CURRICULUM VITAE The Johns Hopkins University School of Medicine

(Signature)		
, ,	Divya Srikumaran	1/30/2024

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

University

2021-present Associate Professor of Ophthalmology

Wilmer Eye Institute, Johns Hopkins University School of Medicine

2017-present Vice Chair for Education

Wilmer Eye Institute, Johns Hopkins University School of Medicine

Hospital

2011-present Active Staff, Full-Time, Johns Hopkins Hospital

2011-2020 Courtesy Staff, The Johns Hopkins Bayview Medical Center

2015-2019 Active Staff, Howard County General Hospital

Personal Data

Wilmer Eye Institute

1106 Annapolis Road, Suite 290

Odenton, MD 21113 Clinic: (410) 874-1425 Fax: (410) 874-1429 dsrikum1@jhmi.edu

Wilmer Eye Institute

Wilmer 370

600 N Wolfe Street Baltimore, MD 21287 Clinic: 410-955-5494

Education and Training

Undergraduate

2001 B.A., Biological Sciences, Summa Cum Laude, Northwestern University, Evanston, IL

Doctoral/Graduate

2005 M.D., Northwestern University Feinberg School of Medicine, Chicago, IL

Postdoctoral

2005-2006 Preliminary Intern, Mercy Medical Center, Baltimore, MD

2006-2009 Resident, Ophthalmology, Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore, MD Fellow, Cornea, Cataract and External Disease, Wilmer Eye Institute, Johns Hopkins Hospital,

Baltimore, MD

Professional Experience

2010-2011 Cornea and External Disease Specialist

Ophthalmic Consultants of Boston, Boston, MA

2011-2021 Assistant Professor of Ophthalmology

Wilmer Eye Institute, Johns Hopkins University School of Medicine

2011-2021 Medical Director

Wilmer Eye Institute of Odenton, Johns Hopkins University, Odenton, MD

2012-2013 Associate Residency Program Director

Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD

2013-2016 Residency Program Director

Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD

2017-present Vice Chair for Education

Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD

2021-present Associate Professor of Ophthalmology

Wilmer Eye Institute, Johns Hopkins University School of Medicine

PUBLICATIONS

Original Research [OR] (*corresponding author, underline indicates primary mentee)

- 1. Sunness JS, Margalit E, **Srikumaran D**, Applegate CA, Tian Y, Perry D, Hawkins BS, Bressler NM. The long-term natural history of geographic atrophy from age-related macular degeneration: enlargement of atrophy and implications for interventional clinical trials. *Ophthalmology*. 2007;114(2):271-277.
- 2. **Srikumaran D**, Son HS, Doyle JJ, Muñoz B, Stark WJ, Jun AS. Correlation of Corneal Parameters and Visual Acuity Outcomes after Descemet Stripping Endothelial Keratoplasty. *J Clin Exp Ophthalmol.* 2013;4(6):308.
- 3. **Srikumaran D**, Munoz B, Aldave AJ, Aquavella JV, Hannush SB, Schultze R, Akpek EK. Long-term Outcomes of Boston Type 1 Keratoprosthesis Implantation: A Retrospective Multicenter Cohort. *Ophthalmology*. 2014;121(11):2159-2164.
- 4. <u>van Landingham SW</u>, **Srikumaran D**, Siddiqui AA, Swenor B, Ramulu PY. Characteristics that Predict Ophthalmic Knowledge among Ophthalmology Residents. *Ophthalmology*. 2015;122(5):1063-1065.
- 5. <u>Zebardast N</u>, Solus JF, Quigley HA, **Srikumaran D**, Ramulu PY. Comparison of resident and glaucoma faculty practice patterns in the care of open-angle glaucoma. *BMC Ophthalmol*. 2015;15:41.
- 6. <u>Ahmad S</u>, Mathews PM, **Srikumaran D**, Aldave AJ, Lenis T, Aquavella JV, Hannush SB, Belin M, Akpek EK. Outcomes of Repeat Boston Type 1 Keratoprosthesis Implantation. *Am J Ophthalmol.* 2016;161:181-187.
- 7. Singman E, **Srikumaran D**, Hackett K, Kaplan B, Jun A, Preece D, Ramulu P. Benchmarking the Wilmer general eye services clinics: baseline metrics for surgical and outpatient clinic volume in an educational environment. *BMC Med Educ.* 2016;16(1):29.
- 8. Mahoney NR, Boland MV, Ramulu PY, **Srikumaran D***. Implementing an electronic learning management system for an Ophthalmology residency program. *BMC Med Educ.* 2016;16(1):307.
- 9. <u>Puri S</u>, **Srikumaran D**, Prescott C, Tian J, Sikder S. Assessment of resident training and preparedness for cataract surgery. *J Cataract Refract Surg*. 2017;43(3):364-368.
- 10. Singman EL, **Srikumaran D**, Green L, Tian J, McDonnell P. Supervision and autonomy of ophthalmology residents in the outpatient Clinic in the United States: a survey of ACGME-accredited programs. *BMC Med Educ*. 2017;17(1):105.
- 11. <u>Lee B, D'Souza M</u>, Singman EL, Wang J, Woreta FA, Boland MV, **Srikumaran D***. Integration of a Physician Assistant into an Ophthalmology Consult Service in an Academic Setting. *Am J Ophthalmol.* 2018;190:125-133. [SI/OI]
- 12. Singman EL, Boland MV, Tian J, Green LK, **Srikumaran D**. Supervision and autonomy of ophthalmology residents in the outpatient clinic in the United States II: a survey of senior resident. *BMC Med Educ*. 2019;19(1):202.
- 13. Zafar S, Canner JK, Mir T, **Srikumaran D**, Channa R, Goldberg MF, Thorne J, Woreta FA. Epidemiology of Hyphema-Related Emergency Department Visits in The United States Between 2006 and 2015. *Ophthalmic Epidemiol.* 2019;26(3):208-215.
- 14. **Srikumaran D**, Tian J, Ramulu P, Boland MV, Woreta F, <u>Wang KM</u>, Mahoney N. Ability of Ophthalmology Residents to Self-Assess Their Performance Through Established Milestones. *J Surg Educ.* 2019;76(4):1076-1087.
- 15. Roohipoor R, Alvarez R, Brodowska K, Yaseri M, Kloek C, Riazi M, Nourinia R, Nikkhah H, Prajna NV, Krishnan C, Tuli S, Green L, Srikumaran D, Shah AS, Mantagos IS, Chiang M, Chan RVP, Loewenstein J. Evaluation of computer-based retinopathy of prematurity (ROP) education for ophthalmology residents: a randomized, controlled, multicenter study. J AAPOS. 2019;23(2):86.e1-86.e7.
- 16. <u>Zafar S, Chen X</u>, Sikder S, **Srikumaran D**, Woreta FA. Resident-performed small incision cataract surgery in a university-based practice in the USA. *Clin Ophthalmol*. 2019;13:529-534.

- 17. Singman EL, Smith K, Mehta R, Boland MV, **Srikumaran D**, Frick K, Young L, Locco G, Tian J, Kowalewski C, McDonnell P. Cost and Visit Duration of Same-Day Access at an Academic Ophthalmology Department vs Emergency Department. *JAMA Ophthalmol.* 2019;137(7):729-735.
- 18. <u>Chen X, Zafar S</u>, Sikder S, **Srikumaran D**, Boland M, Ramanathan S, Woreta F. National survey and outcomes of resident-performed cataract surgery in monocular patients in the United States. *J Cataract Refract Surg.* 2019;45(7):939-945.
- 19. <u>Zafar S</u>, Wang X, **Srikumaran D**, Sikder S, Ramulu P, Boland MV, Singman E, Woreta FA. Resident and program characteristics that impact performance on the Ophthalmic Knowledge Assessment Program (OKAP). BMC Med Educ. 2019;19(1):190.
- Vizcaino MA, Tabbarah AZ, Asnaghi L, Maktabi A, Eghrari AO, Srikumaran D, Eberhart CG, Rodriguez FJ. ADAM3A copy number gains occur in a subset of conjunctival squamous cell carcinoma and its high-grade precursors. *Hum Pathol.* 2019;94:92-97.
- 21. Zafar S, Wang P, Srikumaran D, D Schein O, Thorne JE, Makary MA, Woreta FA. Billing of cataract surgery as complex versus routine for Medicare beneficiaries. *J Cataract Refract Surg.* 2019;45(11):1547-1554.
- 22. <u>Varadaraj V</u>, Woreta FA, Stoeger CG, Tran KD, Jorgenson R, **Srikumaran D***. Surgeon Preference for Endothelial Keratoplasty Techniques. *Cornea*. 2020;39(1):2-7.
- 23. <u>Zafar S</u>, Sebestyen K, Qureshi Z, Schein O, Johnson P, **Srikumaran D**, Woreta FA. National Trends in Imaging Rates for Eye-Related Emergency Department Visits in the United States. *Am J Ophthalmol.* 2020;211:114-122.
- 24. Wang KM, Jun AS, Ladas JG, Siddiqui AA, Woreta F, **Srikumaran D***. Accuracy of intraocular lens formulas in eyes with keratoconus. *Am J Ophthalmol.* 2020;212:26-33.
- 25. <u>Zafar S</u>, Wang P, Schein OD, **Srikumaran D**, Makary M, Woreta FA. Prescribing Patterns and Costs Associated with Postoperative Eye Drop Use in Medicare Beneficiaries Undergoing Cataract Surgery. *Ophthalmology*. 2020;127(5):573-581.
- 26. Mir TA, Canner JK, <u>Zafar S</u>, **Srikumaran D**, Friedman DS, Woreta FA. Characteristics of Open Globe Injuries in the United States From 2006 to 2014. *JAMA Ophthalmol.* 2020;138(3):268-275.
- 27. <u>Zafar S</u>, Chen A, Seo SY, <u>Chen X</u>, Tian J, **Srikumaran D**, Sikder S, Woreta F. The learning curve of a surgical educator: resident cataract surgery outcomes under the supervision of one attending surgeon over five years. *J Acad Ophthalmol.* 2020;12:e15-e19.
- 28. <u>Lee B</u>, McCall TC, Smith NE, D'Souza MA, **Srikumaran D***. Physician Assistants in Ophthalmology: A National Survey. *Am J Ophthalmol.* 2020;217:261-267.
- 29. Zafar S, Bressler NM, Golnik KC, **Srikumaran D**, Ghous Z, Ip S, Chen X, Woreta FA. Fellowship Match Outcomes in the U.S. from 2010-2017: Analysis of San Francisco (SF) Match. *Am J Ophthalmol.* 2020;218:261-267.
- 30. <u>Zafar S</u>, Wang P, Woreta FA, <u>Aziz K</u>, Makary M, <u>Ghous Z</u>, **Srikumaran D***. Postoperative complications in Medicare beneficiaries following endothelial keratoplasty (EK) surgery. *Am J Ophthalmol.* 2020;219:1-11.
- 31. Louie A, Meyerle C, Francomano C, **Srikumaran D**, Merali F, Doyle JJ, Bower K, Bloom L, Boland MV, Mahoney N, Yassine D, Eric LS. Survey of Ehlers-Danlos Patients' ophthalmic surgery experiences. *Mol Genet Genomic Med.* 2020;8(4): e1155.
- **32.** Chen X, Zafar S, **Srikumaran D,** Boland M, Johnson TV, Green LK, Ramanathan S, Pettey J, Steven J, Woreta FA. Factors Influencing Postgraduate Career Decisions of Ophthalmology Residents. *J Acad Ophthalmol.* 2020;12(2);e124-e133.
- 33. Ip SS, <u>Zafar S</u>, Liu TYA, **Srikumaran D**, Repka MX, Goldstein MA, Woreta FA. Nonaccidental trauma in pediatric patients: evidence-based screening criteria for ophthalmologic examination. *J AAPOS*. 2020;24(4): 226.e1-226.e5.
- 34. Gauthier AC, <u>Oduyale OK</u>, <u>Fliotsos MJ</u>, <u>Zafar S</u>, Mahoney NR, **Srikumaran D**, Woreta FA. Clinical Characteristics and Outcomes in Patients Undergoing Primary or Secondary Enucleation or Evisceration After Ocular Trauma. *Clin Ophthalmol*. 2020;14:3499-3506.
- 35. Iftikhar M, Canner JK, Hall L, Ahmad M, **Srikumaran D**, Woreta FA. Characteristics of Orbital Floor Fractures in the United States from 2006 to 2017. *Ophthalmology*. 2021;128:463-470.
- 36. <u>Zafar S</u>, Wang P, Woreta FA, <u>Aziz K</u>, Makary M, **Srikumaran D***. Risk factors for repeat keratoplasty after endothelial keratoplasty in the Medicare population. *Am J Ophthalmol.* 2021;221:287-298.
- 37. Ahmad S, Klawe J, Utine CA, **Srikumaran D**, Jimenez J, Akpek E. Survival of penetrating keratoplasty: a claims-based longitudinal analysis. *Can J Ophthalmol.* 2021;56(1):12-16.
- 38. Wang KM, Lee B, Woreta FA, Ramanathan S, Singman EL, Tian J, **Srikumaran D***. Parental Leave Policy for Ophthalmology Residents: Results of a Nationwide Cross-Sectional Study of Program Directors. *J Surg Educ*. 2021;78:785-794.

- 39. Shah YS, <u>Zafar S</u>, Johnson TV, **Srikumaran D**, Repka MX, Woreta FA. An Algorithm for Ramp Up of Ophthalmic Elective Surgeries Post-COVID-19. *Ophthalmic Epidemiol*. 2021;28(1):90-92.
- Fliotsos MJ, Zafar S, Woreta FA, Ugoh PM, Srikumaran D*. A Comparative Analysis of Ophthalmology Resident Physician Performance Based on Use of Parental Leave Journal of Academic Ophthalmology. J Acad Ophthalmol. 2021;13(1):e1-e4.
- 41. <u>Fliotsos MJ, Zafar S</u>, Dharssi S, **Srikumaran D**, Chow J, Singman EL, Woreta FA. Objective Resident Characteristics Associated with Performance on the Ophthalmic Knowledge Assessment Program Examination. *J Acad Ophthalmol.* 2021;13(1):e40-e45.
- 42. <u>Jabbour S</u>, Jun AS, Shekhawat NS, Woreta FA, Krick TW, **Srikumaran D***. Descemet Membrane Endothelial Keratoplasty Using a Pull-Through Technique with Novel Infusion Forceps. *Cornea*. 2021;40(3):387-392.
- 43. <u>Fliotsos MJ</u>, Best MJ, Field MG, Srikumaran U, Repka MX, Woreta FA, **Srikumaran D***. Impact of reduced elective ophthalmic surgical volume on U.S. hospitals during the early coronavirus disease 2019 pandemic. *J Cataract Refract Surg.* 2021;47(3):345-351.
- 44. <u>Aguwa UT</u>, Aguwa CJ, Repka M, Srikumaran U, Woreta F, Singman EL, <u>Jenkins SG</u>, **Srikumaran D***. Teleophthalmology in the Era of COVID-19: Characteristics of Early Adopters at a Large Academic Institution. *Telemed J E Health*. 2021;27(7):739-746.
- 45. <u>Aguwa UT</u>, **Srikumaran D**, Green LK, Potts JR 3rd, Canner J, Fountain TR, Sun G, Woreta FA. Analysis of Sex Diversity Trends Among Ophthalmology Match Applicants, Residents, and Clinical Faculty. *JAMA Ophthalmol* . 2021;139(11):1184-1190.
- 46. <u>Thanitcul C</u>, Mathews P, Woreta FA, Akpek EK, <u>Varadaraj V</u>, **Srikumaran D***. Surgeon Preference for Keratoplasty Techniques and Barriers to Performing Deep Anterior Lamellar Keratoplasty. *Cornea*. 2021;40(11):1406-1412.
- 47. <u>Thanitcul C, Varadaraj V</u>, Canner JK, Woreta FA, Soiberman US, **Srikumaran D***. Predictors of Receiving Keratoplasty for Keratoconus. *Am J Ophthalmol* . 2021;231:11-18.
- 48. Kisilevsky E, **Srikumaran D**, Chew HF. Surgeon Preferences for Endothelial Keratoplasty in Canada. *Cornea*. 2021;40(11):1420-1425.
- 49. Mgboji GE, Woreta FA, Fliotsos MJ, Zafar S, Ssekasanvu J, Srikumaran D, Zhao J, Buccino DL, Regan L. Prevalence of incivility between ophthalmology and emergency medicine residents during interdepartmental consultations. AEM Educ Train. 2021;5(4):e10653.
- 50. Shah YS, Stroh IG, Zafar S, Zhang N, Sriparna M, Shekhawat N, Ghos Z, **Srikumaran D**, Woreta FA. Delayed diagnoses of Acanthamoeba keratitis at a tertiary care medical centre. *Acta Ophthalmologica* . 2021;99(8):916-921.
- 51. <u>Campbell JA</u>, Ladas JG, <u>Wang KM</u>, Woreta FA, **Srikumaran D***. Refractive Accuracy in Eyes Undergoing Combined Cataract Extraction and Descemet Membrane Endothelial Keratoplasty. *Br J Ophthalmol*. 2022;106(5):623-627.
- 52. Chen A, Canner JK, <u>Zafar S</u>, Ramulu PY, Shields WC, Iftikhar M, **Srikumaran D**, Woreta FA. Characteristics of Ophthalmic Trauma in Fall-Related Hospitalizations in the United States from 2000 to 2017. *Ophthalmic Epidemiol*. 2022;29:206-215.
- 53. Annapragada AV, <u>Jenkins SG</u>, Chang AL, Jain A, **Srikumaran D**, Srikumaran U. Factors Driving Rapid Adoption of Telemedicine in an Academic Orthopedic Surgery Department. *Telemed J E Health*. 2022;28(3):415-421.
- 54. Burton E, Arsiwala LT, Johnson TV, **Srikumaran D**, <u>Zafar S</u>, Woreta FA. Applicant Characteristics Associated with Glaucoma Fellowship Match from 2010 to 2017. *Ophthalmol Glaucoma*. 2022;5(2):233-240.
- 55. <u>Fliotsos MJ, Campbell JA</u>, Li X, Engstrom MB, Stoeger CG, McClory C, Titus MS, Johnson P, Johnston KB, Fischer T, Brooks LK, Montoya MM, Glasser DB, Akpek EK, **Srikumaran D***. Trends in Early Graft Failure Leading to Regrafting After Endothelial Keratoplasty in the United States. *Cornea*. 2022;41(7):833-839.
- 56. <u>Zafar S</u>, Dun C, **Srikumaran D**, Wang P, Schein OD, Makary M, Woreta F. Endophthalmitis Rates among Medicare Beneficiaries Undergoing Cataract Surgery between 2011 and 2019. *Ophthalmology*. 2022;129(3):250-257.
- 57. Shah YS, Fliotsos MJ, Alaqeel A, Boland MV, Zafar S, Srikumaran D, Woreta FA. Use of Teleophthalmology for Evaluation of Ophthalmic Emergencies by Ophthalmology Residents in the Emergency Department. *Telemed J E Health*. 2022;28(6):858-864.
- 58. Tsou BC, Vongsachang H, Purt B, **Srikumaran D**, Justin GA, Woreta FA. Cataract Surgery Numbers in U.S. Ophthalmology Residency Programs: An ACGME Case Log Analysis. *Ophthalmic Epidemiol.* 2022;29(6):688-695.
- 59. <u>Aguwa UT</u>, Wang J, Woreta F, Pettey J, Sun G, Pineles S, **Srikumaran D.*** Residency Program Diversity Recruitment and Education: Survey of Efforts and Barriers to Implementation. *J Surg Educ.* 2022;79(3):595-605.

- 60. Malwankar J, Son HS, Chang DF, Dun C, Woreta F, Prescott C, Makary M, **Srikumaran D.*** Trends, Factors, and Outcomes Associated with Immediate Sequential Bilateral Cataract Surgery (ISBCS) Among Medicare Beneficiaries. *Ophthalmology*. 2022;129(5):478-487.
- 61. <u>Beatson B</u>, Wang J, Boland MV, Ramulu P, Schein O, <u>Fliotsos MJ</u>, Sulewski ME Jr, **Srikumaran D**.* Corneal Edema and Keratoplasty: Risk Factors in Eyes with Previous Glaucoma Drainage Devices. *Am J Ophthalmol*. 2022;238:27-35.
- 62. <u>Lee B</u>, McCall TC, Smith NE, **Srikumaran D.*** PAs' skills in providing vision and ocular care. *JAAPA*. 2022;35(3):48-55.
- 63. Menard M, Shah YS, Stroh IG, <u>Zafar S</u>, Sriparna M, Zhang N, Agarwal AA, Shekhawat N, **Srikumaran D**, Woreta F. Microbial Profile and Clinical Outcomes of Fungal Keratitis at a Single-Center Tertiary Care Hospital. *Clin Ophthalmol* . 2022;16:389-399.
- 64. Burton E, Assi L, Vongsachang H, Swenor BK, **Srikumaran D**, Woreta FA, Johnson TV. Demographics, clinical interests, and ophthalmology skills confidence of medical student volunteers and non-volunteers in an extracurricular community vision screening service-learning program. *BMC Med Educ.* 2022;22(1):143-143.
- 65. <u>Aguwa UT</u>, **Srikumaran D**, Canner J, Knight OJ, Scott AW, Green L, Woreta F. Trends in Racial and Ethnic Diversity of Ophthalmology Residents and Residency Applicants. *Am J Ophthalmol.* 2022; 240:260-264.
- 66. Cai CX, Klawe J, Ahmad S, Zeger SL, Wang J, Sun G, Ramulu P, **Srikumaran D.*** Geographic Variations in Gender Differences in Cataract Surgery Volume Among a National Cohort of Ophthalmologists. *J Cataract Refract Surg.* 2022;48(9):1023-1030.
- 67. **Srikumaran D***, <u>Son HS</u>, Li C, Schein O, Pramanik S. Disparities in Visual Acuity Outcomes after Endothelial Keratoplasty an IRIS® Registry Analysis. *Ophthalmology*. 2022;129(8):912-922.
- 68. <u>Aguwa UT</u>, Aguwa CJ, Onor GI, **Srikumaran D**, Canner J, Knight OJ, Green LK, Woreta F. Racial and Ethnic Diversity Within U.S. Residencies: Trends from 2011 to 2019. *J Surg Educ.* 2022;79(3):587-594.
- 69. Li G, Di Meglio L, Wang J, Woreta FA, Bower KS, Jhanji V, **Srikumaran D**, Soiberman US. Crosslinking vs. Observation in Fellow Eyes of Keratoconus Patients. *J Ophthalmol.* 2022;2022:4661392.
- 70. Son HS, Lum F, Li C, Schein O, Pramanik S, **Srikumaran D.*** Risk Factors for Repeat Keratoplasty after Endothelial Keratoplasty-an IRIS® Registry Analysis. *American Journal of Ophthalmology*. 2022;242:77-87.
- 71. <u>Aguwa UT</u>, Menard M, **Srikumaran D**, Prescott C, Canner J, Woreta F. Sex diversity within US residencies: a cross-sectional study of trends from 2011 to 2019. *BMC Med Educ.* 2022;22(1):526.
- 72. Tsou BC, Eller Z M, Fliotsos MJ, Qiu M, Zafar S, Srikumaran D, Bower K, Woreta FA. Exposure of Ophthalmology Residents to Cornea and Keratorefractive Surgeries in the United States. *J Acad Ophthalmol.* 2022;14(2):e169-e177.
- 73. Jin JQ, Ahmad TR, Parikh N, **Srikumaran D**, Woreta F, Ramanathan S. In the Mind of the Ophthalmology Residency Applicant: Deciding Where to Apply, Interview, and Rank. *J Acad Ophthalmol.* 2022;14(2):e201-e208.
- 74. Huh D, Wang J, Fliotsos MJ, Beal CJ, Boente CS, Wisely CE, De Andrade LM, Lorch AC, Ramanathan S, Reinoso MA, Swamy RN, Waxman EL, Woreta FA, **Srikumaran D***. Association Between Parental Leave and Ophthalmology Resident Physician Performance. *IAMA Ophthalmol.* 2022;140(11):1066-1075.
- 75. Xiao G, Tsou BC, Soiberman US, Prescott CR, **Srikumaran D,** Woreta FA. Keratoplasty in the United States: Trends and Indications From 2015 to 2020. *Cornea*. 2022;42(11):1360-1364.
- 76. Rigi M, Son HS, Moon L, Matthaei M, Srikumaran D, Jun AS, Eberhart CG, Soiberman US. Collagen type XII is undetectable in keratoconus Bowman's layer. *Br J Ophthalmol.* 2023; bjo-2022-322180. In press.
- 77. Mgboji GE, Varadaraj V, Thanitcul C, Canner JK, Woreta FA, Soiberman US, **Srikumaran D.*** Deep Anterior Lamellar Keratoplasty and Penetrating Keratoplasty for Keratoconus: A Claims-Based Analysis. *Cornea*. 2023;42(6):663-669.
- 78. Cai CX, Wang J, Ahmad S, Klawe J, Woreta F, **Srikumaran D**, Mahoney NR, Ramulu P. National trends in surgical subspecialisation in ophthalmology in the USA. *Br J Ophthalmol.* 2023;107(6):883-887.
- Heckenlaible NJ, Dun C, Prescott C, Eghrari AO, Woreta F, Makary MA, Srikumaran D*. Predictors of Receiving Keratoplasty for Fuchs' Endothelial Corneal Dystrophy among Medicare Beneficiaries. Ophthalmol. 2023;130(1):28-38.
- 80. Massenzio SS, Uhler TA, Massenzio EM, Sun E, **Srikumaran D**, Clifton MM, Green LK, Sun G, Wang J, Woreta FA. Navigating the Ophthalmology & Urology Match with a Significant Other. *J Surg Educ*. 2023;80(1):135-142.
- 81. Son HS, Rigi M, Srikumaran D, Eberhart CG, Jun AS, Soiberman US. "Groove and Peel" Deep Anterior Lamellar Keratoplasty: How Deep Can You Go? *Cornea*. 2023;42(1):105-109.

- 82. Xiao G, **Srikumaran D,** Sikder S, Woreta F, Boland MV. Assessing Resident Cataract Surgical Outcomes Using Electronic Health Record Data. *Ophthalmol Sci.* 2023;3(2):100260-100260.
- 83. Awidi AA, Mathews PM, Shekhawat N, Woreta FA, **Srikumaran D**, Daoud YJ. Comparison of simultaneous vs sequential pars plana vitrectomy and cataract surgery. *BMC Ophthalmol.* 2023;23(1):74-74.
- 84. Sun E, Tsou B, Tian J, Eltemsah L, **Srikumaran D**, Chow J, Woreta FA. Fate of Research Articles Reported by Ophthalmology Residency Applicants: What Happens to "Submitted" and "In Preparation" Articles? *J Surg Educ.* 2023;80(5):750-756.
- 85. <u>Huh D</u>, Dun C, <u>Fliotsos MJ</u>, Jeng BH, Stoeger CG, Makary M, Woreta FA, Wolle M, **Srikumaran D***. Trends and Surgeon Variations in Early Regrafts after Endothelial Keratoplasty: Analysis of National Medicare Data Set. *Cornea*. 2023;42(8):1016-1026.
- 86. <u>Zafar S</u>, Dun C, **Srikumaran D**, Cai CX, Wang P, Schein OD, Makary M. National Physician -Level Endophthalmitis Rates for Cataract Surgery among Medicare Beneficiaries in the United States: 2011-2019. *Ophthalmology*. 2023;130(8):872-874.
- 87. Son HS, Moon L, Wang J, Eberhart CG, Jun AS, **Srikumaran D**, Soiberman US, Histological Comparative Analysis of Bowman's Layer Grafts Procured Using 3 Different Techniques. *Cornea*, 2023;42(7):888-893.
- 88. Cha E, Arsiwala-Scheppach L, **Srikumaran D**, Prescott CR. Patient Utilization of Premium Intraocular Lenses Before and During the COVID-19 Pandemic. *Eye Contact Lens*. 2023;49(7):292-295.
- 89. Nugent L, Son HS, Wang J, Varadaraj V, Smith K, Soiberman US, **Srikumaran D***. Racial Variation in Visual Impairment of Patients with Keratoconus at Presentation. *Cornea*. 2023. In press.
- Sun E, Tian J, Eltemsah L, Srikumaran D, Sun G, Chow J, Woreta FA. Impact of Gender and Underrepresented in Medicine Status on Research Productivity among Ophthalmology Residency Applicants. Am. J. Ophthalmol. 2023. In press.
- 91. <u>Son HS</u>, Nugent L, Wang J, <u>Varadaraj V</u>, Smith K, Bower KS, Mgboji G, Soiberman US, **Srikumaran D***. Factors associated with Receipt of Cross-linking for Keratoconus. Cornea 2023. In press.
- 92. Cho K, Ali M, Heckenlaible NJ, Jabbour S, Jun AS, **Srikumaran D***. Outcomes and Early Complications Using an Endothelium-in Pull-Through Descemet Membrane Endothelial Keratoplasty Technique with Preloaded Versus Surgeon-Loaded Donor Tissue in Fuchs Patients. Cornea. 2023. In press.
- 93. Zhao D, Li X, Carey AR, Henderson AD, Amin S, Edwards P, **Srikumaran D**, Woreta FA, Schultz JS, Shrivastava A. Optic Neuritis and Cranial Neuropathies Diagnosis Rates before Coronavirus Disease 2019, in the Initial Pandemic Phase and Post Vaccine Introduction. *Ophthalmol.* 2023. In Press.
- 94. <u>Huh D</u>, Yamazaki K, Holmboe E, Bartley GB, Schnabel SD, Levine RB, **Srikumaran D***. Gender Bias and Ophthalmology Accreditation Council for Graduate Education Milestones Evaluations. *JAMA Ophthalmol*. 2023;141(10):982-988.
- 95. Chen A, Dun C, Schein OD, **Srikumaran D**, <u>Zafar S</u>, Makary M, Woreta FA. Endophthalmitis rates and risk factors following intraocular surgeries in the Medicare population from 2016 to 2019. *Br J Ophthalmol.* 2023. In press.
- 96. Ali M, Dun C, Cho K, Soiberman U, Woreta FA, Makary MA, Jhanji V, **Srikumaran D.** Infectious Keratitis after Keratoplasty in the United States: Analysis of a National Medicare Claims Data Set. *Cornea.* 2023. In Press.
- 97. Ali M, Dun C, Chen A, Saeed S, Prescott CR, Makary MA, **Srikumaran D**, Woreta FA. Early Endophthalmitis Rates and Risk Factors After Corneal Transplant Surgeries in Medicare Beneficiaries from 2016 to 2019. *Cornea*. 2023. In Press.
- 98. Webb K, Dun C, Dai X, Chen A, **Srikumaran D**, Makary MA, Woreta FA. Trends of Surgery, Patient, and Surgeon Characteristics for Corneal Transplants in the Medicare Population from 2011 to 2020. *Cornea.* 2024. In Press

Review Articles [RA] (*corresponding author)

- Lekahnont K, Srikumaran D, Akpek EA. Pediatric Keratoplasty. Expert Review of Ophthalmology. 2008;3(6):655-663.
- 2. **Srikumaran D**, Akpek EK. Recent Advances in Mucous Membrane Pemphigoid. *Current Opinion in Ophthalmology*. 2012;23(6):523-527.
- 3. Chu HS, Hu FR, Liu HY, Srikumaran D.* Keratoplasty Registries: Lessons Learned. Cornea. 2023;42(1):1-11.
- Ali M, Cho K, Srikumaran D.* Fuchs Dystrophy and Cataract: Diagnosis, Evaluation and Treatment. Ophthalmol Ther. 2023;12(2):691-704.

Case Reports [CR] (*corresponding author, underline indicates primary mentee)

- 1. Hindman HB, **Srikumaran D**, Halfpenny C, Hirschbein MJ. Traumatic globe luxation and enucleation caused by a human bite injury. *Ophthal Plast Reconstr Surg.* 2007; 23(5):422-423.
- 2. Parness-Yossifon R, Bryar P, Weinstein JL, **Srikumaran D**, Mets MB. Sudden Dispersion of Retinoblastoma Shortly after Initial Chemotherapy Treatment. *Am J Ophthalmol.* 2009;147(5):903-906.
- 3. Burkholder B, **Srikumaran D**, Nanji A, <u>Lee B</u>, Weinberg RS. Inadvertant Trypan Blue Staining of the Posterior Capsule. *Am J of Ophthalmol.* 2013;155(4):625-628.
- 4. <u>Crum AR</u>, **Srikumaran D**, Woreta F. Bitot's Spots following Bariatric Surgery: An Ocular Manifestation of a Systemic Disease. *Case Rep Ophthalmol.* 2017;8(3):581-589.
- 5. <u>Lee B</u>, Cai CX, **Srikumaran D**, Woreta FA. Severe Achromobacter xylosoxidans keratitis with deep corneal involvement. *Am J Ophthalmol Case Rep.* 2018;11:128-130.
- 6. <u>Ciocco L</u>, <u>Hassan S</u>, Woreta F, **Srikumaran D***. Epithelial ingrowth through venting incision into laser-assisted in situ keratomileusis flap interface after descemet stripping automated endothelial keratoplasty. *Am J Ophthalmol Case Rep.* 2018;13:25-27.
- 7. Plum W, <u>Chen X</u>, <u>Varadaraj V</u>, <u>Srikumaran D</u>, Sikder S, Woreta FA. Pharmacologic pupillary constriction after dilated fundus examination for ectopia lentis to prevent further subluxation. *Am J Ophthalmol Case Rep.* 2020;18:100694.
- 8. <u>Jenkins SG</u>, Jun AS, Woreta FA, **Srikumaran D***. YAG Laser Treatment for Epithelial Ingrowth in Descemet Membrane Endothelial Keratoplasty Interface. *Cornea*. 2020;39(11):1439-1441.
- 9. Lee MJ, **Srikumaran D**, <u>Zafar S</u>, Salehi M, Liu TS, Woreta FA. Case series: Delayed diagnoses of Acanthamoeba keratitis. *Am J Ophthalmol Case Rep.* 2020;19:100778.
- 10. Crum AR, **Srikumaran D.*** Case Report: Intracorneal Hemorrhages Seen with Scleral Contact Lens Wear and Netarsudil Therapy. *Optom Vis Sci.* 2022;99(4):400-404.

Book Chapters, Monographs [BC] (underline indicates primary mentee)

- 1. **Srikumaran D**, Tzu JH, Akpek EK. Cicatrizing conjunctivitis. Focal Points, Clinical Modules for Ophthalmologists. San Francisco, CA: American Academy of Ophthalmology. 2010;29(1):1-9.
- Srikumaran D, Henderson BA. Intraoperative Complications of Cataract Surgery in Complications in Ocular Surgery: Guide to Managing Common Challenges. Agarwal A, Editors. Slack Inc. 2013.
- 3. <u>Chang J</u>, Sikder S, **Srikumaran D.** Vitreous Wick Syndrome in Master Techniques in Ophthalmic Surgery. Roy FH Editor. JP Medical Ltd. 2015.
- 4. <u>Wang KM</u>, **Srikumaran D**. Endothelial Keratoplasty in A Clinical Atlas of Anterior Segment Ocular Coherence Tomography. Levinson B and Woreta FA, Editors. Slack Inc., in press.

Letters, Correspondence [LT] (*corresponding author, underline indicates primary mentee)

- Weinberg RS, Burkholder BB, Srikumaran D, Lee BS. Reply: To PMID 23219064. Am J Ophthalmol. 2013; 156(5):1069-1070.
- 2. Srikumaran D, Munoz B, Akpek EK. Author reply: To PMID 25017414. Ophthalmology. 2015;122(5):e31-e32.
- 3. Singman E, McDonnell PJ, Srikumaran D. Considering Same-Day Access vs Emergency Department.
- 4. Mahoney NR, Boland MV, Ramulu PY, **Srikumaran D.** Implementing an electronic learning management system for an Ophthalmology residency program. *BMC Med Educ.* 2016;16(1):307-307.
- 5. Ophthalmic Visits in Ophthalmology Trainee Education-Reply. JAMA Ophthalmol. 2019; 137(10):1210-1211.
- 6. Zafar S, Sebestyen K, Qureshi Z, Schein O, Johnson P, **Srikumaran D**, Woreta FA. Reply to Cavuoto and Sridhar. *Am J Ophthalmol.* 2020.
- 7. Wang KM, Jun AS, Ladas JG, Siddiqui AA, Woreta F, **Srikumaran D***. Comment On: Accuracy of Intraocular Lens Formulas in Eyes with Keratoconus. *Am J Ophthalmol*. 2020;218:355-356.
- 8. <u>Jenkins SG</u>, Jun AS, Woreta FA, **Srikumaran D***. Letter to the Editor Author's Reply: YAG Laser Treatment for Epithelial Ingrowth in Descemet's Membrane Endothelial Keratoplasty Interface. *Cornea*. 2021;40(6): e11-e12.
- 9. <u>Aguwa UT</u>, **Srikumaran D**, Brown N, Woreta F. Improving Racial Diversity in the Ophthalmology Workforce: A Call to Action for Leaders in Ophthalmology. Am J Ophthalmol. 2021;223:306-307.
- 10. <u>Fliotsos MJ</u>, **Srikumaran D***, Best MJ. Reply: Impact of reduced elective ophthalmic surgical volume on U.S. hospitals during the early coronavirus disease 2019 pandemic. *J Cataract Refract Surg.* 2021; 47(8):1104-1105.
- 11. Torres RM, Reviglio V, Basanta I, **Srikumaran D.** Webinars and Continuing Medical Education: Pros, Cons, and Controversies. *South Med J.* 2022; 115(5):301-303.

12. <u>Ali M</u>, Glasser D, Jeng BH, Lass JH, Philippy B, **Srikumaran D.*** United States Cornea Graft Registry: Vision for the Future. *Ophthalmol Sci.* 2022; 2(3):100177- 100177.

Media Releases or Interviews [MR]

5/15/2013	Interview with Ophthalmology Times, "How to approach cataract surgery in keratoconus."
4/2014	Published in EyeWorld Journal Club, "Review of 'Risk factors for acute postoperative intraocular
	pressure elevation after phacoemulsification in glaucoma patients."
4/2014	Featured in the article published in Millennial Eye, "In your opinion, How Will Femtosecond Laser
	Influence Cataract Surgery for Millennial Ophthalmologists."
7/2020	Recorded interview with Ophthalmology Times to discuss study on Physician Assistant in
	Ophthalmology (OR #28), which was a top 10 story from 2020.
	https://www.mjhlifesciences.com/news-network.
8/26/2020	Interviewed by Robert Linnehan regarding my research highlighted in the article published in Ocular
	Surgery News, "Black patients at higher risk for graft failure after endothelial keratoplasty."
10/27/2020	Study (OR #47) highlighted in an article published in Telemedicine Briefings E-Newsletter, "Eying the
	Teleophthalmology Early Adopters."
11/11/2020	Audio interview by Kimberly A. Skarupski for Faculty Factory [Podcast].
	https://facultyfactory.org/podcast/#episode104.
9/29/2022	Author Podcast JAMA Ophthalmology ""Association Between Parental Leave and Ophthalmology
	D 11 D1 11 D C

FUNDING

Extramural Funding

Current

2018 Zoster Eye Disease Study

U01EY026829-01

National Eye Institute/New York University Medical Center PI: Elizabeth Cohen MD (central coordinating center)

Resident Physician Performance: A Multicenter Study".

Role: JHU Site PI (Budget: \$90,000)

Effort: 2%

2021 Diabetes endothelial keratoplasty study: impact of diabetes on corneal transplant success and cell loss

UG1EY030030-01A1 and UG1EY030039-01A1

National Eve Institute

PI: Collen Bauza, PhD and Jonathan Lass, MD (Budget: \$5,062,218)

Role: JHU site co-PI

Effort: N/A

2022 Molecular Engineering of Novel Therapies to Treat Corneal Neovascularization

R21 EY033934

National Eye Institute PI: Akrit Sodhi MD PhD Role: Co-Investigator

Effort: 2.5%

Dates: 03/01/23 - 02/29/24

A Multi-Center, Randomized, Double-Masked, Vehicle-Controlled, Parallel-Group, Study to Evaluate

the Safety and Efficacy of CSB-001 Ophthalmic Solution 0.1% in Stage 2 and 3 Neurotrophic Keratitis

Subjects

Claris Biotherapeutics/Lexitas Role: Site PI (Budget \$176,722.00)

Effort: 1%

Dates: 8/1/22 - 7/31/24

2023 A Phase IIa, Randomized, Double-Masked, Placebo-Controlled, Parallel-Group, Multicenter Study

Assessing the Efficacy and Safety of STN1010904 Ophthalmic Suspension 0.03% and 0.1% Compared

with Vehicle in Subjects with Fuchs endothelial corneal dystrophy- Phantom Study

Santen Pharmaceutical Inc.

Role: Site PI (Budget \$ 513,664.04)

Effort: 1 %

Dates: 5/25/23 - 2/13/24

2023 Expression of Pro- vs. Anti-Angiogenic Mediators in Anterior Segment Neovascular Disease

2023 EBAA Pilot Research Grant

Role: Grant Recipient/ PI (Budget \$7,500)

Effort: N/A

Dates: 7/1/2023 - 6/30/2024

Previous

2019 Endothelial Keratoplasty Outcomes: IRIS Registry Analysis

American Academy of Ophthalmology/Hoskins Center

Role: Co-Principal Investigator with Sudeep Pramanik MD, MBA

Effort: N/A

\$30,000 provided to the American Academy of Ophthalmology for IRIS Data Access

\$5,000 provided to the Co-Principal Investigator

2021 Patient- and Surgeon-Level Factors Associated with Early Re-Grafts after Endothelial

Keratoplasty: Analysis of a National Medicare Claims Dataset Eye Bank Association of America Pilot Research Grant

Role: PI (Budget: \$5,000)

Effort: N/A

2022 Gender Differences in Ophthalmology ACGME Milestones Evaluations

American Board of Medical Specialties Research and Education Foundation

Role: PI (Budget \$12,500)

Effort: 1%

Pending

None

Intramural Funding

Current

2024 Evaluation of Tomographic Features of Edema in Tube Shunt Patients

Sponsor: Wilmer Pooled Professors Fund

Direct Costs: \$50,000 Role: Principal Investigator

Effort: 2%

2022 Disparities in Keratoconus Treatment

Sponsor: Wilmer Pooled Professors Fund

Direct Costs: \$50,000 Role: Principal Investigator

Effort: 2%

Previous

2008 Long term Outcomes after Laser Photocoagulation for ROP

Sharon Solomon Research Grant

Wilmer Eye Institute

\$2,000 Effort: N/A

2009 Correlation of Corneal Parameters and Visual Acuity after DSAEK Surgery

James P. Dunn Research Grant

Wilmer Eye Institute

\$2,000 Effort: N/A

2010 Correlation of Corneal Parameters and Visual Acuity after DSAEK Surgery

Oliver Schein Research Grant

Wilmer Eye Institute

\$2,000 Effort: N/A

2020 Rates of Keratoplasty and Corneal Edema after Incisional Glaucoma Surgery

Sponsor: Wilmer Cornea Division

Direct Costs: \$70,000 Role: Principal Investigator

Effort: N/A

2021 Disparities in Keratoconus Treatment

Nexus Award for Collaborative Behavioral, Social and Systems Science Data Projects

Sponsor: Johns Hopkins University ICTR

Direct Costs: \$8,000 Role: Principal Investigator

Effort: N/A

Pending

None

CLINICAL ACTIVITIES

Clinical Focus

I have built a surgical referral practice for complex cataracts, anterior segment reconstruction, secondary intraocular lens fixation, and advanced corneal transplantation techniques in the Wilmer Eye Institute Odenton and East Baltimore practice location. My practice not only draws on referrals from the local community, but also Southern Maryland, Maryland's Eastern Shore, Virginia, West Virginia and Pennsylvania and abroad.

Certification Medical, other state/government licensure

2009-present Maryland #D69428

Boards, other specialty certification

2011-present American Board of Ophthalmology, recertified 2021

Clinical (Service) Responsibilities

2021-present Cornea, Cataract Specialist at Odenton Satellite Center and Johns Hopkins East Baltimore Campus.

2 days per week in clinic, 1-2 days per week in surgery.

2011-2021 Cornea, Cataract Specialist at Odenton Satellite Center.

2 days per week in clinic, 1-2 days per week in surgery.

2011-2021 Medical Director, Odenton Satellite Center.

2011-2015 Surgical Attending for resident anterior segment surgery, Bayview Medical Center.

2-4 days per month.

2011-2012 Cornea, External Disease Specialist, resident clinic attending Bayview Medical Center.

1-2 days per week.

Clinical Productivity

2-3 days of clinic per week, 1-2 days of surgery per week. 2011-present

Averages 3,600 patient visits and 400-500 surgeries annually.

Clinical Draw from outside local/regional area

Please refer to Clinical Focus and Clinical Program Building/Leadership.

Membership in or examiner for specialty board

Standard Setting Expert for the Written Qualifying Exam for American Board of Ophthalmology. 2018

Examiner for American Board of Ophthalmology Oral Exam. 2019-present

2019-present Exam Development Committee, Cornea and Cataract for American Board of Ophthalmology. 2021 Standard Setting Expert for the Oral Qualifying Exam for the American Board of Ophthalmology.

Examiner Training for Oral Board Examiners for the American Board of Ophthalmology. 2021,2022 2024 Chair of Cornea Quarterly Questions Article-Based Committee for the American Board of

Ophthalmology

Clinical Program Building/Leadership

Medical Director of Wilmer at Odenton. 2011-2021

> Expanded satellite location from 2 clinical exam lanes to 8 clinical exam lanes with more onsite ocular testing capabilities, laser procedure capability, and an optical shop. Recruited other faculty to practice at Odenton including comprehensive eye care, specialty care in cornea, oculoplastics, medical retina and uveitis, pediatrics, and specialty contact lens. Visit volumes grew tremendously during my tenure between FY2012 when annual visits were around 1,000, and FY2019 when visits exceed 13,000 visits. Throughout the growth and expansion, the Odenton practice location has maintained consistent positive margins that have grown year over year. In addition, patient satisfaction scores are among the highest compared to other Wilmer practices. The clinic draws patients from Anne Arundel County, Southern Maryland, the Eastern Shore, Delaware, and Virginia, in addition to the local community. The practice has a reputation of excellence in the region and was awarded "Best Ophthalmology Practice" by a local newspaper, the Bovie Capital Gazette, in 2020.

Clinical Demonstration Activities to external audience, on or off campus

Instructor at National DMEK Courses at the American Academy of Ophthalmology and for Cornea Society Fellows Virtual and in person Surgical Courses.

Invited to create a video for the Eye Bank Associations of American EyeLearn platform demonstrating a DMEK surgery technique. https://vimeo.com/user53089726/dmeksrikumaran

Development of nationally/internationally recognized clinical standard of care

None

EDUCATIONAL ACTIVITIES

Educational Focus

Teaching

Classroom instruction

JHMI/Regional

2011, 2012, 2018 Lecturer, Johns Hopkins Hospital ophthalmology residents, "ABCS of a Cataract Evaluation,"

Baltimore, MD

2012, 2013 2014, 2016 2015, 2017	Lecturer, Johns Hopkins Hospital ophthalmology residents, "Anterior Vitrectomy," Baltimore, MD Lecturer, Johns Hopkins Hospital ophthalmology residents, "OVD's," Baltimore, MD Lecturer, Johns Hopkins Hospital ophthalmology residents, "Wound Construction," Baltimore, MD
2017	Wetlab instructor, Student National Medical Association Regional VI Leadership Institute, Baltimore, MD
2018	Lecturer, Johns Hopkins Hospital ophthalmology residents, "IOL Calculations," Baltimore, MD
2019	Longitudinal Clerkship Clinical Skills Preceptor, Medical students, Baltimore, MD
2020	Lecturer, Johns Hopkins Hospital ophthalmology residents, "Ocular Surface Tumors," Baltimore, MD
2020	Lecturer, Johns Hopkins Medical Students Virtual Ophthalmology Elective, "Corneal Ulcers" offered twice, Baltimore, MD
2020	Lecturer, Johns Hopkins Virtual Visiting Medical Student Elective for URM Students, "Viral Ophthalmic Disease," Baltimore, MD
2021	Lecturer, Johns Hopkins Medical Students Virtual Ophthalmology Elective, "Disparities in
2022	Keratoplasty," Baltimore, MD
2022	Lecturer, Johns Hopkins Hospital ophthalmology residents, "What's That Spot: Ocular Surface Tumors," Baltimore, MD
2022	Lecturer, University of Maryland Ophthalmology Department Resident Teaching, "What's That Spot: Ocular Surface Tumors," Baltimore, MD
2022	Lecturer, University of Maryland Ophthalmology Department Resident Teaching, "Cataract Surgery in Eyes with Prior Refractive Surgery" Baltimore, MD
<u>National</u> None	
<u>International</u>	
2022	Centre hospitalier de l'Université de Montréal (CHUM) Resident Lecture, "Cataract Surgery In Eye with FECD." Montreal, Canada
Clinical instruction	with LCD. Montea, Canada
JHMI/Regional	
2011-2012	Outpatient Ophthalmology Service, Attending Physician 2 days per week, Johns Hopkins Bayview
2011-2015	Medical Center, Baltimore, MD Outpatient Ophthalmology Surgical Training, Attending Physician 1 day per week, Johns Hopkins
2011-2013	Bayview Medical Center, Baltimore, MD
2015-present	Surgical Preceptor for fellows, residents, or medical students 2 days a month, Wilmer, Baltimore, MD
<u>National</u>	
2022	Cornea Society Fellows World Cornea Congress Wetlab Instructor for Endothelial Keratoplasty, Chicago, IL
2021	Cornea Society Fellows Virtual Wetlab Instructor for Endothelial Keratoplasty
2021	Cornea Society Virtual Grands Rounds Panelist for "IOL Calculations in Challenging Situations"
2022	Eversight Webinar "Cataract Surgery in Fuchs Corneal Dystrophy"
International	

2022 "Cataract Surgery in Fuchs Corneal Dystrophy" Resident Lecture CHUM Montreal, Canada

CME instruction

JHMI/Regional

2008 Wilmer Residents Association Meeting "Long-term Outcomes after Diode Laser treatment in ROP,"

Baltimore, MD

2009 Wilmer Residents Association Meeting "Correlation of Corneal Parameters and Visual Acuity after

DSAEK Surgery," Baltimore, MD

2009 Current Concepts in Ophthalmology "Management of Traumatic Aniridia and Aphakia,"

Baltimore, MD

2010	Wilmer Residents Association Meeting "Correlation of Corneal Parameters and Visual Acuity after DSAEK Surgery," Baltimore, MD
2011	Current Concepts in Ophthalmology "Cataract Surgery in Patients with Fuchs Corneal Dystrophy," Baltimore, MD
2012	Current Concepts in Ophthalmology "Cataract Surgery in Patients with Keratoconus," Baltimore, MD
2015	Johns Hopkins IEE Summer Teaching Camp, breakout session leader for "Active Teaching and Learning in Large and Small Group Settings" and "Teaching Tips for Workplace-based Settings: Making the Most of Teaching Opportunities," Baltimore, MD
2019	Current Concepts in Ophthalmology "Long-term outcomes of endothelial keratoplasty," Baltimore, MD
2020	Johns Hopkins IEE Summer Teaching Camp, breakout session leader "Small Group Learning," Baltimore, MD (Virtual)
2020	Johns Hopkins Foundation for Teaching and Learning, breakout session leader "Small Group Learning," Baltimore, MD
2020	Current Concepts in Ophthalmology "Endothelial Keratoplasty: An IRIS Registry Analysis," Baltimore, MD
2021	Johns Hopkins IEE Summer Teaching Camp, breakout session leader "Small Group Learning," Baltimore, MD
2021	Current Concepts in Ophthalmology, "Endothelial Keratoplasty for Complex Eyes," Baltimore, MD
2022	
	Current Concepts in Ophthalmology, "Cataract Surgery in Keratoconus," Baltimore, MD
2023	Wilmer Technicians Course, "Understanding DMEK and DSAEK," Baltimore, MD
2024	Evidence Based Eye Care, "Cataract Surgery in FECD," Baltimore, MD
<u>National</u>	
2010	Cape and South Shore Optometric Group Meeting "New Techniques in Corneal Surgery," Sandwich, MA
2011	Cape and South Shore Optometric Group Meeting "Corneal Conundrums," Sandwich, MA
2011	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Chicago, IL and Cleveland, OH
2012	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Baltimore, MD and Chicago, IL
2012	JHCAPO Technician Course at Joint AAO Meeting "Inflammatory and Infectious Diseases of the Cornea," Faculty Lecturer, Chicago, IL
2013	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Baltimore, MD
2014	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Baltimore, MD and Chicago IL
2014	JHCAPO Technician Course at Joint AAO Meeting "Inflammatory and Infectious Diseases of the Cornea," Faculty Lecturer, Chicago, IL
2015	JHCAPO Technician Course at Joint AAO Meeting "Inflammatory and Infectious Diseases of the Cornea," Faculty Lecturer, Las Vegas, NV
2015	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Washington, DC and Chicago, IL
2016	Lecturer and Wetlab Instructor, Complementary Ophthalmic Resident Education Cataract Course, Chicago, IL
2016	JHCAPO Technician Course at Joint AAO Meeting "Inflammatory and Infectious Diseases of the Cornea," Faculty Lecturer, Chicago, IL
2019	Skills Transfer Course Instructor, "Learning DMEK," American Academy of Ophthalmology, San Francisco, CA
2019	Skills Transfer Course Instructor, "Advanced Endothelial Keratoplasty," American Academy of Ophthalmology, San Francisco, CA
2020	Lecturer, Skills Transfer Course Instructor, "Learning DMEK: Preoperative Considerations" American Academy of Ophthalmology Virtual Meeting

2021	Skills Transfer Course Instructor, Learning DMEK Course American Academy of Ophthalmology
2021	New Orleans, LA
2021	Lecturer, Instruction Course American Academy of Ophthalmology Meeting "Epidemiology of
2021	Keratoconus" (Virtual due to COVID)
2021	Senior Instructor and Lecturer, "Cataract and Fuchs Dystrophy: Part 2" (Virtual due to COVID)
2021	Lecturer, "Learning DMEK: Preoperative Considerations," American Academy of Ophthalmology
	New Orleans, LA
2021	Skills Transfer Course Instructor, "Vitrectomy for Anterior Segment Surgeons," American Academy
	of Ophthalmology, New Orleans, LA
2022	Skills Transfer Course Instructor, "Learning DMEK Course" American Academy of Ophthalmology
	Chicago, IL
2022	Lecturer, Instruction Course "Epidemiology of Keratoconus" American Academy of Ophthalmology
	Meeting Chicago, IL
2022	Senior Instructor and Lecturer "Cataract and Fuchs Dystrophy" American Academy of
	Ophthalmology Meeting, Chicago, IL
2022	Lecturer "Learning DMEK: Preoperative Considerations," American Academy of Ophthalmology
	Chicago, IL
2022	Skills Transfer Course Instructor, "Vitrectomy for Anterior Segment Surgeons," American Academy
	of Ophthalmology, Chicago, IL
2023	Skills Transfer Course Instructor, "DMEK," American Society for Cataract and Refractive Surgeons,
	San Diego, CA
2023	Skills Transfer Course Instructor, "Learning DMEK Course" American Academy of Ophthalmology
_0_0	San Francisco, CA
2023	Lecturer, Instruction Course "Cross Linking" American Academy of Ophthalmology Meeting San
2023	Francisco, CA
2023	Senior Instructor and Lecturer "Cataract and Fuchs Dystrophy" American Academy of
2023	
2022	Ophthalmology Meeting, San Francisco, CA
2023	Lecturer "Learning DMEK: Preoperative Considerations," American Academy of Ophthalmology
	San Francisco, CA

<u>International</u>

None

Workshops/seminars

JHMI/Regional

2014	"Why pursue a career in ophthalmology?" for medical students at Johns Hopkins University School
	of Medicine

National

2021	"Cataract Surgery in Corneal Disease" Senior Instructor for new instruction course for American

Academy of Ophthalmology (Virtual due to COVID)

2022 "Cataract Surgery in Corneal Disease" Senior Instructor instruction course for American Academy of

Ophthalmology, New Orleans, LA

2023 "Cataract Surgery in Corneal Disease" Senior Instructor for new instruction course for American

Academy of Ophthalmology, San Fransisco, CA

2023 "Why Ophthalmology" Hopkins Ophthalmology Virtual Curriculum Lecture for students nationally

(Zoom)

<u>International</u>

None

Educational Demonstration Activities to extend audience on or off campus

Invited to present our model for integration of PA in our consult service at the American Academy of Ophthalmology Annual Meeting 2021 for the symposium by the American Society of Ocular Trauma.

RESEARCH ACTIVITIES

Research Focus

My research focus has been centered on medical education and outcomes of corneal transplants and cataract surgery in corneal diseases. With respect to medical education, I have collaborated with faculty in our department and beyond to assess complication rates in resident-performed cataract surgery, create innovative ways to educate residents through resident clinics, and support trainee wellness. I have published several papers on the novel use of Physician Assistants in ophthalmology, which unlike other specialties, is quite unusual. In addition, I have used real-world data including Medicare claims and the American Academy of Ophthalmology IRIS registry to assess corneal transplant outcomes, including risk factors for failure and complication rates and receipt of treatment. I have already collaborated with the Eye Bank Association of America and received funding for some of the work related to adverse events after keratoplasty procedures. These studies' results can be used to counsel patients and set national quality benchmarks and have revealed previously undescribed racial disparities in endothelial keratoplasty outcomes. I currently serve as the PI for Wilmer for the participation in the SOURCE and IRIS registry. In addition to big data research, I serve as the JHU site PI for the Zoster Eye Disease Study, an NIH-funded multicenter trial assessing the use of Valtrex in zoster keratitis and CO PI for the Diabetes in Endothelial Keratoplasty Study, another NIH (National Institutes of Health) sponsored multi-center trial in addition commercially sponsored trials.

Research Program Building/Leadership

Please see Research Focus.

Research Demonstration Activities to external audiences, on or off campus

None

Inventions, Patents, Copyrights

None

Technology Transfer Activities

None

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

System Innovation Focus

System Innovation and Quality Improvement efforts within JHMI:

2014 Hired a Physician Assistant within ophthalmology. The first PA in our service improved the resident service to balance education and reduced consult wait times for the ED and inpatient units. The addition of the PA reduced consult wait times by 28 minutes in an adjusted model. Findings published in the (OR #11).

System Innovation and Quality Improvement Efforts outside of JHMI None

System Innovation and Quality Improvement Program Building/Leadership None

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2011-2021	Medical Director, Wilmer Eye Institute Odenton
2011-present	Member, Wilmer Long Range Planning Committee
2011-2021	Member, Wilmer Finance Committee
2012	M 1 D 1 D E 1 C

2012-present Member, Residency Program Evaluation Committee

2012-2013 Associate Residency Program Director

2012-2016 Member, Ophthalmology Residency Selection Committee

2012-2016 Head, Resident Probation Committee

2012-2016 Member, Graduate Medical Education Committee

2013-2016 Residency Program Director

2013-2016 Member, Residency Clinical Competency Committee

2015 Member, Search Committee for Associate Dean of Graduate Medical Education

2015 Member, Graduate Medical Education Special Review Committee

2017-present Vice Chair Education

2018-2021 Member, Ophthalmology Residency Selection Committee

2019-2020 Member, Institute for Excellence in Education Abstract Selection Committee

2020-present Member, Resident Selection Diversity Subcommittee 2022-present Member, Educator Competency Metrics Committee 2023-present Institute for Educational Excellence Ambassador

Editorial Activities

Editorial Board Appointments

2017-present Ophthalmology and Therapy (Advisory Board)

2021-present Cornea, Editorial Board Member

2022-present Cornea Open, Associate Editor (new journal 2022)

2022- present Eye, Section Editor

2022-present Frontiers in Ophthalmology, Editorial Board Member

Journal Peer Review Activities

2016-present Cornea

2018-present JAMA Ophthalmology

2017-present American Journal of Ophthalmology

2021-present Ophthalmology (Recognized with the AAO Secretariat Award for being a top reviewer in 2023)

2021-present Journal of Academic Ophthalmology 2020-present British Journal of Ophthalmology

2022-present Eye

2022-present Frontiers in Ophthalmology

Other Peer Review Activities

2017 Peer review Cornea textbook for Slack Inc.

2019 Peer review Ophthalmology textbook for Thieme Publishers

Advisory Committees Review Groups/Study Sections

2015-2020 Women in Ophthalmology Finance Committee Member

2019-present American Board of Ophthalmology Cornea/Cataract Exam Development Committee Member

2020-present Eye Bank Association of America Scientific Programs Committee Member

2020-present Eye Bank Association of America Best Paper of Session Judge 2020-present Lions Vision Gift Eye Bank Medical Advisory Committee Member

2020-present Cornea Society Graft Registry Committee Member

2024-present Chair, American Board of Ophthalmology Cornea Article Based Question Committee

2024- present Ophthalmology Foundation Examinations Board Committee

Professional Societies

2006-present Fellow, American Academy of Ophthalmology

2009-present Member, American Society of Cataract and Refractive Surgery

2012-present Women in Ophthalmology 2012-2018 Member, Cornea Society

2013-2016 Member, Association of University Professors of Ophthalmology

2019-present Cornea Society Member with Thesis

2018-present Eye Bank Association of America/Paton Society Member 2019-present Member, Association for Research in Vision and Ophthalmology

2020-present Eye and Contact Lens Association Member

2022-present Cornea Society, Member at Large of the Board of Directors

Conference Organizer (JHMI/Regional; National; International)

2012-2014 Wilmer Resident Cataract Course

Session Chair (JHMI/Regional; National; International)

JHMI/Regional

None

National

2024-present American Academy of Ophthalmology Cornea Subspecialty Day Chair

International Consultantships

2017-2021 Alcon Laboratories, selected as a part of an 8–10-member national group of leaders in resident

education to provide advice on the development of surgical curricula for trainees and faculty involved with resident education. Meet annually with the group to review new technologies and how

to best train residents and faculty in education on the adoption of new technology.

RECOGNITION

Awards, Honors	
1999	Northwestern University JG Nolan Scholarship (partial tuition)
2001	Phi Beta Kappa, Northwestern University
2001	Graduate Summa Cum Laude, Northwestern University
2005	Alpha Omega Alpha Medical Honor Society Northwestern University
2009	Greater Baltimore Medical Center Outstanding Resident Award
2009	Mitchel Prize (2nd place) Resident Research Award, Wilmer Eye Institute
2009-2010	Aliki Perroti Scholar, Wilmer Eye Institute
2014	Resident Appreciation Award for Commitment to the Residency
2019-2022	Baltimore Magazine Top Doctor
2020	Resident Appreciation Award for Commitment to the Residency
2020	Women in Ophthalmology Top Ten Posters Recognition
2021	Scholarly Concentrations Excellence in Mentoring Award
2022	American Academy of Ophthalmology Achievement Award
2023	American Academy of Ophthalmology Secretariat Award

Invited Talks

]	JHMI/Regional	
2	2012	Wilmer Nursing Conference, "Management of Astigmatism." Baltimore, MD.
2	2015	Annual Evidence Based Care Optometry Conference, "Deep Anterior Lamellar Keratoplasty."
		Linthicum, MD.
2	2016	Annual Evidence Based Care Optometry Conference, "What's that Bump." Ellicott City, MD.
2	2017	Annual Evidence Based Care Optometry Conference, "Corneal Conundrums." Baltimore, MD.
2	2019	Wilmer Fuchs Symposium, "Surgeon Preference for EK Technique." Baltimore, MD.
2	2019	Corneal Dystrophy Foundation, "Fuchs FAQs." Silver Spring, MD.
2	2020	Annual Evidence Based Care Optometry Conference, "Viral Ophthalmic Disease." Baltimore, MD.
2	2022	Wilmer Afternoon Research Seminar, "Real World Data: Lessons Learned about Endothelial
		Keratoplasty," Baltimore, MD.
2	2022	University of Maryland Ophthalmology Department Grand Rounds, Colleen Conway Grace
		Lectureship "Real World Data: Lessons Learned about Endothelial Keratoplasty," Baltimore, MD.
2	2023	Hopkins Ophthalmology Virtual Curriculum, "Why Ophthalmology" (Virtual Presentation)
2	2023	Wilmer Annual Technician Course, "Understanding DMEK and DSAEK." Baltimore, MD.
4	2017 2019 2019 2020 2022 2022 2022	Annual Evidence Based Care Optometry Conference, "What's that Bump." Ellicott City, MD. Annual Evidence Based Care Optometry Conference, "Corneal Conundrums." Baltimore, MD. Wilmer Fuchs Symposium, "Surgeon Preference for EK Technique." Baltimore, MD. Corneal Dystrophy Foundation, "Fuchs FAQs." Silver Spring, MD. Annual Evidence Based Care Optometry Conference, "Viral Ophthalmic Disease." Baltimore, MD Wilmer Afternoon Research Seminar, "Real World Data: Lessons Learned about Endothelial Keratoplasty," Baltimore, MD. University of Maryland Ophthalmology Department Grand Rounds, Colleen Conway Grace Lectureship "Real World Data: Lessons Learned about Endothelial Keratoplasty," Baltimore, MD. Hopkins Ophthalmology Virtual Curriculum, "Why Ophthalmology" (Virtual Presentation)

<u>National</u>	
2011	Wilmer Cornea Fellowship Reunion, "Steven's Johnson's Syndrome." Orlando, FL
2015	Association of University Professors of Ophthalmology, Invited Panelist for International Ophthalmology Symposium on Opportunities for Residents. Tucson, AZ
2017	National Medical Association Conference, "Update on Ocular Surface Neoplasia." Philadelphia, PA
2019	American Academy of Ophthalmology National Medical Association Wellness Symposium "Parental Leave Policies for Residents: Leading by Example." San Francisco, CA
2020	Yale Eye Center Invited Grand Rounds Speaker, "Endothelial Keratoplasty: Real World Outcomes." [Virtual due to COVID]
2020	National Medical Association Conference, "Approach to Cataract Surgery in the Presence of Corneal Disease." [Virtual Recorded Presentation due to COVID]
2020	National Medical Association Conference, "Anterior Segment Hot Topics." [Virtual Recorded Session due to COVID]
2020	Weill Cornell Ophthalmology Department Ophthalmology Grand Rounds Speaker, "Endothelial Keratoplasty: Real World Outcomes." [Virtual due to COVID]
2021	American Society of Cataract and Refractive Surgery Speaker and Discussant, invited to present my paper (OR #37) which was 1 of 2 papers selected for the monthly virtual Journal Club
2021	Eye Bank Association of America Annual Meeting, Speaker and Session Moderator, "Determination of Graft Failure and Early Re-Graft." [Virtual due to Covid]
2021	American Society of Cataract and Refractive Surgery Eye and Contact Lens Symposium Speaker "Cataract Surgery in Eyes with Keratoconus" Las Vegas, NV
2021	American Academy of Ophthalmology Cornea Subspecialty Day Speaker "DSAEK for Complex Eyes." New Orleans, LA
2021	American Society of Ocular Trauma AAO Symposiums "Integration of a PA into an Academic Setting." New Orleans, LA
2022	American Society of Cataract and Refractive Surgery Cornea Subspecialty Day Speaker "Why I Use Preloaded Tissue." Washington DC
2022	American Society of Cataract and Refractive Surgery Eye and Contact Lens Symposium "Cataract Surgery in Eyes with Refractive Surgery." Washington DC
2023	American Board of Medical Specialties Board of Directors Meetings "Ophthalmology Milestones Evaluations: Are there differences by Gender." San Diego, CA (virtual presentation)
2023	Cornea Society Symposium, "Democratizing DALK." ASCRS, San Diego, CA.
2023	ARVO SIG "Endothelial keratoplasty: Real World Outcomes" Rockville, MD (virtual presentation)
<u>International</u>	
2020	Gautomi Eye Center, "Endothelial Keratoplasty: Real World Outcomes." Rajamundry, India. [Virtual due to COVID].
2020	World Association of Eye Hospitals, "How Covid has Impacted Academic Missions." [Virtual Webinar due to COVID].
2021	Kasr Alainy Cairo University, "Training Tomorrow's Leaders." Cairo, Egypt Special Invited Lecture [Virtual due to COVID].
2021	Kasr Alainy Cairo University, "Endothelial Keratoplasty Techniques and Outcomes." Cairo, Egypt Special Invited Lecture [Virtual due to COVID].
2022	All India Ophthalmology Society, "Cataract Surgery in Eyes with Keratoconus." [Virtual Meeting, Eye and Contact Lens Symposium].
2022	Centre hospitalier de l'Université de Montréal (CHUM) Grand Rounds Speaker, "Real World Outcomes of Endothelial Keratoplasty." Montreal, Canada.
2022	National Taiwan University Hospital, "Training Tomorrow's Leaders." Taipei, Taiwan.
2022	Taiwanese Ophthalmology Society Cornea Symposium Speaker. "Endothelial Keratoplasty in Complex Eyes" Taiwan.
2023	KERACON 2023 Speaker "DMEK (Mis)Adventures", 11th Annual meeting of the Cornea Society of India, Chandigarh, India.
2023	KERACON 2023 Speaker "Vaccine-Related Graft Rejection", 11th Annual meeting of the Cornea Society of India, Chandigarh, India.
2024	Envision Summit "Cataract Surgery in FECD" Puerto Rico, Invited Speaker

OTHER PROFESSIONAL ACCOMPLISHMENTS

Oral/Podium presentations

- 1. **Srikumaran D,** Aladave AJ, Hannush SB, Aquavella JV, Schultze R, Akpek AK. Boston Type 1 Keratoprosthesis Long Term Outcomes. American Academy of Ophthalmology Annual Meeting, Chicago, IL, 2012.
- 2. **Srikumaran D,** Aladave AJ, Hannush SB, Aquavella JV, Schultze R, Akpek AK. Boston Type 1 Keratoprosthesis Removal. American Academy of Ophthalmology Annual Meeting, New Orleans, LA, 2013.
- 3. **Srikumaran D**, Green LA, McDonnel PJ, Singman EL. Supervision and Autonomy of Ophthalmology Residents in an Outpatient Clinic. Association of University Professors of Ophthalmology Meeting San Diego, CA, 2017.
- 4. **Srikumaran D**, Wang P, Woreta F, <u>Aziz K</u>, Makary MA. Long Term Outcomes after Endothelial Keratoplasty Among Medicare Fee-For-Service Beneficiaries. Cornea and Eye Banking Forum. San Francisco, CA, 2019.
- 5. **Srikumaran D**, <u>Campbell J</u>, Woreta FA, Stoeger, C, McClory C, Engstrom M, Johnson P, Johnston K. Primary Graft Failure Following Keratoplasty in the United States: Current Trends. World Cornea Congress Boston, MA, 2020 (Cancelled due to COVID).
- Srikumaran D, Kelly SP, Hsu S, Pramanik S. Disparities in Endothelial Keratoplasty Outcomes: An IRIS Registry Analysis. Women In Ophthalmology Summer Symposium, 2020 (Selected as Top Poster and Virtual Oral Presentation given due to COVID).
- 7. **Srikumaran D,** Soo HS, Li C, Pramanik S. Smoking as a Risk Factors for Repeat Keratoplasty. Eye Bank Association of America Annual Meeting, 2021 (Virtual due to COVID).

Professional Development Courses

2012	Introduction to Curriculum Development Workshop, Johns Hopkins Faculty Development
	Program, Johns Hopkins University School of Medicine.
2013	Emerging Women's Leadership Program.
2015	Direct Observation for Clinical Learning and Assessment with Dr. Rachel Levine, Wilmer Eye
	Institute.
2016	Working with Struggling Learners with Dr. Rachel Levine, Wilmer Eye Institute.
2018	Feedback Strategies using a Coach Approach with Dr. Rachel Levine, Wilmer Eye Institute
	Residency Retreat.
2020-2021	Science of Clinical Investigation Certificate, School of Public Health.
2021 - 2022	Johns Hopkins Leadership Program for Women Faculty.
2021-2022	Women Professors in Ophthalmology Mentoring Program.
2022-2023	Eye Bank Association of America Physician Leadership Program.
2022-2023	ABMS Visiting Scholars Program.
2022	Inaugural Hopkins Career Development Coaching Camp.
2023-2024	Association of University Professors of Ophthalmology Leadership Development Program.