant Rejection Postvaccination Among Medicare Beneficiaries. *Cornea*. 2024;doi: 10.1097/ICO.0000000000003524.
36. Kaur P, Moon L, Srikumaran D, Salzberg SL, Lu J, Simner PJ, **Soiberman U**. No Evidence of Chronic Infection in a Metagenomic Sequencing Study of the Keratoconus Corneal Epithelium. *J Clin Med*. 2024;13(12):3399;doi: 10.3390/jcm13123399.
37. Ali M, Dun C, Chang DF, Son HS, Woreta FA, **Soiberman U**, Prescott CR, Makary MA, Srikumaran D. Surgeon adoption of immediate sequential bilateral cataract surgery in the United States from 2018 to 2022. *J Cataract Refract Surg*. 2025;51(3):210-217. doi: 10.1097/j.jcrs.0000000000001597. PMID: 39696765.
38. Moon L, Kaur P, Wang J, Sodhi A, Eberhart C, **Soiberman U**. Mechanical Strain of Corneal Epithelium Influences the Expression of Genes Implicated in Keratoconus. *Invest Ophthalmol Vis Sci*. 2025;266(1):52. doi:10.1167/iovs.66.1.52. PMID: 39847367.
39. Friedrich M, Auffarth GU, **Soiberman U**, Augustin VA, Khoramnia R, Son HS. Visual and topographic outcomes after Corneal Allogeneic Intrastromal Ring Segments (CAIRS) for keratoconus: a systematic review and meta-analysis. *Am J Ophthalmol*. 2025;S0002-9394(25)00142-4. doi: 10.1016/j.ajo.2025.03.028. PMID: 40157443.
40. Kaur P, Moon L, Sharma D, Wang J, Sodhi A, Pitha I, Eberhart C, **Soiberman U**. An Ex Vivo Model to Study Early Changes in Keratoconus. *Cornea*. 2025 Jun 3. doi: 10.1097/ICO.0000000000003903. Epub ahead of print. PMID: 40459945.
41. Aamir FB, Ali M, Dun C, Prescott CR, **Soiberman U**, Makary MA, Woreta FA, Srikumaran D. Incidence, Etiology, and Treatment of Corneal Perforations in Older Adults in the United States. *Ophthalmology*. 2025 Nov 17:S0161-6420(25)00712-2. doi: 10.1016/j.ophtha.2025.11.003. Epub ahead of print. PMID: 41260398.

Review Articles [RA]

1. **Soiberman U**, Loewenstein A. Bevacizumab versus ranibizumab for the treatment of neovascular age-related macular degeneration: a review of the literature. *Expert Review of Ophthalmology*. 2010;5:603-615.
2. **Soiberman U**, Kakizaki H, Selva D, Leibovitch I. Punctal Stenosis – Definition, Diagnosis and Treatment. *Clin Ophthalmol*. 2012;6:1011-1018.
3. **Soiberman U**, Kesler A. Idiopathic intracranial hypertension – what's new in 2012? *Harefuah*. 2013;152:115-118.
4. **Soiberman U**, Foster JW, Jun AS, Chakravarti S. Pathophysiology of keratoconus: what do we know today? *The Open Ophthalmology Journal*. 2017;11:252-261.
5. Zhu A, Jun AS, **Soiberman U**. Combined Protocols for Corneal Collagen Crosslinking with Photorefractive Surgery for Refractive Management of Keratoconus – Update on Techniques and Review of Literature. *Ophthalmology and Therapy*. 2019;8:15-31.
6. Son HS, Friedrich M, Jun AS, **Soiberman U**. Advancements and Innovations in Keratoconus Management: A review of Current Practices. *J Clin Med*. 2025;14:7491.

Case Reports [CR]

1. Coleman M, **Soiberman U**, Stark WJ. 10-0 polypropylene sutures do not undergo biodegradation after 13 years in the eye. *Digital Journal of Ophthalmology*. 2016;22(3).
2. Mannschreck DB, Rubinfeld RS, **Soiberman U**, Jun AS. Diffuse lamellar keratitis after epi-off corneal crosslinking: An under-recognized complication? *American Journal of Ophthalmology Case Reports*. 2019;13:140-142.
3. Li G, Berkenstock M, **Soiberman U**. Corneal ulceration associated with dupilumab use in a patient with atopic dermatitis. *Am J Ophthalmol Case Rep*. 2020;19:100848. Doi: 10.1016/j.ajoc.2020.100848. eCollection.

Book Chapters, Monographs [BC]

1. Daoud Y, **Soiberman U**, Stark WJ. Iris Suture Fixation of an Intraocular Lens. In: Basic Techniques of Ophthalmic Surgery, 2nd edition, American Academy of Ophthalmology, 2015.
2. **Soiberman U**, Stark WJ, Daoud Y. Scleral Fixation of an Intraocular Lens. In: Basic Techniques of Ophthalmic Surgery, 2nd edition, American Academy of Ophthalmology, 2015.
3. **Soiberman U**, Dzhaher D, Daoud Y. Iris Suture Fixation of an Intraocular Lens. In: Basic Techniques of Ophthalmic Surgery, 3rd edition, American Academy of Ophthalmology, 2019.
4. **Soiberman U**, Mustafa O, Daoud Y. Scleral Fixation of an Intraocular Lens. In: Basic Techniques of Ophthalmic Surgery, 3rd edition, American Academy of Ophthalmology, 2019.
5. Dzhaher D, **Soiberman U**. Corneal Collagen Cross-Linking. In: Basic Techniques of Ophthalmic Surgery, 3rd edition, American Academy of Ophthalmology, 2019.

Books, Textbooks [BK]

None

Editorials [ED]

1. **Soiberman U**, Jun AS. More support for deep anterior lamellar keratoplasty over penetrating keratoplasty for keratoconus, but questions remain. *Br J Ophthalmol*. 2023; doi: 10.1097/ICO. 0000000000003405.

2. Son HS, **Soiberman U**. Big bubble formation in deep anterior lamellar keratoplasty may be more successful in early keratoconus eyes. *Br J Ophthalmol*. 2024 Oct 22;108(11):1477-1478. doi: 10.1136/bjo-2024-326213.

Letters, Correspondence [LT]

1. **Soiberman U**, Stark WJ. Luxated capsule-IOL complex with capsular tension ring lying upside down on retina – May consultation. *J Cataract Refract Surg*. 2016;42(5): 799-800.

Media Releases or Interviews [MR]

1. 3/18/2019: State of corneal crosslinking for patients with keratoconus, *Ophthalmology Times*.
<https://www.opthalmologytimes.com/view/2019-state-corneal-crosslinking-patients-keratoconus>
2. 3/17/2021: Rethink DALK – Groove and Peel technique.
<https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2FdJNrE6HEgrg%3Ft%3D1&data=04%7C01%7Cusoiber1%40jhmi.edu%7Cf4168b25e86e4a953bb508d8ea4b40b9%7C9fa4f438b1e6473b803f86f8aedf0dec%7C0%7C0%7C637516957119979964%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C2000&sdata=DCHvnbO%2B6ZJGxeR16bSkAYSInraMjqPblsjIBtSaoPg%3D&reserved=0>
3. 6/7/2022: Unilateral CXL an Acceptable Alternative in Certain Scenarios.
<https://reviewofoptometry.com/news/article/unilateral-cxl-an-acceptable-alternative-in-certain-scenarios>
4. 6/8/2022: American Academy of Ophthalmology/Academy Express: Editor's Choice
5. 8/11/2022: Commentary on an NBC News article: [Eye implant made from pig protein restored sight in 14 blind people \(nbcnews.com\)](https://www.nbcnews.com/health/health-news/eye-implant-pig-protein-restored-sight-blind-people-rcna42681) <https://www.nbcnews.com/health/health-news/eye-implant-pig-protein-restored-sight-blind-people-rcna42681>
6. 9/27/2022: Commentary for health online magazine on a study on acanthamoeba keratitis: [Reusable Contact Lenses May Increase Risk of Rare, Sight-Threatening Eye Infection](#).

Other Media [OM] (Videos, Websites, Blogs, Social Media, etc.)

<https://www.hopkinsmedicine.org/wilmer/research/cornea/keratoconus/index.html>

FUNDING

EXTRAMURAL FUNDING

Research Extramural Funding

Previous

1/2023-12/2025	Wnt dysfunction in keratoconus – from characterization to potential therapeutics Physician Scientist Award Research to Prevent Blindness Total direct cost: \$300,000 PI: Uri Soiberman Role: PI, 20% effort
9/30/18 – 8/31/22	The Role of Wnt-regulated Collagen Dysfunction in Keratoconus K08EY027474 National Eye Institute Total direct cost: \$695,208 PI: Uri Soiberman Role: PI, 75% effort
1/1/18 – 9/30/18	Robust nanofiber bandages for closure of open globe injuries 128482 Luna SBIR Total direct cost: \$101,600.06 PI: Jennifer Elisseeff Role: Co-investigator, 7% effort
5/1/18 – 12/31/20	Statistical optimization of self-assembled biosynthetic cornea implants R01EY029055 National Eye Institute Total direct cost: \$1,100,625

PI: Jennifer Elisseff:
Role: Co-investigator, 3% effort

Certification

Medical, other state/government licensure

7/16 - present Medical license #D0082072, Maryland Board of Physicians

Boards, other specialty certification

2023 – present American Board of Ophthalmology

CME Instruction

JHMI/Regional

6/13/14 Instructor, Wilmer Faculty and general ophthalmologists, Iris fixation of subluxated or dislocated IOLs, Wilmer Residents Association meeting, Baltimore, MD, USA

12/4/14 Instructor, general ophthalmologists and optometrists, Case Presentation – Cataract Extraction with Toric Intraocular Lens Implantation, The Wilmer Eye Institute's 27th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

6/19/15 Instructor, Wilmer Faculty and general ophthalmologists, Subconjunctival dendrimer-dexamethasone for the treatment of corneal inflammation, Wilmer Residents Association meeting, Baltimore, MD, USA

12/4/14 Instructor, general ophthalmologists and optometrists, Case Presentation – Corneal stem cell deficiency secondary to nab-Paclitaxel, The Wilmer Eye Institute's 28th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

6/10/16 Instructor, Wilmer Faculty and general ophthalmologists, Keratoconus and MicroRNAs, Wilmer Residents Association meeting, Baltimore, MD, USA

12/1/16 Instructor, general ophthalmologists and optometrists, Corneal Collagen Crosslinking, The Wilmer Eye Institute's 29th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

11/30/17 Instructor, general ophthalmologists and optometrists, Corneal Collagen Crosslinking, The Wilmer Eye Institute's 30th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

3/11/18 Instructor, optometrists, Corneal Collagen Crosslinking, 11th Annual Wilmer Eye Institute Evidence-Based Optometry Conference, Baltimore, MD, USA

11/29/18 Instructor, general ophthalmologists and optometrists, Corneal Collagen Crosslinking Update, The Wilmer Eye Institute's 30th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

4/7/19 Instructor, optometrists, Corneal Transplants, 12th Annual Wilmer Eye Institute Evidence-Based Optometry Conference, Baltimore, MD, USA

5/31/19 Instructor, Wilmer staff, Keratoconus, Wilmer Day of Learning, Baltimore, MD, USA

12/5/19 Instructor, general ophthalmologists and optometrists, What's New in Keratoconus Management?, The Wilmer Eye Institute's 32th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

12/3/20 Instructor, general ophthalmologists and optometrists, Keratoconus Update, The Wilmer Eye Institute's 33th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

12/2/21 Instructor, general ophthalmologists and optometrists, Keratoconus Update, The Wilmer Eye Institute's 34th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

12/1/2022 Instructor, general ophthalmologists and optometrists, Keratoconus Update, The Wilmer Eye Institute's 35th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

11/30/2023 Instructor, general ophthalmologists and optometrists, Keratoconus Update, The Wilmer Eye Institute's 36th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

12/5/2024 Instructor, general ophthalmologists and optometrists, Current Management of Keratoconus, The Wilmer Eye Institute's 37th Annual Current Concept in Ophthalmology meeting, Baltimore, MD, USA

National

None

International

11/11/2025 Panelist, cornea fellows, Cornea Society University Webinar, Topic: Medical Mysteries

Workshops /seminars

JHMI/Regional

None

National

11/15/21 Instructor, general ophthalmologists, Approach to Cataract Surgery in Corneal Diseases (ID# 455V), Cataract Surgery in Eyes with Keratoconus, American Academy of Ophthalmology Annual Meeting 2021, New Orleans, LA

11/15/21	Course leader, general ophthalmologists, What's New in the Surgical Treatment of Keratoconus (ID# 627V), Corneal Collagen Crosslinking and Deep Anterior Lamellar Keratoplasty, American Academy of Ophthalmology Annual Meeting 2021, New Orleans, LA
10/1/22	Course leader, general ophthalmologists, What's New in the Surgical Treatment of Keratoconus (ID# 247), Corneal Collagen Crosslinking and Deep Anterior Lamellar Keratoplasty, American Academy of Ophthalmology Annual Meeting 2022, Chicago, IL
10/3/22	Instructor, general ophthalmologists, Approach to Cataract Surgery in Corneal Diseases (ID# 648), Cataract Surgery in Eyes with Keratoconus, American Academy of Ophthalmology Annual Meeting 2022, Chicago, IL
11/5/23	Instructor, general ophthalmologists, Approach to Cataract Surgery in Corneal Diseases (ID# 467), Cataract Surgery in Eyes with Keratoconus, American Academy of Ophthalmology Annual Meeting 2023, San Francisco, CA
11/5/23	Course leader, general ophthalmologists, What's New in the Surgical Treatment of Keratoconus (ID# 488), Corneal Collagen Crosslinking and Deep Anterior Lamellar Keratoplasty, American Academy of Ophthalmology Annual Meeting 2023, San Francisco, CA
10/20/24	Instructor, general ophthalmologists, Approach to Cataract Surgery in Corneal Diseases (ID# 407), Cataract Surgery in Eyes with Keratoconus, American Academy of Ophthalmology Annual Meeting 2024, Chicago, IL
10/21/24	Course leader, general ophthalmologists, What's New in the Surgical Treatment of Keratoconus (ID# 619), Corneal Collagen Crosslinking and Deep Anterior Lamellar Keratoplasty, American Academy of Ophthalmology Annual Meeting 2024, Chicago, IL
4/25/2025	Instructor, general ophthalmologists, YES STL-11: DALK, American Society of Cataract and Refractive Surgeons Annual Meeting 2025, Los Angeles, CA
10/18/2025	Course leader, general ophthalmologists, What's New in the Surgical Treatment of Keratoconus (ID# 254), Corneal Collagen Crosslinking and Deep Anterior Lamellar Keratoplasty, American Academy of Ophthalmology Annual Meeting 2025, Orlando, FL

International

3/21/25	Course leader, cornea specialists, What's New in the Surgical Treatment of Keratoconus: Corneal Transplant: Deep Anterior Lamellar Keratoplasty: When and How, World Cornea Congress IX, Washington DC
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RESEARCH ACTIVITIES

Research Program Building / Leadership

2018-present Lab Director: the pathobiology of keratoconus

Research Demonstration Activities to external audience, on or off campus None

Inventions, Patents, Copyrights

2/8/16 Co-inventor, Dendrimer-Bioadhesive Polymer Hydrogel Nanoglue and Use of Thereof, awarded 8-17-2017

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2021-2025	Faculty Senate member, Johns Hopkins School of Medicine
2022-2023	Council member, Johns Hopkins University Council

Editorial Activities

Editorial Board appointments

2019	Ad hoc editor, <i>Translational Vision Science & Technology</i>
2021-2022	Reviewing Editor, <i>Ocular Immunology and Inflammation</i>
2022-2024	Advisory Board member, <i>Ophthalmology and Therapy</i>
2022-present	Reviewing Editor, <i>Frontiers in Ophthalmology</i>
2022-present	Editorial Board member, <i>Cornea Open</i>
2023-present	Editorial Board member, <i>Ocular Immunology and Inflammation</i>
2023-2024	Editorial Board member, <i>Eye</i>
2024-present	Section Editor, <i>Eye</i>
2024-present	Editorial Board member, <i>Cornea</i>

Journal peer review activities

2008-present Lancet

Ophthalmic Surgery
 Lasers & Imaging
 Medical Science Monitor
 PLoS One, Eye (London)
 Journal of Ocular Pharmacology and Therapeutics
 Experimental Eye Research
 BMC Ophthalmology
 Ocular Immunology & Inflammation
 Investigative Ophthalmology Visual Science
 JAMA Ophthalmology
 American Journal of Ophthalmology
 British Journal of Ophthalmology
 Current Eye Research
 Cornea
 Ophthalmology
 Survey of Ophthalmology
 The Journal of Clinical Investigation
 Scientific Reports
 Graefe's Archive for Clinical and Experimental Ophthalmology
 American Journal of Ophthalmology Case Reports
 Translational Vision Science & Technology
 Eye and Vision
 Ophthalmic Research
 Ophthalmology Science
 Ophthalmology and Therapy
 Science Advances
 PNAS

Advisory Committees, Review Groups/Study Sections

2021-present	Member, World Association of Eye Hospital, Keratoconus medical outcomes committee: this is an international panel of cornea experts focusing on creating a proposed standard value-based keratoconus outcome set for future studies
2022-present	Member, American Academy of Ophthalmology, ONE Network – Cornea committee
2024-present	Member, American Academy of Ophthalmology, Webinar planning committee
2022-2024	Member, Eye Bank Association of America – Medical Review Subcommittee
2024	2 nd Keratoconus and Ectatic Diseases Consensus panel member
2025	Ad hoc NEI study section, Early Career Reviewer, Bethesda, MD, USA

Professional Societies

2014-2015	Member in training, The Association for research in vision and ophthalmology
2017-present	Member, The Association for research in vision and ophthalmology
2019-2023	Member, The American Academy of Ophthalmology
2023-present	Fellow, The American Academy of Ophthalmology
2022-present	Member, American Academy of Ophthalmology, ONE Network – Cornea committee, Webinar planning committee
2019-present	Member with thesis, Cornea Society
2021-present	Member, Eye and Contact Lens Association
2021-present	Member, PanCornea
2021-present	Member, Global Education and Research Society of Ophthalmology
2021-2024	Member, American Society of Cataract and Refractive Surgery

Session Chair

2/18/2023	Co-moderator, Cornea Society Symposium, All India Ophthalmological Society for the International Ophthalmic Conclave Zoom webinar. Based out of India: Cornea and Lens based Astigmatism Management.
5/8/2024	Session co-chair, Paper session: Keratitis, ARVO annual meeting, Seattle, WA
5/16/2024	Session Chair, American Academy of Ophthalmology Webinar. Based out of San Francisco, CA: New IOL Formulas and Difficult Calculations.
5/4/2025	Session co-chair, Poster session: Corneal Surgery I, ARVO annual meeting, Salt Lake City, UT

5/4/2025 Session co-chair, Paper session: Corneal Surgery, ARVO annual meeting, Salt Lake City, UT
 5/15/2025 Session Chair, American Academy of Ophthalmology Webinar. Based out of San Francisco, CA: An Uncomplicated Overview of Cataract Surgery Complications.

RECOGNITION

Awards, Honors

2018 National Eye Institute sponsored Mentored Career Development Award (K08EY027474)
 2023 Physician Scientist Award, Research to Prevent Blindness
 2024 American Academy of Ophthalmology Achievement Award
 2025 Wilmer Cornea and External Eye Disease Fellowship Clinical Teaching Award

Invited Talks

JHMI/Regional

3/30/23 Lessons Learned from the Keratoconus Corneal Epithelium. Wilmer WARM seminar, Baltimore, MD.

National

5/6/20 Wnt induced collagen XII dysfunction in the keratoconus epithelium – a novel pathway for potential intervention. ARVO, Baltimore, MD, USA – invited but ARVO was [cancelled due to COVID-19](#).
 9/11/20 Keratoconus and Corneal Transplantation. Ophthalmic Anesthesia Society Virtual Conference, Chicago, IL.
 3/17/21 Advances in keratoconus management. Bascom Palmer Eye Institute. Miami, FL, via zoom.
 3/17/21 Rethink DALK: Pre-Descemetic DALK – the Groove & Peel Technique. Principles and benefits of Groove and Peel DALK. LEITR eye bank webinar, Tampa, FL.
 5/1/21 Reduced WNT10A in keratoconus corneal epithelium and Bowman's layer and upregulation of collagen I suggest Wnt signaling as a therapeutic target. ARVO Annual Meeting, virtual, Rockville, MD.
 7/27/21 Cataract Surgery in Corneal Pathology: Management of Cataracts in Patients with Keratoplasty (PKP/DALK) Combined and Staged Surgery, American Society of Cataract and Refractive Surgery Annual Meeting 2021, Las Vegas, NV
 8/7/21 DALK: No Big Bubble? No Problem! Keratoconus: Consensus, Controversies, and State-of-the-Art Treatments. Cornea Society Zoom Webinar, Based out of Fairfax, VA
 10/2/22 Is the Eye a Portal for SARS-CoV-2 Infection and are COVID-19 Patients at Risk for Ocular Pathology, Ocular COVID-19: Questions and Answers Symposium, OMIG Group, American Academy of Ophthalmology Annual Meeting 2022, Chicago, IL
 11/17/22 Manual deep anterior lamellar keratoplasty for keratoconus, Eversight eyebank Zoom Webinar. Organized by a tissue bank based out of Ann Arbor, Michigan
 1/5/23 WNT10A and COL12A1 are underexpressed in keratoconus Bowman layer, Millar Lab weekly meeting, Icahn School of Medicine at Mount Sinai, New York City, NY
 4/22/23 Key Insights Into Keratoconus, 1st Annual Keratoconus Symposium Front to Back and Everything In Between, International Academy of Keratoconus, Scottsdale, AZ
 4/22/23 Patient-centered Keratoconus Management, 1st Annual Keratoconus Symposium Front to Back and Everything In Between, International Academy of Keratoconus, Scottsdale, AZ
 4/22/23 Key Insights Into Keratoconus, 2nd Annual Keratoconus Symposium Front to Back and Everything In Between, International Academy of Keratoconus, Bethesda, MD
 1/25/24 Existing approaches to keratoconus management; Novel vs Norm: Groundbreaking Ideas in Corneal Disease, American Academy of Ophthalmology webinar (coordinated with the Cornea Society), based out of San Francisco, CA.
 7/9/24 Ask Us Anything: Audience Questions, National Keratoconus Foundation Webinar, Based out of Irvine, CA
 10/19/24 Diagnostic Modalities for Detection and Discussion on Determining Progression, Cornea Subspecialty Day, American Academy of Ophthalmology Annual Meeting 2024, Chicago, IL
 10/20/24 Contact Lenses and Therapeutic Options for Ectasia, Therapeutic Contact Lenses in Corneal Disease (ECLA symposium), American Academy of Ophthalmology Annual Meeting 2024, Chicago, IL
 4/25/25 DALK in Corneal Scar, CD-3: Session III: Complex Surgical Cornea – Video Case Review, Cornea Subspecialty Day, American Society of Cataract and Refractive Surgeons Annual Meeting, Los Angeles, CA
 10/18/25 Surgical Video – Master Class – Corneal Plication, Cornea Subspecialty Day, American Academy of Ophthalmology Annual Meeting 2025, Orlando, FL

International

5/28/19 Manual deep anterior lamellar keratoplasty for the treatment of advanced keratoconus. Pan American Association of Ophthalmology meeting 2019, Cancun, Mexico.

5/28/19 Iris suture fixated intraocular lenses. Pan American Association of Ophthalmology meeting 2019, Cancun, Mexico.

11/28/19 Corneal Crosslinking – What You Should Know. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/28/19 Anterior Segment Surgery – What’s New. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/28/19 Deep Anterior Lamellar Keratoplasty. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/29/19 Iris Sutured Intraocular Lenses. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/29/19 Keratoconus – An Update. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/29/19 Corneal Crosslinking in 2019. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/29/19 Dry Eye and Ocular Surgery. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

11/30/19 Complex Case Symposium. University of Sao Paulo Ophthalmology Congress 2019, Sao Paulo, Brazil

12/30/19 Dysregulation of Wnt signaling in the keratoconus epithelium and its effect on collagen production. Tel Aviv Medical Center, Department of Ophthalmology monthly research meeting, Tel Aviv, Israel.

6/27/21 Contact lenses for keratoconus. AIOC 2021, All India Ophthalmological Society, virtual.

10/16/21 DALK and Groove and Peel for keratoconus. State of the art surgical treatments for keratoconus. PanCornea Pan American Cornea Society Zoom Webinar. International meeting - Based out of Medellin, Colombia

11/21/21 Alternatives to Big Bubble DALK for keratoconus. Advanced and Intermediate Anterior Lamellar Keratoplasty. Global Education and Research Society of Ophthalmology Zoom webinar. Based out of India

2/18/22 Molecular mechanisms of disease in keratoconus epithelium. All India Ophthalmological Society/Contact Lens Association of Ophthalmology (CLAO) – Update on Corneal Ectasia Session Zoom webinar. Based out of India

2/18/23 A case-based approach to management of post-keratoplasty astigmatism. All India Ophthalmological Society/Cornea Society – Cornea and lens based astigmatism management Session Zoom webinar. Based out of India

9/28/22 Unilateral crosslinking and close follow-up is an acceptable alternative to immediate bilateral treatment in some, but not all keratoconus eyes, World Cornea Congress 2022, Chicago, IL

3/17/23 Crosslinking protocols – which one is better for my patient, 35th Pan American Congress of Ophthalmology, Buenos Aires, Argentina

3/19/23 New Technologies and the Management of Keratoconus: What Treatment Is Best at Each Stage of the Disease, 35th Pan American Congress of Ophthalmology, Buenos Aires, Argentina

7/7/23 WNT10A and collagen dysfunction in keratoconus, Intraocular Implant & Refractive Surgery Convention 2023, Intraocular Implant & Refractive Society, India, Chennai, India

7/7/23 Unilateral corneal collagen crosslinking with vigilant follow-up of the fellow eye is an acceptable approach to progressive keratoconus, Intraocular Implant & Refractive Surgery Convention 2023, Intraocular Implant & Refractive Society, India, Chennai, India

1/26/23 Recent insights into the biology of keratoconus, All India Ophthalmological Society Conclave – Cornea Update 2024 Session Zoom webinar. Based out of India.

3/23/25 A case of neurotrophic keratitis and HSV geographic ulcer. World Cornea Congress IX, Washington DC.

6/26/25 Peel-off techniques for deep anterior lamellar keratoplasty, Centro Mexicano de Cornea y Cirugia Refractiva, Based out of Mexico.

Visiting Professorships

9/18/25 Visiting Professor Lecture: Redefining Keratoconus Treatment. Harvard Medical School, Department of Ophthalmology, Cornea Center of Excellence.

OTHER PROFESSIONAL ACCOMPLISHMENTS

Posters

9/2009 Comparison of Dynamic Contour Tonometry, Goldmann Applanation Tonometry and Tonopen for Measuring Intraocular Pressure in Normal Tension Glaucoma. European Society of Cataract and Refractive Surgery meeting

9/2009 Measurement of Intraocular Pressure in Patients Undergoing IntraLASIK and LASEK Using Goldmann Applanation Tonometry and Dynamic Contour Tonometry. European Society of Cataract and Refractive Surgery meeting

10/2009 Measurement of Intraocular Pressure in Patients Undergoing IntraLASIK and LASEK Using Goldmann Applanation Tonometry and Dynamic Contour Tonometry. American Academy of Ophthalmology meeting

3/2011 Heidelberg Spectral-Domain Optical Coherence Tomographic Findings in Retinal Artery Macroaneurysm.

COPHY (Controversy in Ophthalmology)

4/2011 Heidelberg Spectral-Domain Optical Coherence Tomographic Findings in Retinal Artery Macroaneurysm. ARVO

10/2011 Iris fixation of dislocated IOLs. American Academy of Ophthalmology

3/2013 Serum Vascular Endothelial Growth Factor and Ischemia Modified Albumin levels after unilateral and bilateral intravitreal bevacizumab injections. ISOPT (International Symposium on Ocular Pharmacology and Therapeutics), Paris

5/2014 Preservation of the Photoreceptor Layer following Subthreshold Laser Treatment for Diabetic Macular Edema as Demonstrated by SD-OCT. ARVO

3/2015 Subconjunctival dendrimer-drug therapy for the treatment of corneal inflammation. Wilmer Research Meeting

5/2015 Subconjunctival dendrimer-drug therapy for the treatment of corneal inflammation. ARVO

5/2017 AKT and mTOR differential signaling in keratoconus compared to donor stromal cells. ARVO

5/2017 Molecular insights into ECM and collagen assembly disruptions in keratoconus. ARVO

5/2017 PAMAM dendrimer based injectable gel for the treatment of corneal inflammation. ARVO

4/2019 Gene expression in the corneal epithelium of progressive keratoconus patients. ARVO

4/2019 Regulation of the keratoconic in vitro phenotype through integrated stress response stimulation. ARVO

5/2020 Real-world results of epithelium off, full fluence, Dresden protocol cross-linking in the USA. ARVO – cancelled due to COVID-19

5/2020 Real world outcome of epithelium-off full fluence corneal collagen crosslinking in an academic medical center in the US. World Cornea Congress, Boston. Cancelled due to COVID-19

5/2020 WNT10A expression levels in the keratoconus corneal epithelium and disease severity. World Cornea Congress, Boston. Cancelled due to COVID-19

5/2021 Keratoconus: Trends in Management and Preferred Treatment Patterns. ARVO.

5/2022 Keratoconic eyes have reduced collagen XII in Bowman's layer. ARVO.

5/2024 WNT10A regulates COL12A1 in corneal epithelial cells and suggests Wnt signaling as a therapeutic target. ARVO.

10/2024 SDoH and Prevalence of Visual Impairment in a Large Multicentered KCN Cohort: A SOURCE Repository Analysis. AAO 2024.

10/2024 Management of Corneal Perforations from 2012 to 2021: A Medicare Analysis. AAO 2024.

3/2025 Mechanical Strain Reduces Collagen XII Expression in Corneal Epithelial Cells. World Cornea Congress IX.

3/2025 Management of Corneal Perforations from 2012 to 2021: A Medicare Analysis. World Cornea Congress IX.