

BRIAN MICHAEL SHAFER, MD
Curriculum Vitae

Current Primary Employer: Founder and CEO
Cataract, Refractive, Cornea, and Glaucoma Surgeon
Shafer Vision Institute
Plymouth Meeting, PA 19462
April 1 2023 – Present

Academic Appointment Adjunct Assistant Professor of Ophthalmology
University of Pennsylvania
Philadelphia, PA 19104
August 16 2021 – Present

Hospital Affiliations Chester County Hospital, West Chester, PA
Penn Presbyterian Medical Center, Philadelphia, PA
Lankenau Hospital, Wynnewood, PA

Prior Employment Cataract, Refractive, Cornea, and Glaucoma Surgeon
Associate Surgeon
Chester County Eye Care Associates
Malvern, PA 19355
August 16, 2021 – March 30, 2023

Education:

08/2008 – 05/2012	BS	University of Rochester, Rochester, NY
05/2012 – 05/2016	MD	Temple University School of Medicine, Philadelphia, PA

Postgraduate Training and Fellowship Appointments:

06/2016 – 06/2017	Intern in Medicine, Pennsylvania Hospital, Philadelphia, PA
07/2017 – 06/2020	Resident in Ophthalmology, Scheie Eye Institute, Philadelphia, PA
07/2019 – 06/2020	Chief Resident in Ophthalmology, Scheie Eye Institute, Philadelphia, PA
07/2020 – 06/2021	Fellow in Cornea, Refractive, Glaucoma, and Anterior Segment Surgery, Vance Thompson Vision, Sioux Falls, SD

Licensure:

07/2016 – 06/2020	Pennsylvania
07/2020 – 06/2023	South Dakota, Minnesota
07/2021 – present	Pennsylvania

Awards, Honors and Membership in Honorary Societies:

2012	Phi Beta Kappa
2016	Alpha Omega Alpha
2016	Gold Humanism Honor Society
1/2018	Presenter Award (First Place), Atlantic Coast Retina Conference
5/2019	NEI Travel Grant, ARVO 2019
5/2019	Hot Topic Poster, ARVO 2019
6/2020	Medical Student Teaching Award, Scheie Eye Institute
7/2020	Winning Pitch Challenge, Honorable Mention
1/2021	Image of the Month, Corneal Physician
7/2021	Best Paper of Session, ASCRS 2021
10/2021	Research Contest Winner, Interventional Glaucoma Congress 2021
1/2022	One to Watch: MillennialEye
4/2022	Castle Connolly Top Doctors: One to Watch
8/2022	Rising Star: Rising Eye Stars
1/2023	Castle Connolly Top Doctor

Memberships in Professional and Scientific Societies:

American Medical Association (Member)
American Academy of Ophthalmology (Member)
American Society for Cataract and Refractive Surgery (Member)
International Society of Refractive Surgery (Member)
Refractive Surgery Alliance (Member)
Cornea Society (Member)
American Glaucoma Society (Member)
American-European Congress of Ophthalmic Surgery (Member)

Committee Involvement

EyeWiki Refractive Surgery (Editor)
AAO Refractive Surgery Day (Reviewer)
Refractive Surgery Day Wet Lab, AAO (Director)
Cornea Society University (Member Development)
ASCRS Young Eye Surgeons (Wetlab Curriculum)

Peer Reviewed Literature

- Shafer BM, Puls-Boever K, Berdahl JP, Thompson V, Ibach MJ, Zimprich LL, Schweitzer JA. Defocus Curve of Emerging Presbyopic Patients. *Clin Ophthalmol.* 2023;17:843-847
- Ferguson TJ, Wilson CW, Shafer BM, Berdahl JP, Terveen DC. Clinical Outcomes of a Non-Diffractive Extended Depth-of-Focus IOL in Eyes with Mild Glaucoma. *Clin Ophthalmol.* 2023;17:861-868
- Shafer BM, McCabe C, Reiser H, Newsom TH, Berdahl J. The REVIVE Study: Long Term Outcomes of a Novel Non-Diffractive Extended Vision IOL versus Monofocal Control IOL. *Clinical Ophthalmology*, 2023.
- Rohlf D, La Nasa A, Terveen D, Shafer B, Thompson V, Berdahl J. Outcomes of LASIK versus PRK Enhancement in eye with prior cataract surgery. *J Cataract Refract Surg.* 2022 Aug 16.
- Shafer, B., Ferguson, T.J., Chu, N. *et al.* The Effect of Periocular Negative Pressure Application on Intraocular and Retrobulbar Pressure in Human Cadaver Eyes. *Ophthalmol Ther* (2021).
- Tirelli F, Shafer BM, Davidson SL, Lerman MA. Immunomodulation and TNF- α inhibition for tubulointerstitial nephritis and uveitis syndrome: a case series. *J AAPOS.* 2021 Oct;25(5):267.e1-267.e6.
- VanderZee, Brandon & Shafer, Brian & Berdahl, John. (2021). Intracranial Pressure and Its Relationship to Glaucoma. *Current Ophthalmology Reports.* 10.1007/s40135-021-00267-z.
- Liu T, Shafer BM, Thompson V. Update on refractive surgery. *Advances in Ophthalmology and Optometry.* 2021;6:325-339.
- Ibach MJ, Shafer BM, Wallin DD, Puls-Boever KR, Thompson VM, Berdahl JP. The Effectiveness and Safety of Dextenza 0.4 mg for the Treatment of Postoperative Inflammation and Pain in Patients After Photorefractive Keratectomy: The RESTORE Trial. *J Refract Surg.* 2021 Sep;37(9):590-594. doi: 10.3928/1081597X-20210610-05. Epub 2021 Sep 1. PMID: 34506241.
- Shafer BM, Greenwood M. Presbyopia Correction at the Time of Cataract Surgery. *Curr Ophthalmol Rep.* 2020; 0:1-9
- Shafer BM, Gorry TG, Tapino PJ, Airan-Javia, S. Carelign: A Novel Handoff System for Medical and Surgical Consultants. *J Acad Ophthalmol.* 2020;00:1-4
- Shankar VA, Bialick SR, Shafer BM. Metastatic Squamous Cell Lung Carcinoma to the Optic Nerve Sheath Mimicking Retrobulbar Optic Neuritis. *Ophthalmic Plast Reconstr Surg.* 2020;
- Shafer BM, Fuerst N, Massaro-Giordano G, Palladino V, Givnish T, Macchi I, Sulewski M, Orlin S, Bunya V. The Use of Self-Retained, cryopreserved amniotic membrane for the treatment of Sjogren syndrome: a case series. *Digital Journal of Ophthalmology.* June 8, 2018.
- Frederick Vivino, Vateeene Bunya, Giacomina Massaro-Giordano, Chadwick Johr, Stephanie Giattino, Annemarie Schorpion, Brian Shafer, Ammon Peck, Kathy Sivils, Astrid Rasmussen, John Chiorini, Jing He, Julian Ambrus. Sjogren's Syndrome: An Update on Disease Pathogenesis, Clinical Manifestations and Treatment. *Immunology (Accepted April 2019)*

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Makayla McCoskey, Brian Shafer, Akosua Nti, Gui-Shuang Ying, Paul Tapino, Wei Pan, Victoria Addis. First Year Ophthalmology Residency Call Structure and its Association with Resident Anxiety and Confidence. *Journal of Academic Ophthalmology (Accepted December 2019)*.

Shafer BM, Lee V, Mehta S. Excision of a Large Cutaneous Horn. *JAMA Ophthalmology (Accepted July 2018)*

Shafer BM, Qiu M, Rapuano CJ, Shields CL. Association Between Hay Fever and High Myopia in United States Adolescents and Adults *Eye and Contact Lens*. 2017 May; 43(3): 186-191

Stull, Carolyn; Valdes-Rodriguez, Rodrigo; Shafer, Brian M; Shevchenko, Alina; Nattkemper, Leigh A; Chan, Yiong-Huak; Tabaac, Sydney; Schardt, Martin J.; Najjar, Dany M; Foster, William J.; Yosipovitch, Gil. The prevalence and characteristics of chronic ocular itch: a cross-sectional survey. *Itch*. March 2017. Volume 2, Issue 1, p4

Kaidong Zhang, Brian M. Shafer, Matthew D. Demars II, Harry A. Stern, and Rudi Fasan. Controlled Oxidation of Remote sp³ C-H Bonds in Artemisinin via P450 Catalysts with Fine-Tuned Regio- and Stereoselectivity. *J. Am. Chem. Soc.* 2012; 134(45), 18695–18704.

Clinical Trial Involvement

Sub-Investigator. Zoster Eye Disease Study. University of Pennsylvania

Sub-Investigator. AR-13324-CS210-A Randomized, Open-Label, Parallel-Group Study to Evaluate the Safety and efficacy of Two Dosing Regimens of Netarsudil Ophthalmic Solution in Patients with Corneal Edema Due to Fuchs Corneal Dystrophy

Sponsor: Aerie Pharmaceuticals, Inc

Sub-Investigator. RFP-C001 Lasik-Pivotal Trial of WaveLight EX500 Excimer Laser System for the Correction of Myopia with and without Astigmatism Using InnovEyes in Conjunction with InnovEyes sightmap

Sponsor: Alcon Research LLC and its affiliates (“Alcon”)

Sub-Investigator EQX CP-020 A Prospective Study to Evaluate the Ability to Determine Intracranial Pressure by Modulation Intraocular Pressure Using Negative Pressure Applied to the Periocular Microenvironment Anterior to the Orbital Rim

Sponsor: Equinox Ophthalmic, Inc

Sub-Investigator EQX CP-022 Negative Pressure Applied by the Equinox Mercury™ Multi-Pressure Dial to Lower and Modulate Intraocular Pressure in Subjects with Severe Open Angle Glaucoma (The Ranger Study)™

Sponsor: Equinox Ophthalmic, Inc

Sub-Investigator IG2M-105-PASN ISTENT INJECT® Trabecular micro-bypass system new enrollment post-approval study

Sponsor: Glaukos

Sub-Investigator CECF843 A2201 A randomized, double-masked, multicenter study to evaluate the safety and efficacy of ECF843 vs Vehicle in subjects with dry eye disease

Sponsor: Novartis

Sub-Investigator CSP-033 A Prospective Randomized Controlled Multi-Center Clinical Study to Evaluate the safety and effectiveness of the RxSight Light Adjustable Lens (LAL) in Subjects desiring and extended depth of focus.

Sponsor: RxSight, Inc

Sub-Investigator B&L 945 EnVista A Prospective, Multicenter, Randomized, Active-Controlled Clinical Study to Evaluate the Safety and Effectiveness of the enVista One-Piece Hydrophobic Acrylic Trifocal Intraocular Lens in Subjects Undergoing Cataract Extraction.

Sponsor: Bausch & Lomb

Sub-Investigator SAHARA Prospective, Randomized, Masked, Controlled Trial to Evaluate the Safety and Effectiveness of the TearCare System in the Treatment of the Signs and Symptoms of DryEye Disease

Sponsor: Sight Sciences

Sub-Investigator TTHX-001 A Phase 1/ Phase 2 Study Evaluating the Safety and Efficacy of the Investigational New Drug TTHX1114(NM141) on the Regeneration of Corneal Endothelial Cells in Patients with Corneal Endothelial Dystrophies following Intracameral Delivery

Sponsor: Trefoil Therapeutics, Inc

Sub-Investigator TTHX-002 Phase 2 Study To Determine the Safety and Efficacy of the Investigational

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New Drug TTHX1114(NM141) on the Regeneration and Migration of Corneal Endothelial Cells in Patients undergoing Descemetorhexis without Endothelial Keratoplasty (Descemet Stripping Only) TTHX-002

Sponsor: Trefoil Therapeutics, Inc

Sub-Investigator IDOS-106-EXCH Prospective, non-randomized, open label, multi-center, single arm study of exchange of travoprost intraocular implant

Sponsor: Glaukos

Sub-Investigator QC-202 randomized active-controlled multi-site double-masked study to evaluate the safety and tolerability of 2 concentrations of QLS-101 versus timolol maleate Preservative Free (PF) 0.5% ophthalmic solution in subjects with normal tension glaucoma

Sponsor: Qlaris Bio, Inc

Sub-Investigator Romeo II (CLN1-07277) A retrospective, observational, multicenter, 12-month follow-up study of patients with open-angle glaucoma treated with the Omni surgical system as a standalone procedure in pseudophakic patients or combined with cataract surgery

Sponsor: Sight Sciences, Inc

Sub-Investigator ~ IIT~ Defocus curve part II-Analysis of Defocus Curve of Pre-Presbyopic and Emerging Presbyopic Patients (Alcon)

Sub-Investigator ~ IIT~ VIVity- Outcomes in Patients with Early Stage Glaucoma IIT (Alcon)

Sub-Investigator ~ IIT ~ REVIVE- Long Term Outcomes of Vivivity IOL versus Control (Alcon)

Sub-Investigator ~ IIT ~ PanOptix- Outcomes of a trifocal IOL in post-refractive patients (Alcon)

Sub-Investigator ~ IIT ~ MAKER- A Randomized, Double-Masked, Controlled, Single Site Investigator Initiated, Exploratory Study of the Midazolam/Ketamine Melt vs Ketamine Melt alone vs Midazolam Melt alone in subjects undergoing intraocular surgery (Vance Thompson Vision)

Sub-Investigator ~ IIT~ A Randomized, Controlled, Masked (Reading Center) Prospective Study of the Effectiveness and Safety of the Ocular Therapeutix Dextenza (dexamethasone Ophthalmic insert) 0.4 mg for the treatment of post-operative inflammation and pain in patients who have undergone PhotoRefractive Keratectomy (PRK) (Ocular Therapeutix, Inc)

Sub-Investigator ~ IIT ~ PREPARE- In Clinic Optometrist Insertion of Dextenza Prior to Cataract Surgery To evaluate the clinical outcomes with optometrist pre-surgical insertion of DEXTENZA in the clinical office setting in patients undergoing same-day cataract surgery compared to standard of care steroid therapy. (Ocular Therapeutix)

Sub-Investigator ~ IIT ~ DeFocus Curve-Binocular Custom Vision Utilizing the Light Adjustable Lens (LAL) (RxSight)a

Trade Publications

Shafer BM. Embrace Innovation with Sustained-Release Medications. *Ophthalmology Management*. March 2022.

Shafer BM, Yu A, Busin M, El-Defrawy S, Rai A, Yan, D. Educating the Next Generation of Ophthalmologists. *CRST*. June 2021.

McKinney, S (Interview of Shafer BM). The Quest for Perfect Vision. *Review of Ophthalmology*. May 2021.

Cho C, Shafer BM. Clubhouse: Can I Ping You In? *MillennialEYE*. May/June 2021.

Shafer BM. Fellowship in a Pandemic: Finding Opportunity in a Crisis. *MillennialEYE*. November/December 2020.

Shafer BM. Ixodes Scapularis: A Sight For Sore Eyes. *Scheie Vision Annual Report 2019*. December 2019.

Shafer BM. Image of the Month. *Corneal Physician*. January 2021.

Consultancy

Alcon (2021 – Present)

Allergan (2021 – Present)

CorneaGen (2021 – Present)

ImprimisRx (2021 – Present)

Visus Therapeutics (2021 – Present)

Harrow Pharmaceuticals (2021 – Present)

Speaker

Allergan: Durysta (2020 – Present)
Alcon: ATIOLs (2021 – Present)

Advisory Board Involvement

12/9/2021	Alcon Global Advisory Board: Toric IOLs (Virtual)
12/8/2021	Allergan, Durysta (Virtual)
11/13/2021	Visus (AAO)
11/12/2021	Tarsus (AAO)
11/12/2021	Alcon Innovations (AAO)
7/24/2021	Allergan, Durysta (ASCRS)
9/29/2022	Visus Therapeutics (AAO)

National Meeting Presentations

CSTILII 2023	Combining SLT and Durysta
CSTILII 2023	Presbyopia Correction at the Time of Cataract Surgery
CSTILII 2023	Astigmatism Management at the Time of Cataract Surgery
AAOPT 2022	Marrying a Lens to an Eye: IOL Selection
ASCRS 2022	Real World Experience and Outcomes with Sustained Release Bimatoprost Implant (Best Paper of Session)
ASCRS 2022.	Impact of Negative Pressure Applied to the Anterior Orbital Rim on Intraocular Pressure and Retrobulbar Pressure
AAO 2022	ISRS: Presbyopia, the Unfiltered Truth
AECOS 2022	The Shafer Protocol: SLT and Durysta
IGC 2021	The Effect of Periocular Negative Pressure Application on Intraocular and Retrobulbar Pressure in Human Cadaver Eyes
ASCRS 2021	Analysis of the Defocus Curves of Emerging Presbyopic Patients
ASCRS 2021	The Revive Study: Long Term Outcomes of a Novel Non-Diffractive Extended Vision IOL Versus Monofocal Control IOL
ASCRS 2021	One Year, Site-Level Outcomes of a Novel Non-Diffractive Extended Vision Intraocular Lens Versus Control
ASCRS 2021	The RESTORE Study: Safety and Efficacy of DEXTENZA for Post-Operative Inflammation and Pain Following PRK
AECOS 2021	A Nightmare Case of Zonular Dialysis and PC Rupture
ASCRS 2020	Analysis of the Defocus Curves of Emerging Presbyopic Patients
ARVO 2019	Outer Plexiform Layer Remodeling in Aging and Age-related Macular Degeneration (Best Paper of Session)