PREEYA K. GUPTA, MD CURRICULUM VITAE

Primary academic appointment: Associate Professor of Ophthalmology

Primary academic department: Department of Ophthalmology, Duke University Eye Center, Division of Cornea and Refractive Surgery

Present academic rank and title: Associate Professor of Ophthalmology Track I

Specialty certification(s) and dates (Month/Day/Year): American Board of Ophthalmology (10/14/2011)

Education:	Institution	<u>Date</u> (Year)	Degree
High School:	Breck School, Golden Valley, MN	1998	
College:	Northwestern University, Evanston IL	2002	Bachelor of Science
Graduate or Professional School	Northwestern University Feinberg School of Medicine, Chicago, IL 2006	2006	Doctor of Medicine

Professional training and academic career: (chronologically, beginning with first postgraduate position)

	Institution	Position/Title	<u>Dates</u>
1)	MacNeal Hospital, Berwyn, IL	Transitional Year Internship	06/06 - 06/07
2)	Duke University Eye Center, Durham, NC	Residency in Ophthalmology	07/07 - 06/10
3)	Minnesota Eye Consultants, Minneapolis, MN	Fellow in Anterior Segment Surgery (Cornea, Refractive, and Glaucoma	07/10 – 07/11 a surgery)
4)	Duke Eye Center, Durham, NC	Assistant Professor of Ophthalmology	8/11 to present
5)	Duke Eye Center at Page Road	Clinical Director	8/12 to present
6)	Duke Eye Center, Durham, NC	Associate Professor of Ophthalmology	8/17 to present

Publications:

1. Refereed journals:

1) Duarte MC, Herndon LW, **Gupta PK**, Afshari NA. DSEK in eyes with double glaucoma tubes. *Ophthalmology*. 2008; 115(8): 1435.

2) **Gupta PK**, Patel R, and Bhatti MT. Neuroretinitis Secondary to Concurrent Infection with Cat Scratch Disease and Lyme Disease. *Eye*. 2009 Jul; 23(7):1607 [e-pub Sept 12 2008].

3) **Gupta PK**, Freedman SF, Lee PP. Conformance to Preferred Practice Patterns in Caring for Children with Esotropia. *J Pediatric Ophthalmol and Strabismus.* 2010; May-Jun 47(3): 145-9.

4) Price KP, **Gupta PK**, Woodward JA, Stinnett S, and Murchison AP. "Eyebrow and Eyelid Dimensions: An Anthropometric Analysis of African American and Caucasians." *Plastic Reconstructive Surgery*. 2009 Aug; 124(2):615-23.

5) Reeves SW, Kang PC, Zlogar DF, **Gupta PK**, Stinnett S, Afshari NA. Recurrent Corneal Erosion Syndrome: A Study of 364 Episodes. *Ophthalmic Surgery Lasers and Imaging*. 2010 Mar 9:1-2.

6) Lin, I, **Gupta, PK**, Boehlke C, Lee, PP. Conformance to Preferred Practice Patterns in Caring for Patients with Dry Eye. *Archives of Ophthalmology*. 2010; 128(5):619-623.

7) Ehlers JP, **Gupta PK**, Farsiu S, Maldonado R, Kim T, Toth CA, Mruthyunjaya P. Evaluation of Contrast Agents for Enhanced Visualization in Optical Coherence Tomography. *Investigative Ophthalmology and Visual Science*. 2010 Dec; 51(12): 6614-9.

8) Johnson TV, **Gupta PK**, **Vudathala DK**, **Blair IA**, **Tanna AP**. Thermal stability of bimatoprost, latanoprost, and travoprost under simulated daily use. *Journal of Ocular Pharmacology and Therapeutics*. 2011 Feb; 27(1):51-9.

9) **Gupta PK,** Bordelon A, Vroman DT, Afshari NA, Kim T. Early Outcomes of Descemet's Stripping Automated Endothelial Keratoplasty in Pseudophakic Eyes with Anterior Chamber Intraocular Lenses. *American Journal of Ophthalmology*. 2011 Jan; 151(1):24-28.

10) **Gupta PK**, Asrani S, Freedman SF, El-Dairi M, Bhatti MT. Differentiating Glaucomatous from Non-Glaucomatous Optic Nerve Cupping by Optical Coherence Tomography. *Open Neurology Journal*. 2011; 5: 1-7.

11) Gupta PK, Stinnett SS, and Carlson AN. Prevalence of Obstructive Sleep Apnea in Patients with Keratoconus. *Cornea*. 2012 Jun; 31(6): 595-9. PMID: 22333661

12) **Gupta PK**, Ehlers JP, Kim T. Evaluation of Clear Corneal Wound Dynamics with Contrast-Enhanced Spectral-Domain Optical Coherence Tomography. *Ophthalmic Surg Lasers Imaging*. 2012 May-Jun; 43(3): 222-8.

13) Lee BS, **Gupta PK**, Davis EA, Hardten DR. Outcomes of Photorefractive Keratectomy Enhancement After LASIK. *Journal of Refractive Surgery*. 2014; 30(8): 549-556.

14) Vora GK and **Gupta PK**. Intense pulsed light therapy for the treatment of evaporative dry eye disease. *Curr Opin Ophthalmol.* 2015 Jul; 26(4):314-8.

15) Vickers LA and **Gupta PK**. The future of dry eye treatment: a glance into the therapeutic pipeline. *Ophthalmol Ther*. 2015; Dec;4(2):69-78 [e-pub ahead of print Aug 20]

16) Vickers LA and **Gupta PK**. Femtosecond astigmatic keratotomy. Curr Opin Ophthalmol. 2016; Jul; 27(4):277-84. [Epub ahead of print Mar 31]

17) Frank GS and **Gupta** PK. Current Theories and Methods for Managing Negative Dysphotopsia. *Int Ophthalmol Clin.* 2016; 56(3): 107-16.

18) **Gupta PK**, Vora GK, Matossian C, et al. Outcomes of Intense Pulsed Light Therapy for Treatment of Evaporative Dry Eye Disease. *Canadian J Ophthalmol.* 2016; Aug; 51(4):249-53.

19) Ong S, Vora GK, **Gupta PK**. Anterior Segment Imaging in Ocular Surface Squamous Neoplasia. *Journal of Ophthalmology*. 2016, Epub 2016 Oct 5.

20) Tong L, **Gupta PK**. Need for animal models of meibomian gland dysfunction. *Ophthalmology and Therapy*. 2016 Dec; 5(2):129-134.

21) Kim MJ, Stinnett SS, **Gupta PK**. Effect of Thermal Pulsation Treatment on Tear Film Parameters in Dry Eye Disease Patients. *Clinical Ophthalmology*. 2017 May; 11: 883-886.

22) Godin M and **Gupta PK**. Lifitegrast ophthalmic solution for the treatment of signs and symptoms of dry eye disease: design, development and place in therapy" *Clinical Ophthalmology*. 2017 May; 11: 951-957.

23) Wolffsohn JS, Arita R, Chalmers R, Djalilian A, Dogru M, Dubmleton K, **Gupta PK**, et al. TFOS DEWS II Diagnostic Methodology Report. *Ocul Surface*. 2017 Jul; 15(3):539-574.

24) Tong AY, **Gupta PK**, Kim T. Wound closure and tissue adhesives in clear corneal incision cataract surgery. *Curr Opin Ophthalmol.* 2018 Jan; 29(1): 14-18.

25) **Gupta PK**, Stevens M, Kashyap N, Priestly Y. Prevalence of meibomian gland atrophy in a pediatric population. *Cornea*. 2018 Apr; 37(4): 426-430.

26) Godin MR, Stinnett SS, **Gupta PK**. Outcomes of Thermal Pulsation Treatment for Dry Eye Syndrome in Patients with 2 Sjogren Disease. *Cornea*. 2018 Sep; 37(9): 1155-1158.

27) Reyes NJ, Mathew R, Kunnen CM, Chen Y, Kalnitsky J, Redfern RL, Leonardi A, Perez VL, MacLeod AS, **Gupta PK**, Saban DR. Neutrophils cause obstruction of eyelid sebaceous glands in inflammatory eye disease in mice. *Science Translational Medicine*. 2018 Jul 25; 10(451).

28) **Gupta PK**, Drinkwater OJ, VanDusen KW, Brissette AR, Starr CE. Prevalence of ocular surface dysfunction in patients presenting for cataract surgery evaluation. *J Cataract Refract Surg.* 2018 Sep; 44(9):1090-1096.

29) Passi SF, Thompson AC, **Gupta PK**. Comparison of agreement and efficiency of a swept source-optical coherence tomography device and an optical low-coherence reflectometry device for biometry measurements during cataract evaluation. *Clin Ophthalmol.* 2018 Nov (12): 2245-2251.

30) Kim T, Sall K, Holland EJ, Brazzell RK, Coultas S, **Gupta PK**. Safety and efficacy of twice daily administration of KPI-121 1% for ocular inflammation and pain following cataract surgery. *Clin Ophthalmol*. 2018(13): 69-86.

31) Godin MR, Boehlke C, Kim T, **Gupta PK**. Influence of Lens Status on Outcomes of Descemet's Membrane Endothelial Keratoplasty. *Cornea*. 2019 Apr; 38(4): 409-412.

32) Matossian C, McDonald M, Donaldson KE, Nichols KK, MacIver S, **Gupta PK**. Dry Eye Disease: Considerations for Women's Health. *J Women's Health.* 2019 Apr; 28(4): 502-14.

33) Tong AY, Passi SF, **Gupta PK**. Clinical outcomes of liftegrast 5% ophthalmic solution in the treatment of dry eye disease. *Eye Contact Lens*. 2019 Apr 10 [epub ahead of print]

34) Starr CE, **Gupta PK**, Farid M, Beckman KA, Chan CC, Yeu E, Gomes JAP, Ayers BD, Berdahl JP, Holland EJ, Kim T, Mah FS; ASCRS Corneal Clinical Committee. An algorithm for the preoperative diagnosis and treatment of ocular surface disease. *J Cataract Refract Surg.* 2019 May; 45(5): 669-684.

35) Yeu E, Goldberg DF, Mah FS, Beckman KA, Luchs, JI, Solomon JD, White DE, **Gupta PK**. Safety and efficacy of amniotic cytokine extract in the treatment of dry eye disease. *Clin Ophthalmol*. 2019 May (13): 887-894.

36) Goerlitz-Jessen MF, **Gupta PK**, Kim T. Impact of epithelial basement membrane dystrophy and Salzmann nodular degeneration on biometry measurements. *J Cataract Refract Surg.* 2019 Aug; 45(8): 1119-1123.

37) **Gupta PK**, Asbell P, Sheppard J. Current and Future Pharmacological Therapies for the Management of Dry Eye. Eye Contact Lens. 2020 Mar;46 Suppl 2:S64-S69.

38) Beckman KA, **Gupta PK**, Farid M, Berdahl JP, Yeu E, Ayres B, Chan CC, Gomes JAP, Holland EJ, Kim T, Starr CE, Mah FS; ASCRS Cornea Clinical Committee. Corneal crosslinking: current protocols and clinical approach. J Cataract Refract Surg. 2019 Nov;45(11):1670-1679

39) Liebmann JM, Barton K, Weinreb RN, Eichenbaum DA, **Gupta PK**, McCabe CM, Wolfe JD, Ahmed I, Sheybani A, Craven ER. Evolving guidelines for intracameral injection. J Glaucoma. 2020 Mar;29 Suppl 1:S1-S7.

40) Brooks CC, Jabbehdari S, **Gupta PK.** Dexamethasone 0.4mg Sustained-Release Intracanalicular Insert in the Management of Ocular Inflammation and Pain Following Ophthalmic Surgery: Design, Development and Place in Therapy. Clin Ophthalmol. 2020 Jan 13;14:89-94

ii. Study Group publications

1) Masket S, Hovanesian JA, Levenson J, Tyson F, Flynn W, Endl M et al Hydrogel sealant versus sutures to prevent fluid egress after cataract surgery. *J Cataract Refract Surg.* 2014 Dec; 40(12):2057-66.

2. Books

- 1) Chang DF, Kim T, Gupta PK, DelMonte DW editors. *Curbside Consultation in Cataract Surgery*, 2nd Edition. New Jersey: SLACK, Inc., 2014
- 2) Gupta PK and DelMonte DW. Cornea Section Editors. *The Ophthalmology Clinical Trials Handbook*. New York: Nova Science Publishers, Inc., 2015.

3. Chapters in books:

- 1) Bournias TE, Abraham C, Kshettry P. "Uveitis." Bournias TE, editor. Blueprints Ophthalmology. Massachusetts: Blackwell Publishing, Inc; 2005. 121-126.
- 2) Abraham C, **Kshettry P**, Bournias TE. "Ocular trauma." Bournias TE, editor. Blueprints Ophthalmology. Massachusetts: Blackwell Publishing, Inc; 2005: 35-48.
- Abraham C, Kshettry P, Bournias TE. "Basic ophthalmic examination." Bournias TE, editor. Blueprints Ophthalmology. Massachusetts: Blackwell Publishing, Inc; 2005:15-26.
- Feder RS and Kshettry P. "Noninflammatory ectatic disorders." Krachmer JH, Mannis, MJ, Holland, EJ, editors. Cornea (2nd Ed). Philadelphia: Elsevier-Mosby; 2005: 955-974.
- 5) **Gupta PK** and Kim T. "Developmental anomalies of the cornea size and shape." Krachmer JH, Mannis, MJ, Holland, EJ, editors. Cornea (3rd Ed.). Philadelphia: Elsevier-Mosby; 2010.
- 6) **Gupta PK** and Kim T. "Use of tissue adhesives in anterior segment surgical procedures." Albert and Lucarelli, editors. Clinical Atlas of Procedures in Ophthalmic Surgery and Oculofacial Surgery (2nd Ed). AMA Press; 2011.
- 7) **Gupta PK**, Berdahl JP. "Concomitant glaucoma drainage devices and corneal transplantation." Kahook, editor. Essentials of Glaucoma Surgery. New Jersey: SLACK, Inc; 2012: 313-318.
- 8) **Gupta PK**, Berdahl JP. "Glaucoma surgery in corneal transplant patients." Essentials of Glaucoma Surgery. Kahook, editor. Essentials of Glaucoma Surgery. New Jersey: SLACK, Inc; 2012: 301-306.
- 9) Gupta PK, Hardten DR, Davis EA, Lindstrom RL. "Future of phakic intraocular lenses." Alio JL and Perez-Santonja JJ, editors. Refractive Surgery with Phakic Intraocular Lenses: Fundamentals and Clinical Practice (2nd Ed). New Dehli: Jaypee Brothers Medical Publishers Ltd; 2012: 195-198.
- Gupta PK. "My patient has dry eyes and blepharitis. How and when do I need to treat these before cataract surgery?" *Curbside Consultation in Cataract Surgery*, 2nd Ed. Chang DF, Kim T, Gupta PK, DelMonte DW editors. New Jersey: SLACK, Inc, 2014. 3-5.
- 11) **Gupta PK** and Meyer J. Routine preoperative testing for patients who are receiving a refractive IOL. In: Henderson and Yoo, editors. Curbside Consultation in Refractive Surgery. New Jersey: SLACK, Inc; 2014.
- 12) **Gupta PK**, Kim MJ, and Kim T. "Developmental anomalies of the cornea size and shape." Krachmer JH, Mannis, MJ, Holland, EJ, editors. Cornea (4th Ed.). Philadelphia: Elsevier-Mosby; 2016: 599-609.
- Vickers L, Foulks G, and Gupta PK. "Diagnosis and Management of Corneal Allograft Rejection." Krachmer JH, Mannis, MJ, Holland, EJ, editors. Cornea (4th Ed.). Philadelphia: Elsevier-Mosby; 2016: 1315-1323.
- 14) Kim MJ and **Gupta PK**. "Dry eye disease: the role of hormones, age, and topical antihypertensives." Mah F, Rhee M, editors. Dry eye disease: an up to date practical guide. New Jersey: SLACK, Inc. In press 2017
- 15) Godin M, **Gupta PK**, and Kim T. "The eyelid facial." Mah F, Rhee M, editors. Dry eye disease: an up to date practical guide. New Jersey: SLACK, Inc. In press 2017
- 16) Jabbehdari S, Kim T, Gupta PK. "Developmental anomalies of the cornea size and shape." Mannis, MJ, Holland, EJ, editors. Cornea (5th Ed.). Philadelphia: Elsevier-Mosby; in press
- Brooks C and Gupta PK. "Diagnosis and Management of Corneal Allograft Rejection" Mannis, MJ, Holland, EJ, editors. Cornea (5th Ed.). Philadelphia: Elsevier-Mosby; in press

5. Non-refereed publications:

- i. Print
 - 1) **Gupta PK**, Kharod B, Afshari NA. "Crystalline Keratopathy: spectrum of disease, diagnosis, and treatment." *Eyenet*, Jan 2008.
 - 2) Gupta PK, Bhatti MT, Rucker J. Sweet Case of Diplopia. Survey of Ophthalmology. 2009; 54(2): 305-310.

- 3) **Gupta PK**, Kim T. "Applications of tissue adhesives in ophthalmic surgery." *Cataract and Refractive Surgery Today*. September 2009; 67-68.
- 4) **Gupta PK**, Jun B, Kim T. Comparison of System Metrics Using Minimal Threshold Ultrasound Settings in Microcoaxial Phacoemulsification. *Techniques in Ophthalmology*. 2010; 8(2): 69-71.
- 5) **Gupta PK**, Reeves SW. "A cornea specialist's approach to the refractive surgery evaluation." *Cataract and Refractive Surgery Today Europe*. Sept 2011.
- 6) Gupta PK. "Rosacea and Ocular Infection." Topics in Ocular Antiinfectives. 2013 Sept. 43: 5-7.
- 7) Legault G and **Gupta PK**. Choosing the Right Treatment for Hyperopia: Refractive lens exchange versus LASIK. *Cataract and Refractive Surgery Today*. July 2014.
- 8) Gupta PK. Integrating New Technologies Into Your Practice. Advanced Ocular Care. July/Aug 2014.
- 9) McGaughy AG and Gupta PK. "In-Office Use of Amniotic Membrane" Eyenet. Feb 2015.
- 10) Gupta PK. "Cataract surgery in patients with MGD." Cataract and Refractive Surgery Today. March 2015.
- 11) Beyer C, Gupta PK, Maloney R. "Presbyopic correction after radial keratotomy." *Cataract and Refractive Surgery Today*. Aug 2015, 38-41.
- 12) Gupta PK, Jackson MJ, and Wiley WF. "Vision loss after post-LASIK flap trauma." *Cataract and Refractive Surgery Today*. Dec 2015, 38-41.
- 13) Gupta PK, Loh J, Tauber S, Donaldson K. "Ten years later: stromal infiltrate and lamellar keratitis." *Cataract and Refractive Surgery Today*. Mar 2016, 41-43.
- 14) Gupta PK, Parkhurst G, Stonecipher K, and Carlson A. "High regular corneal astigmatism." *Cataract and Refractive Surgery Today*. May 2016, 51-54.
- 15) Hein AM and Gupta PK. Epidemic keratoconjunctivitis: prevention strategies in the clinic. Eyenet. Feb 2017, 33-34.

ii. Digital

- 1) Vora GK and Gupta PK. Collagen Crosslinking: an update. Millennial Eye. March 2014.
- 2) Nariani A and Gupta PK. "Dry eye and refractive surgery outcomes." Current Ophthalmology Reports. 2016. 4(1), 8-14.

6. Position, and background papers

ASCRS CyPass Withdrawal Consensus Statement; Online publication: Jan 2019 <u>https://ascrs.org/CyPass_Statement</u> <u>http://ascrs.org/sites/default/files/Preliminary_ASCRS%20_yPass_Withdrawal_Consensus_Statement.pdf</u> Invited faculty contributor

Editorial Experience:

a. Editorial Boards

- 1. Editorial Board Member, Cataract and Refractive Surgery Today (CRST), 1/15 to present
- 2. Editorial Board Member, International Society of Refractive Surgery (ISRS) Multimedia Library Editorial Board, 8/15 to present
- 3. Editorial Board Member, Dry Eye & Ocular Surface, 8/15 to present
- 4. American Academy of Ophthalmology BCSC Refractive Surgery Committee, 10/16 to present
- 5. Editorial Board Member, ONE Network, American Academy of Ophthalmology (AAO) 1/17 to present
- 6. Editorial Board Member, Ocular Surgery News (OSN)—cornea and external disease section, 1/17 to present
- 7. Editorial Board Member, Eyeworld 4/18 to present

b. Ad Hoc scientific review journals

- 1. Reviewer, Journal of Ocular Pharmacology and Therapeutics 2/11 to present
- 2. Reviewer, Journal of Refractive Surgery, 6/11 to present
- 3. Reviewer, American Journal of Ophthalmology 6/11 to present
- 4. Reviewer, Canadian Journal of Ophthalmology, 3/13 to present
- 5. Reviewer, Investigative Ophthalmology and Visual Science, 12/13 to present
- 6. Reviewer, Journal of Cataract and Refractive Surgery, 7/14 to present
- 7. Reviewer, Ophthalmology, 3/14 to present

Invited Lectures and Presentations

i. Named Lectures

"Management and Diagnosis of Dry Eye Disease in 2018" Robert G. Miller Lecturer. Northwestern University Department of Ophthalmology Keynote Lecturer. Chicago, IL; June 28, 2018.

ii. Visiting Professorships

- "Advanced treatment for MGD and Dry Eye Disease." Tong Ren Hospital. Visiting Professor. Beijing, China; November 12, 2018.
- 2) "Implementing thermal pulsation into clinical practice." Shanghai No. 1 Hospital. Visiting Professor. Shanghai, China; November 14, 2018.
- 3) "Integration of advanced MGD therapeutics." Samsung Hospital. Visiting Professor. Seoul, South Korea; August 5, 2019.

iii. International Meetings

- 1) "Evaporative Dry Eye: Advances in Therapeutics." Korean Ophthalmology Society Annual Meeting. Seoul, Korea; Nov 1, 2014.
- "Complications with multifocal IOLs" Intraocular Implant & Refractive Surgery International Meeting. Chennai, India; July 7, 2018.
- "Neurostimulation in Dry Eye Disease" Intraocular Implant & Refractive Surgery International Meeting. Chennai, India; July 8, 2018.
- 4) "EDOF IOLs in practice" Intraocular Implant & Refractive Surgery International Meeting. Chennai, India; July 8, 2018.
- 5) "Advances in MGD Treatment." Chinese National Ocular Surface & Tear Film Diseases Congress. Wuhan, China; November 10, 2018.
- 6) "Thermal Pulsation Therapy for MGD." Chinese National Ocular Surface & Tear Film Diseases Congress. Wuhan, China; November 10, 2018.
- "ASCRS Corneal Clinical Committee Algorithm for Diagnosing OSD in Patients Presenting for Cataract and Refractive Surgery". J&J Vision Innovation Summit. Tokyo, Japan; August 4, 2019.
- 8) "MGD therapeutics in the treatment of symptomatic disease". J&J Vision Innovation Summit. Tokyo, Japan; August 5, 2019.

iv. National Scientific Meetings (invited) Peer Reviewed Scientific Presentations

- Gupta PK, Jun B, Kim T. "System Metrics Comparison of Different Ultrasound and Fluidic Settings Through Microcoaxial Incision." Scientific Presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—April 3, 2009; San Francisco, CA.
- 2) **Gupta PK** and Carlson AN. Prevalence of Obstructive Sleep Apnea in Patients with Keratoconus. Scientific Presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—April 10, 2010; Boston, MA.

- Ehlers JP, Gupta PK, Farsiu S, Maldonado R, Toth CA, and Mruthyunjaya P. Ophthalmic Contrast Agents for Optical Coherence Tomography: A qualitative study. Paper Presentation. ARVO/ISIE 6th Annual Meeting, Fort Lauderdale, FL. May 2010.
- 4) **Gupta PK** and Hardten DR. Clinical Outcomes of PRK Enhancement in Post-LASIK Patients American Society of Cataract and Refractive Surgery (ASCRS) Meeting. Paper presentation. March 27, 2011; San Diego, CA.
- Gupta PK, Vora GK, Stinnett S. Scientific Presentation. Clinical Outcomes of Intense Pulsed Light Therapy for Evaporative Dry Eye. Paper presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting. April 27, 2014; Boston, MA.
- 6) Vora GK, Gupta PK, Matossian C, et al. Outcomes of Intense Pulsed Light Therapy for Evaporative Dry Eye. Paper presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting. April 19, 2015; San Diego, CA.
- 7) Godin M and **Gupta PK**. Scientific Presentation. Clinical Outcomes of Thermal Pulsation in Patients with Sjogrens Disease. Paper presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting. May 9, 2016; New Orleans, LA.
- Stevens M and Gupta PK. Prevalence of meibomian gland atrophy in a pediatric population. Paper presentation. ASCRS Annual Meeting. Los Angeles, CA. May 8, 2017.
 *Received honor of Best Paper of Session
- Kim, T, Gupta PK, Holland EJ, et al. Safety and efficacy of twice daily administration of KPI-121 1% for ocular inflammation and pain following cataract surgery. Paper presentation. ASCRS Annual Meeting. Washtington, DC. April 16, 2018.
- 10) Passi S, Thompson A, and **Gupta PK.** Comparison of agreement and efficiency of an optical low-coherence reflectometry device and a swept source OCT device. Paper presentation. ASCRS Annual Meeting. Washtington, DC. April 16, 2018.
- 11) Passi S, Thompson A, **Gupta PK.** Optical quality and tear film analysis before and after TrueTear application in patients with dry eye syndrome. Paper presentation. ASCRS Annual Meeting. San Diego, CA. May 4, 2019.
- 12) Passi S, Kim MJ, Thompson A, Raufi NN, Kim T, and Gupta PK. Refractive outcomes using intraoperative aberrometry for highly myopic, highly hyperopic, and post-refractive eyes. Paper presentation. ASCRS Annual Meeting. San Diego, CA. May 4, 2019. *Winner Best Paper of Session
- Goerlitz-Jessen MF, Gupta PK, Kim T. The impact of epithelial basement membrane dystrophy and Salzmann's nodular degeneration on biometry measurements. Paper presentation. ASCRS Annual Meeting. San Diego, CA. May 4, 2019. *Winner Best Paper of Session

Peer Reviewed Presentations

- "Ophthalmic Office Emergencies: Things You Don't Want to Miss." Spotlight session, AAO Annual Meeting. New Orleans, LA; Nov 17, 2013.
- 2) "Laser Refractive Enhancements Post-Premium IOLs" Cornea Day, ASCRS Annual Meeting. Boston, MA; April 25, 2014.
- 3) "The Dry Eye Debate." Millennial Eye Live Meeting. Austin, TX; Nov 22, 2014.
- 4) "DMEK complications" Innovative Techniques & Controversies in Ophthalmology. Park City, UT; Jan 23, 2015
- 5) "Messy Malyugin" Innovative Techniques & Controversies in Ophthalmology. Park City, UT; Jan 24, 2015
- 6) "Dry Eye Care in the Surgical Practice: Why it is too important to ignore" Innovative Techniques& Controversies in Ophthalmology. Park City, UT; Jan 24, 2015
- 7) "Role of Office-Based Application of Amniotic Membrane in Ocular Surface Disease Treatment" Innovative Techniques& Controversies in Ophthalmology. Park City, UT; Jan 24, 2015
- 8) "Multifocal IOL complications" ASCRS Combined Ophthalmic Symposium. Austin, TX; Aug 22, 2015.
- 9) "Clear understanding of IOL opacification" ASCRS Combined Ophthalmic Symposium. Austin, TX; Aug 22, 2015.
- 10) "Complex Corneal Scenarios" Royal Hawaiian Eye Meeting. Kona, HI; Jan 21, 2016.
- 11) "Management of complex cataracts" Royal Hawaiian Eye Meeting. Kauai, HI; Jan 16, 2017.

- 12) "Amniotic membrane in ocular surface disease" Royal Hawaiian Eye Meeting. Kauai, HI; Jan 19, 2017.
- "Cornea Cornucopia" Invited keynote lecturer. Southeastern College of Optometry (SECO) Annual Meeting. Atlanta, GA; March 3, 2017.
- 14) "Yes, DMEK Can Be Efficient". Kiawah Eye Meeting. Kiawah, SC. June 2, 2017.
- 15) "Advances in Presbyopia Correction". OSN NY Meeting. New York, NY. October 19, 2017.
- 16) "Managing ocular surface disease in the refractive patient" Royal Hawaiian Eye Meeting. Maui, HI; Jan 19, 2018.
- 17) "Office based treatments for MGD—what really works?" American Society of Cataract and Refractive Surgery Annual Meeting. Washington, DC; April 13, 2018.
- 18) "Swept source OCT in biometry: does it really make a difference." Kiawah Eye Meeting. Kiawah, SC. May 31, 2018.
- 19) "Treating the tough dry eye patients: new technology in dry eye disease." Kiawah Eye Meeting. Kiawah, SC. June 2, 2018.
- 20) "Meibomian gland atrophy in a pediatric population" Advanced Refractive Congress. Ft. Lauderdale, FL; July 28, 2018.
- "Pathophysiology of Dry Eye Disease: Review of the DEWS II Report". American Academy of Ophthalmology Annual Meeting. Chicago, IL; October 30, 2018.
- 22) "Best of ASCRS 2019: Cornea" ASCRS Annual Meeting. San Diego, CA; May 7, 2019.
- 23) "Managing small pupils". Kiawah Eye Meeting. Kiawah, SC. May 31, 2019.
- 24) "Dry Eye Procedures: Stepping up your game". Kiawah Eye Meeting. Kiawah, SC. June 1, 2019.
- 25) "Best Refractive Diagnostics in 2019". Advanced Refractive Congress Meeting. Ft. Lauderdale, FL. July 27, 2019.
- 26) "Office Based MGD Treatments". ASCRS Combined Ophthalmic Symposium. Austin, TX. August 24, 2019.
- 27) "Managing the White Cataract". ASCRS Combined Ophthalmic Symposium. Austin, TX. August 24, 2019.

v. Instructional Courses, workshops, symposiums (National)

- Gupta PK and Carlson AN. Prevalence of Obstructive Sleep Apnea in Patients with Keratoconus. Scientific Presentation. Cornea Clinical Committee Highlights Session. American Society of Cataract and Refractive Surgery (ASCRS) Meeting— April 11, 2010; Boston, MA.
- "Surgical Management of Astigmatism" ASCRS Young Physician and Resident Committee Faculty Moderator; Webinar July 27, 2011
- 3) "Toric IOLs in 2014" ASCRS Resident Advanced Cataract Training (ReACT) Meeting. New York, NY; March 1, 2014.
- "Challenging Video Cases for the Young Surgeon" Course Instructor/Faculty ASCRS Annual Meeting. Boston, MA; April 26, 2014.
- 5) "Optimal Care of Meibomian Gland Dysfunction and Evaporative Dry Eye Patients in a Busy Surgical Practice" Course Instructor/Faculty ASCRS Annual Meeting. Boston, MA; April 27, 2014.
- "Advanced Technologies for Managing Meibomian Gland Dysfunction." Course Instructor/Faculty ASCRS Annual Meeting. Boston, MA; April 28, 2014.
- 7) "Dry Eye Evaluation and Management." Review of Ophthalmology Continuing Specialized Residency Education Program. Fort Worth, TX; September 12, 2014.
- "Toric IOLs: Evaluation & Management." Review of Ophthalmology Continuing Specialized Residency Education Program. Fort Worth, TX; September 12, 2014.
- 9) "Evaluation of the Refractive Surgery Candidate." Review of Ophthalmology Continuing Specialized Residency Education Program. Fort Worth, TX; September 12, 2014.

- 10) "Retinal detachment and LASIK" From Front to Back: Managing the Posterior Segment Sequelae of Anterior Segment Surgery. Course Faculty & Presenter. AAO Annual Meeting. Chicago, IL; Oct 19, 2014.
- 11) "Management of Dense & White Cataract". Complex Cataract and IOL Complications, Course Faculty Presenter, AAO Annual Meeting. Chicago, IL; Oct 21, 2014.
- 12) "Corneal Considerations Corneal Considerations in Cataract Surgery: Preoperative Pearls to Prevent Postop Peril" Course Instructor/Faculty ASCRS Annual Meeting. San Diego, CA. April 19, 2015.
- 13) "Ocular surface disease diagnosis and management." Course: Corneal Considerations Corneal Considerations in Cataract Surgery: Preoperative Pearls to Prevent Postop Peril" ASCRS Annual Meeting. New Orleans, LA. May 9, 2016. Course Faculty
- 14) "Taking your practice from good to great: clinical and practice insights 10 years out" Course Director and faculty. ASCRS Annual Meeting. Washington, DC; April 14, 2018.
- 15) "Ocular surface disease prior to cataract and refractive surgery". Cornea Clinical Committee Symposium. ASCRS Annual Meeting. Washington, DC; April 15, 2018.
- 16) "From front to back: anterior segment and retinal disease review." American Academy of Ophthalmology Annual Meeting. Chicago, IL; October 29, 2018.
- 17) "MGD conundrum". Cornea Clinical Committee Symposium. ASCRS Annual Meeting. San Diego, CA; May 5, 2019.
- vi. Posters (National meeting)
 - Kshettry P, Vudathala D, Johnson TV, Blair IA, and Tanna AP. "Thermal Stability of Bimatoprost and Latanoprost." Scientific Poster. Association for Research in Vision and Ophthalmology (ARVO) Meeting—April 26, 2004; Ft. Lauderdale, FL.
 - Gupta PK, Freedman SF, Lee PP. "Conformance to Preferred Practice Patterns in Caring for Children with Esotropia." Scientific Poster. Association for Research in Vision and Ophthalmology (ARVO) Meeting—April 28, 2008; Ft. Lauderdale, FL.
 - Gupta PK, Asrani S, Freedman SF, El-Dairi M, Bhatti MT. "Differentiation of Glaucomatous and Non-Glaucomatous Optic Nerve Cupping by OCT." Scientific Poster. North American Neuro-Ophthalmology Society (NANOS) Meeting—February 24, 2009; Lake Tahoe, NV.
 - 4) Gupta PK, Lin I, Lee PP. "Conformance to Preferred Practice Patterns in Caring for Patients with Dry Eye." Scientific Poster. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—April 3, 2009; San Francisco, CA.
 - Lin I, Gupta PK, Boehlke C, Lee PP. "Impact of Physician Subspecialty and Electronic Medical Record on Dry Eye Care." Scientific Poster. Association for Research in Vision and Ophthalmology (ARVO) Meeting—May 6, 2009; Ft. Lauderdale, FL.
 - 6) Price KP, Gupta PK, Woodward JA, Stinnett S, and Murchison AP. "Eyebrow and Eyelid Dimensions: An Anthropometric Analysis of African American and Caucasians." Scientific Poster. Association for Research in Vision and Ophthalmology (ARVO) Meeting—May 6, 2009; Ft. Lauderdale, FL.
 - 7) Gupta PK, Bryant JW, Suner IJ. "RaScaL: Pilot Study Comparing Ranibizumab + Peripheral Scatter Laser to Triamcinolone + Macular Laser in Diabetic Macular Edema Associated With Peripheral Nonperfusion on Ultra-Widefield Angiography." Scientific Poster. Association for Research in Vision and Ophthalmology (ARVO) Meeting—May 4, 2009; Ft. Lauderdale, FL.
 - 8) **Gupta PK**, Kim T. Clinical Observations of Single-Use Irrigation/Aspiration Tip. Scientific Poster. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—April 2010; Boston, MA.
 - 9) Carlson AN, Gupta PK and Santaella R. Keratoconus and Post-LASIK Keratoectasia: The Role of Eye Rubbing and Nocturnal Eye Pressure Scientific Video Presentation. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—April 2010; Boston, MA.

- Gupta PK, Bordelon A, Vroman DT, Afshari NA, Kim T. Early Outcomes of Descemet's Stripping Automated Endothelial Keratoplasty in Pseudophakic Eyes with Anterior Chamber Intraocular Lenses. Scientific Poster. World Cornea Congress VI Meeting—April 2010; Boston, MA.
- 11) Ehlers JP, **Gupta PK**, Farsiu S, Maldonado R, Kim T, Toth CA, and Mruthyunjaya P. Prednisolone Contrast Enhancement for Anterior Segment Optical Coherence Tomography. Scientific Poster. AAO Annual Meeting. Chicago, IL. October 2010.
- 12) Gupta PK, Ehlers JP, Kim T. Contrast-Enhanced Corneal Wound Imaging by Optical Coherence Tomography. Scientific Poster. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—March 27, 2011; San Diego, CA.
- 13) Kim M, Vora G, **Gupta PK**. Baseline characteristics and outcomes of patients who require additional maintanence treatments with IPL. Association for Research in Vision and Ophthalmology (ARVO) Meeting—May 7, 2015; Denver, CO.
- 14) Kim MJ and Gupta PK. Effects of Thermal Pulsation Treatment on Higher Order Aberrations and Keratometry in Patients with Dry Eye Disease. American Society of Cataract and Refractive Surgery (ASCRS) Meeting—May 7, 2016; New Orleans, LA.
- 15) VanDusen K and **Gupta PK**. Prevalence of dry eye in patients under going cataract surgery. ASCRS Annual Meeting. Los Angeles, CA. May 2017.
- 16) **Gupta PK**, Yeu L, et al. "Clinical Outcomes of Amniotic Cytokine Extract in the Treatment of Dry Eye Disease." Poster Presentation. AAO Annual Meeting. New Orleans, LA. November 13, 2017.
- 17) Godin, **Gupta PK**, Kim T. Changes in intraocular toric lens power and alignment based on intraoperative aberrometry. Poster presentation. ASCRS Annual Meeting. Washington, DC. April 14, 2018.
- 18) Gupta PK, Foulks G, Holland E, Sall K, Brazzell RK, Coultas S. KPI-121 0.25% for Short Term Treatment of Dry Eye Disease: Results of a Multicenter Randomized Phase 3 Trial (STRIDE1). AAO Annual Meeting. Chicago, IL. October 29, 2018.

vii. Regional presentations and posters

- Gupta PK, El-Dairi M, Freedman SF, Asrani S, Bhatti MT. "Differentiation of Glaucomatous and Non-Glaucomatous Optic Nerve Cupping by OCT." Selected Machemar Award Scientific Presentation. Duke University Department of Ophthalmology Resident and Fellow Research Day conference. Durham, NC. June 20, 2008.
- 2) "LASIK surgery: My Technique" TLC Refractive Surgery Training Course. Minneapolis, MN. January 26, 2011
- 3) "Enhancement strategies for the post-refractive surgery patient" TLC Refractive Surgery Training Course. Minneapolis, MN. January 26, 2011.
- 4) "Surgical intervention for common eye disease" Minnesota Paraoptometric Society. Minneapolis, MN; Feb 4, 2011.
- 5) "Dry eye and blepharitis: classification and novel therapies" Regions Hospital Ophthalmic Technician Program. Minneapolis, MN; May 15, 2011.
- 6) "Surgical management of astigmatism" Regions Hospital Ophthalmic Technician Program. Minneapolis, MN; May 15, 2011.
- 7) "Clinical Cases in Corneal Surgery" North Carolina Optometric Society Eastern District Meeting. Raleigh, NC; October 26, 2011.
- "Advances in Dry Eye Therapy" Duke Eye Center at Page Road Continuing Education Course. Durham, NC; December 6, 2011.
- "Intense Pulsed Light Therapy for the Treatment of Dry Eye" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; March 24, 2012.
- 10) "Phakic IOLs: What Options Do We Have in 2012?" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; March 24, 2012.
- 11) "Keratitis Outbreak in the Triangle" Duke Eye Center at Page Road Continuing Education Course. Durham, NC; August 14, 2012.
- 12) "Intense Pulsed Light Therapy for the Treatment of Dry Eye" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; March 23, 2013.

- "Intacs for the treatment of keratoconus" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; March 23, 2013.
- "Role of amniotic membrane tissue in ocular surface repair" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; March 23, 2013.
- "The Red Eye: Managing Evaporative Dry Eye Disease" Duke Eye Center Continuing Education Course. Durham, NC; Nov 4, 2013.
- "Fundamentals of Cataract Surgery" Quad-Residency Regional Phacoemulsification Training Course. Chapel Hill, NC; Jan 11, 2014.
- 17) "Early Post-operative Complications in Cataract Surgery" Quad-Regional Phacoemulsification Training Course. Chapel Hill, NC; Jan 11, 2014.
- "Amniotic Membrane: Applications in Ophthalmology" North Carolina Optometric Society Eastern District Meeting; Raleigh, NC; January 22, 2014.
- "Dry Eye Diagnostic Testing Advances" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; February 22, 2014.
- "Refractive Surgery: a decision tree" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; February 22, 2014.
- "IOL Opacification: Why Your Lens May Be at Risk" Duke Eye Center Continuing Education Course. Durham, NC; January 12, 2015.
- 22) "Advances in Toric IOLs" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; February 28, 2015.
- "Meibomian Gland Imaging Breakthroughs in 2015" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; February 28, 2015.
- 24) "Managing the Posterior Segment Sequelae of Anterior Segment Surgery" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; February 28, 2015.
- 25) "Cataract Surgery 101" Quad-Residency Regional Phacoemulsification Training Course. Chapel Hill, NC; Jan 31, 2015.
- 26) "Complications in Cataract Surgery" Quad-Regional Phacoemulsification Training Course. Chapel Hill, NC; Jan 31, 2015.
- 27) "Dry eye and meibomian gland dysfunction: why ophthalmologists care about rosacea". Dermatology Grand Rounds. Duke University Medical Center. Durham, NC; May 20, 2015.
- "Management of dry eye ocular surface disease" North Carolina Eye Physicians and Surgeons Annual Meeting. Myrtle Beach, SC. Sept 13, 2015.
- "Dry Eye Masqueraders" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; April 23, 2016.
- 30) "Intraocular lenses: the new frontier" Duke Eye Center Continuing Education Course. Durham, NC; Aug 22, 2016.
- 31) "Advances in Dry Eye Disease Treatment" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; Feb 4, 2017.
- 32) "Dry Eye in 2018". Charlotte Ophthalmology Society Meeting. Invited Keynote lecturer. Charlotte, NC; Jan 25, 2018.
- 33) "Advances in Treatment of Presbyopia" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; Feb 10, 2018.
- 34) "Modern therapy for DED management" Duke Eye Center Controversies in Cataract and Cornea Surgery Meeting. Durham, NC; Feb 9, 2019.
- 35) "Toric IOLs" Quad-Regional Advanced Phacoemulsification Training Course. Chapel Hill, NC; March 2, 2019.

Scholarly societies: (Alpha Omega Alpha, Sigma Xi, Phi Beta Kappa; etc.)

• Alpha Omega Alpha—2006

Organizations and participation:

2007— American Academy of Ophthalmology (AAO) Member

Leadership positions held AAO Council Member 2015 to present AAO Council Regional Meeting Co-chair April 2016

2008— American Society of Cataract and Refractive Surgery (ASCRS) Member

Leadership positions held Young Eye Surgeons (YES) ASCRS Clinical Committee 2010 to 2014 Cornea Clinical Committee Member 2015 to present Membership Committee Member 2017 to present

2011—International Society of Refractive Surgery Member

Leadership positions held Editorial Board Member, International Society of Refractive Surgery (ISRS) Multimedia Library Editorial Board, 8/15 to present

2012-Vanguard Ophthalmology Society (subspecialty, by invitation only) Member

Leadership positions held President Jan 2018 to present Treasurer 2015 to 2017

2014—Cornea Society Member

2014—American Society of Progressive ENterprising Surgeons (subspecialty, by invitation only) Member

2015—Tear Film Ocular Surface (TFOS) Society Member

Leadership positions held Dry Eye International Workshop Task Force Committee member (DEWS II): dry eye diagnostics & public awareness subcommittees (invitation only) International collaboration to define dry eye and develop a comprehensive series of reports on the definition, diagnosis, classification, and management of dry eye

2016—Present Lid and Meibomian Gland Working Group (LIME), Selected international member

Professional Awards and Special Recognitions:

- Northwestern University "Jennifer Cushman Award"—2004: Recognizes excellence in striving to build community at Northwestern
- 2) Intern of the Year Award MacNeal Hospital-2007
- 3) Duke Hospital Patient Service Excellence Commendation-2007 and 2008
- 4) Duke Eye Center Robert Machemer Resident Research Award—2008: Awarded to one resident demonstrating intellectual curiosity based on original research.
- 5) North American Neuro-Ophthalmology Society (NANOS) Resident Award–2009: Awarded to three residents nationally who show academic excellence
- 6) American Society of Cataract and Refractive Surgery Cornea Clinical Committee Highlights Selected Presenter—2010: Presented paper "Prevalence of Obstructive Sleep Apnea in Patients with Keratoconus"

- 7) American Society of Cataract and Refractive Surgery (ASCRS) Foundation Resident Excellence Award—2010: 1 of 10 residents nationally recognized for excellence in academics
- 8) K. Alexander Dastgheib Surgical Excellence Award 2010: recognizes excellence in surgical skills and judgment, as well as best unedited surgical video.
- 9) American Society of Cataract and Refractive Surgery Honorable Mention, Poster Presentation—2011: Presented "Contrast-Enhanced Corneal Wound Imaging by OCT"
- **10)** National Millennial Eye Outstanding Female in Ophthalmology Award 2014: Chosen among all female ophthalmologists nationally; given to one who is dedicated to the advancement of ophthalmology and the promotion of women in their field.
- 11) Vital's Patient Choice Award 2015: Recognizes top performing doctors based on reviews and ratings collected from patients
- 12) Ocular Surgery News (OSN) Premier Surgeon 2016 Award: Given to a premium refractive cataract surgeon who has been identified as a leading innovator in the field of refractive cataract surgery, supported by their work to educate colleagues and innovate by developing novel technologies and techniques to advance premium practice.
- **13)** AAO Achievement Award 2017: award that recognizes individuals for contributions to the academy; award was received within my first 6 years as a faculty member, signifying active participation on national level
- 14) Intraocular Implant and Refractive Surgery Society India Gold Medal Award 2018: selected international speaker and award winner for excellence in the field of anterior segment surgery
- 15) 2019 The Ophthalmologist Power List Awardee
- 16) 2020 The Ophthalmologist Power List Awardee

Education / Teaching Activities

i. Teaching and supporting Learners

National Course Faculty

- 1) Challenging cases for the young surgeon. Course faculty. ASCRS Annual Meeting. Chicago, IL; April 22, 2012.
- 2) Challenging cases for the young surgeon. Course faculty presenter. ASCRS Annual Meeting. San Francisco, CA; April 20, 2013.
- 3) ASCRS Resident Advanced Cataract Training (ReACT) Meeting. Course Faculty. New York, NY; March 1, 2014.
- Dry Eye & Premium Procedure Management Case Sections. American-European Congress of Ophthalmic Surgery (AECOS) Meeting. Course Faculty and panelist. Deer Valley, UT; July 24 & July 26, 2014.
- 5) ASCRS Refractive Day 2017. ASCRS Annual Meeting. New Orleans, LA. May 5, 2017. Course faculty.
- 6) ASCRS Resident Advanced Cataract Training (ReACT) Meeting. Course Faculty. New York, NY; Sept 23, 2017.
- 7) From Front to Back: Review of Retinal and Anterior Segment Disease. Course Faculty. Chicago, IL; October 29, 2018.
- 8) ASCRS Refractive Day 2019. ASCRS Annual Meeting. San Diego, CA. May 3, 2019. Course faculty.
- 9) Mastering it all: tips for success from successful female leaders. ASCRS Annual Meeting. San Diego, CA. May 5, 2019. Course leader and faculty.

Wetlab/Surgical training

- 1) Phakic IOL Wet-lab Course Faculty Instructor (Lab247A). AAO Annual Meeting. Chicago, IL; Nov 12, 2012.
- 2) Phakic IOL Wet-lab Course Faculty Instructor (Lab 109A). AAO Annual Meeting. Chicago, IL; Nov 17, 2013.
- 3) Quad-Residency Regional Phacoemulsification Training Course. Course Faculty/Instructor. UNC Surgical Labs. Chapel Hill, NC; January 10, 2014.
- 4) Review of Ophthalmology Continuing Specialized Residency Education Program. Wetlab Instructor. Fort Worth, TX; September 13, 2014.
- 5) Phakic IOL Wet-lab Course Faculty Instructor (Lab 125A). AAO Annual Meeting. Chicago, IL; Oct 20, 2014.
- 6) YES Resident and Fellow Skills Lab (STS-17). ASCRS Annual Meeting. New Orleans, LA; May 7, 2016. Course Faculty
- Quad-Residency Regional Basic Phacoemulsification Course. Course Faculty/Instructor. UNC Surgical Labs. Chapel Hill, NC; Aug 26, 2016.
- 8) ASCRS Young Eye Surgeons Surgical Skills Course. Sept 23, 2017. Course Instructor.
- 9) VISX Certification Course. Duke Eye Center. Sept 30, 2017. Course Instructor.
- 10) VISX Certification Course. Duke Eye Center. Aug 31, 2018. Course Leader.
- 11) VISX Certification Course. Duke Eye Center. Aug 16, 2019. Course Leader.

Panelist

- 1) Intraocular surgery: multifocal lens session. Judge panelist for scientific paper session ASCRS Annual Meeting. Chicago, IL; April 21, 2012.
- 2) ASCRS Resident and Fellow Forum, judge panelist for scientific paper session. Chicago, IL; April 21, 2012.
- 3) ASCRS Resident and Fellow Forum, judge panelist for scientific paper session. San Francisco, CA; April 20, 2013.
- 4) Intraocular surgery: Presbyopia correcting IOL session. Judge panelist for scientific paper session ASCRS Annual Meeting. San Francisco, CA; April 21, 2013.
- 5) Cornea: Keratoconus DALK. ASCRS Annual Meeting. New Orleans, LA; May 8, 2016. Judge panelist for scientific paper session
- 6) Pardon the Ophthalmology Symposium: Hot topic in cornea and external disease. ASCRS Annual Meeting. New Orleans, LA; May 7, 2016. Panelist
- 7) Cornea, External Disease original paper session. Judge panelist for scientific paper session AAO Annual Meeting. New Orleans, LA; Nov 13, 2017.
- 8) Choosing and using the right IOL. Refractive Day at ASCRS Annual Meeting. Washington DC. April 13, 2018.
- 9) Astigmatism Management Symposium. AAO Annual Meeting. Chicago, IL; October 29, 2018.
- 10) Ocular Innovation Summit: Dry eye breakout. Ocular Innovation Summit (OIS) Meeting. San Diego, CA; May 2, 2019.
- 11) Traditional vs Premium channel: Ophthalmic devices, who pays and how? Ocular Innovation Summit (OIS) Meeting. San Diego, CA; May 2, 2019.

Within Duke University

- 1) Resident surgical skills wetlab course. Faculty. November 4, 2011.
- 2) Advanced Cornea Didactic Session. Faculty. Monthly sessions with cornea fellows. 2011-present.
- 3) "Topography 101" Duke Eye Center Resident lecture series. November 11, 2011.
- 4) "Introduction to refractive surgery" Duke Eye Center Resident lecture series. November 11, 2011.
- 5) "Keratoconus Treatment Strategies" Duke Eye Center Resident lecture series. November 11, 2011.
- 6) Cornea Grand Rounds. Faculty participant. March 13, 2012.
- 7) "Red Eye" Duke Internal Medicine Resident lecture series, 2012-15
- 8) Biomedical Engineering Device Innovations course. Course faculty for graduate students within BME. Jan 2013.
- *9)* "Understanding Dry Eyes" Healthy Focus Lecture Series for patients. Duke Raleigh Hospital and Duke Eye Center, June 7, 2013 and June 10, 2013.
- 10) "Management of dense cataracts" Duke Eye Center Resident lecture series. June 5th, 2015.
- 11) "Pupillary device expansion pearls" Duke Eye Center Resident lecture series. June 5th, 2015.
- 12) "Multifocal IOL complications" Duke Eye Center Resident lecture series. March 25, 2016.
- 13) "Refractive evaluations" Duke Eye Center Resident lecture series. March 25, 2016.
- 14) "Transitioning to DMEK" Duke Eye Center Resident lecture series. March 25, 2016.

ii. Development of courses/educational programs

- 1) ASCRS Resident and Fellow Forum course faculty and planning committee. Chicago, IL; April 21, 2012.
- 2) ASCRS Resident and Fellow Forum course faculty and planning committee. San Francisco, CA; April 20, 2013.
- 3) Program Chair, Millennial Eye Meeting 2015. Los Angeles, CA. Sept 2015; 150 attendees, including resident and fellows
- 4) Duke Controversies in Cornea and Cataract Surgery Annual Meeting. Durham, NC. April 23, 2016. Course Director
- 5) ASCRS Cornea Day 2016. ASCRS Annual Meeting. New Orleans, LA. May 6, 2016. Course planning committee and faculty
- 6) Millennial Eye Meeting 2016. Miami, FL. October 2016. Course Program Chair; 150 attendees, including resident and fellows
- 7) Duke Controversies in Cornea and Cataract Surgery Annual Meeting. Durham, NC. February 4, 2017. Course Director
- Quad-Residency Regional Advanced Phacoemulsification Course. Course planning committee, faculty instructor. UNC Surgical Labs. Chapel Hill, NC; April 29, 2017.
- 9) ASCRS Cornea Day 2017. ASCRS Annual Meeting. Los Angeles, CA. May 5, 2017. Course planning committee and faculty.
- Quad-Residency Regional Advanced Phacoemulsification Course. Course planning committee, faculty instructor. UNC Surgical Labs. Chapel Hill, NC; Feb 24, 2018.
- 11) ASCRS Cornea Day 2019. ASCRS Annual Meeting. San Diego, CA. May 3, 2019. Program planning committee and faculty.

iii. Development of assessment tools and methods

TFOS DEWS II Diagnostic Committee Member—creation of international guidelines for the diagnosis of dry eye disease Wolffsohn JS, Arita R, Chalmers R, Djalilian A, Dogru M, Dubmleton K, **Gupta PK**, et al. TFOS DEWS II Diagnostic Methodology Report. *Ocul Surface*. 2017 Jul;15(3):539-574.

ASCRS Corneal Clinical Committee Member—creation of clinical algorithm for diagnosis of ocular surface disease in patients presenting for cataract and refractive surgery.

Starr CE, **Gupta PK**, Farid M, Beckman KA, Chan CC, Yeu E, Gomes JAP, Ayers BD, Berdahl JP, Holland EJ, Kim T, Mah FS; ASCRS Corneal Clinical Committee. An algorithm for the preoperative diagnosis and treatment of ocular surface disease. *J Cataract Refract Surg.* 2019 May; 45(5): 669-684.

iv. Education management/ Leadership

Certified VISX Instructor 2016

Clinical Activity - type of practice and estimate of time commitment:

Clinical practice 80%--cornea, refractive, and cataract surgery; specialty focus in ocular surface disease and dry eye care. 20% -- clinical research and teaching

Participation in Academic and Administrative Activities of the University and Medical Center

i. Administrative positions

Clinical Medical Director of Duke Eye Center at Page Road: 9/12 to present

ii. Committees

- 1) Retina Faculty Search Committee Member 09/11 to 4/12: involved in search and interview process for selection of new retina faculty member
- Duke Eye website search engine optimization: responsible for reviewing website content and extensive revision 10/11 to 2/12
- 3) Chancellor's Clinical Leadership in Academic Medicine Program (CCHAMP): selected participant; 1/14 to 6/14
- 4) Clinical Faculty Professionalism Advisory Program: selected faculty member for program development; 1/14 to present
- 5) Duke Medicine website (<u>www.dukemedicine.org</u>) content development: responsible for ophthalmology specific content development in new dukemedicine.org website: 6/14 to 7/14
- 6) Eye Center Task Force Member 6/14 to present
- 7) PDC Revenue Committee member 12/14 to present
- 8) Oculoplastics Faculty search committee member: 7/15 to present 7/16
- 9) Cornea Faculty search committee chair: 7/18 to present

iii. Leadership positions

- Chancellor's Clinical Leadership in Academic Medicine Program (C-CHAMP) Oversight committee member: 9/15 to present
- 2) PDC Board of Managers –Member at Large: 7/17 to present -selected member chosen to represent the department of ophthalmology

Funding:

External support - gifts, grants, and contracts:

Present:

- Phase 3, Double-Masked, Randomized, Controlled Study of KPI-121 0.25% Ophthalmic Suspension Compared to Vehicle in Subjects with Dry Eye Disease (STRIDE 3). Study Sponsor: Kala Pharmaceuticals, Inc. Role: Principal Investigator 7/14/19 to present (end date 2/1/20)
 Purpose: phase 3 study investigating new product for the treatment of episodic dry eye disease. Site: Duke Eye Center, Durham, NC
- Cellular and molecular mechanisms that contribute to ocular surface disease during severe allergic inflammation. Sponsor: NIH 5R01EY021798-09; PI: Daniel Saban. Role: Co-investigator (1% effort). 11/19 to present (end date 4/30/20) Purpose: Grant funding for translational research investigating the immune pathways found in patients with MGD and dry eye disease; this grant funded work correlating immune profiles in mouse model of MGD with human tear samples from MGD patients.

Site: Duke Eye Center, Durham, NC

Past:

 Safety and Effectiveness of the VEGA UV-A System for Corneal Collagen Cross-Linking in Eyes with Keratoconus. Study sponsor: Topcon, Role: sub-investigator (Principal investigator: David Hardten, MD) 7/2010 to 7/2011.
 Purpose: Investigational study to assess the efficacy and outcomes of CXL in patients with keratoconus to halt progressive disease

Site: Minnesota Eye Consultants, Minneapolis, MN

 OPHTEC Model 311 Artificial Iris Lens for the Treatment of Visual Disturbances Resulting from Partial or Total Absence of the Human Iris. Study sponsor: OPHTEC, Role: sub-investigator (Principal investigator: David Hardten, MD) 7/2010 to 7/2011.

Purpose: Clinical trial to investigate the safety and efficacy of an artificial iris implant to treat patients with vision decrease due to iris defects.

Site: Minnesota Eye Consultants, Minneapolis, MN

- A Multi-Center Study to Map Novel Genes for Fuchs' Endothelial Corneal Dystrophy. Study sponsor: Case Western Reserve University, Role: sub-investigator (Principal investigator: David Hardten, MD) 7/2010 to 7/2011.
 Purpose: Study investigating the genetic aspects of Fuchs dystrophy; corneal endothelium from Fuchs patients was analyzed to map genes related to Fuchs.
 Site: Minnesota Eye Consultants, Minneapolis, MN
- A Multi-Center, Prospective, Observational Study of the Progression of Ocular Findings in Patients with Dry Eye Disease. Study sponsor: Allergan, Role: sub-investigator (Principal investigator: David Hardten, MD) 7/2010 to 7/2011.
 Purpose: Prospective study evaluating patients with dry eye disease over time to determine what are the clinical features of disease progression in dry eye patients.
 Site: Minnesota Eye Consultants, Minneapolis, MN
- 5) A Multi-Center, Double-Masked, Randomized, Vehicle-Controlled, Parallel-Group Study to Evaluate the Safety and Efficacy of 0.005% and 0.010% Aqueous Cyclosporine Ophthalmic Solutions Administered Twice Daily for at Least Two Weeks Prior to and Six Months After LASIK Surgery in Reducing Post-LASIK Corneal Hypoesthesia. Study sponsor: Allergan, Role: sub-investigator (Principal investigator: David Hardten, MD) 7/2010 to 7/2011. Purpose: Clinical trial examining the impact of cyclosporine usage prior to and post LASIK surgery as a modifier of corneal nerve dysfunction in the perioperative period after LASIK. Site: Minnesota Eye Consultants, Minneapolis, MN
- 6) Clinical Evaluation of ReSure[™] Sealant for Sealing Corneal Incisions in Patients Undergoing Clear Corneal Cataract Surgery: A Pivotal Study. Study sponsor: Ocular Therapeutix, **Role: Principal Investigator** 5/2012 to 4/2013. **Purpose**: Phase 3 clinical trial investigating the safety and efficacy of a novel ocular adhesive used at the time of cataract surgery to increase wound integrity. This study was used for FDA approval of this product. **Site**: Duke Eye Center, Durham, NC
- Phase 3, Double Masked, Randomized, Controlled Study to Evaluate the Safety and Efficacy of KPI-121 1.0% Ophthalmic Suspension in Subjects with Post-Surgical Inflammation. Study Sponsor: Kala Pharmaceuticals, Inc.
 Role: Principal Investigator 5/16 to 2/17; Coordinating investigator of clinical trial executive review committee
 Purpose: Phase 3 clinical trial investigating the safety and efficacy of a novel ocular topical steroid for the treatment of pain 16 and inflammation at the time of cataract surgery. This study was used for FDA approval of this product.

Site: Duke Eye Center, Durham, NC

- 8) KPI-121 0.25% for Short Term Treatment of Dry Eye Disease: Results of a Multicenter Randomized Phase 3 Trial (STRIDE1). Study Sponsor: Kala Pharmaceuticals, Inc.
 Role: Clinical trial image grader and coordinating investigator 9/17 to 3/18
 Purpose: Phase 3 study investigating new topical product for the treatment of episodic dry eye disease. I served as one of two image graders in the trial, which included over 10,000 images.
- 9) Cross-sectional study of TGFBI Corneal Dystrophies. Study Sponsor: Avellino.
 Role: Principal Investigator 6/16 to 5/17
 Purpose: Clinical trial investigating new test to screen patients in the office for presence of genetic abnormality associated with corneal decompensation at the time of laser eye surgery.
 Site: Duke Eye Center, Durham, NC