## Curriculum Vitae

Date of preparation: February 13, 2017

Name: Shilpa Joshi Desai, MD

Current Position: July 7, 2015-July 6, 2017

Surgical Retina Fellow

New England Eye Center/Ophthalmic Consultants of Boston

Boston, MA

Future Position: July 6, 2017 -

Assistant Professor of Ophthalmology

New England Eye Center at Tufts Medical Center

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Date of Birth: 4/22/1985 Place of Birth: Rochester, NY

Citizenship: USA

### **EDUCATION**

9/2003-6/2007 Massachusetts Institute of Technology B.S., Chemical Engineering

GPA: 5.0/5.0

8/2007-5/2011 Harvard Medical School M.D. cum laude

## **HONORS & AWARDS**

2004	Supply Chain Excellence Award, Johnson and Johnson
2005	Tau Beta Pi Member, Engineering Honor Society
2007	Phi Beta Kappa, Academic Honor Society
2008	Paul and Daisy Soros Fellowship Semi-Finalist
2010	Elected Member of Aescupalian Club, Harvard Medical School
2014	Garcia/Asbury Clinical Research Award
2016	National Eye Institute Travel Grant Recipient, ARVO 2016

# KEYWORDS/AREAS OF INTEREST

Ophthalmology, Retina, Development

# PROFESSIONAL ACTIVITIES

CLINICAL	
2015-2017	Surgical Retina Fellow, Ophthalmic Consultants of Boston/New England Eye
	Center, Boston, MA
2012-2015	Resident, Ophthalmology, University of California, San Francisco, CA
2011-2012	Medical Internship, Mount Auburn Hospital, Cambridge, MA
2007-2011	Medical Student, Harvard Medical School: High Honors in Ophthalmology,
	Surgery, Ob/Gyn, Pediatrics, Neurology, Emergency Medicine, and Medicine
	Sub-Internship.
2011	Clinical Volunteer, H.V. Desai Eye Hospital. Shadowed physicians in Eye
	Hospital outside Pune, India. Took histories, did clinical exams, reviewed
	studies, observed in operating room.

### RESEARCH

2015 Sub-Investigator, Ophthalmic Consultants of Boston

PRO-CON VGFTe-AMD-1507 – A prospective, single-blind, randomized study to evaluate intravitreal aflibercept injection versus sham as prophylaxis against conversion to neovascular age-related macular degeneration in high risk eyes

CNTO2476MDG2002- A phase 2b, multicenter, double-masked, randomized study evaluating the safety and clinical response of sub-retinal administration of CNTO 2476 in subjects with visual acuity impairment associated with geographic atrophy secondary to age related macular degeneration

FILLY – POT-CP121614 – A phase II, multicenter, randomized, single-masked, sham-controlled study of safety, tolerability, and evidence of activity of intravitreal APL-2 therapy in patients with geographic atrophy

NT-503-3-AMD-001 – A multi-center, two-stage, open-label phase I and randomized, active controlled, masked phase II study to evaluate the safety and efficacy of intravitreal implantation of NT-503-3 encapsulated cell technology compared with Eylea for the treatment of recurrent sub-foveal choroidal neovascularization secondary to age related macular degeneration

EGP-437-007 – Open-label, multi-center, phase 1b/2a clinical trial designed to evaluate the safety and efficacy of iontophoretic dexamethasone phosphate ophthalmic solution in patients with macular edema

CAPELLA – R2176-3-AMD-1417 – A phase 2, double-masked, randomized, controlled, multiple-dose, regimen-ranging study of the efficacy and safety of intravitreal REGN2176-3 in patients with neovascular age-related macular degeneration

DS7080-A-U101 – Phase I dose escalation and exploration study of DS-7080a in patients with neovascualr age-related macular degeneration

VIDI 8232-CL 3001- A phase 2, double-masked, randomized, active controlled study to evaluate the efficacy and safety of ASP8232 in reducing central retinal thickness in subjects with diabetic macular edema

OPH1002 – A phase 3, randomized, double-masked, controlled trial to establish the safety and efficacy of intravitreous administration of Fovista ® (anti-PDGF-B pegylated aptamer) administration in combination with Lucentis® compared to Lucentis® monotherapy in subjects with subfoveal neovascular age-related macular degeneration

OPH1004 – A phase 3, randomized, double-masked, controlled trial to establish the safety and efficacy of intravitreous administration of Fovista ® (anti-PDGF-B pegylated aptamer) administration in combination with either Avastin ® or Eylea ® compared to Avastin ® or Eylea ® monotherapy in subjects with subfoveal neovascular age-related macular degeneration

OPH1005 – Sub-retinal fibrosis in neovascular AMD: A 24 month phase 2a open label safety study of Fovista ® (Anti-PDGF-BB pegylated aptamer) regimen administered independently or in combination with anti-VEGF therapy (Avastin ®, or Eylea ®) during the induction and maintenance phases of therapy

OPH1006 – Effect of anti-VEGF agents administered on a quarterly maintenance regimen in neovascular AMD subjects receiving anti-PDGF therapy: An 18 month phase 2a Open Label, randomized study of Avastin ®, Lucentis ®, or Eylea ® (anti-VEGF therapy) administered in combination with Fovista ® (Anti-PDGF-BB pegylated aptamer in neovascular AMD subjects)

CHROMA GX29176 – A phase III, multicenter, randomized, double-masked, sham-controlled study to assess the efficacy and safety of lampalizumab administered intravitreally to patients with geographic atrophy secondary to age-related macular degeneration.

STOMP-CSC – Short-term oral mifepristone for central serous chorioretinopathy: A placebo-controlled dose ranging study of mifepristone for CSC.

R910-OD-1403 – An open-label, dose-escalation study of the safety and tolerability of intravitreal REGN910-3 and IVT REGN910 in patients with either neovascular AMD or DME.

VMA-001-A safety and efficacy assessment of resolvine for treatment of vitreomacular attachment.

ORBIT – TG-MV-019 – Ocriplasmin research to better inform treatment.

ACU-4429-202 – A multicenter, randomized, double masked, placebo-controlled, dose-escalation, multiple-dose study of the safety, tolerability, pharmacokinetics, and pharmacodynamics of ACU-4429 in subjects with dry age-related macular degeneration.

MAHALO EXT – A phase 1B/II, multicenter, randomized, single-masked, sham injection controlled study of safety, tolerability, and evidence of activity of FCFD4514G intravitreal injections administered monthly or bi-monthly to subjects with geographic atrophy.

YAG-001 – A single-center, prospective study evaluating safety and efficacy of YAG vitreolysis versus sham for symptomatic Weiss ring due to PVD.

YAG-001-A single-center, open-label, prospective study evaluating the safety and efficacy or YAG vitreolysis for symptomatic vitreous floaters.

2010 Research Assistant, Massachusetts Eye and Ear Institute. Clinical study on effect of caffeine on intra-ocular pressure. (Mentor – Dr. Louis Pasquale)

2009 Research Assistant, Orthopedics Department, Children's Hospital Boston. Anterior cruciate ligament healing through the use of collagen scaffolds. (Mentor – Dr. Martha Murray)

2006 Research Assistant, Department of Chemical Engineering, MIT. Targeted, stimuliresponsive polymeric drug delivery. (Mentor – Dr. Jackie Ying)

2004 Research Assistant, Department of Chemical Engineering, MIT. Cell patterning and microfluidic channels. (Mentor – Dr. Robert Langer)

### PROFESSIONAL ORGANIZATIONS

## Service to Professional Organizations

2012-2015	Membership Advisory Committee, American Academy of Ophthalmology
2009-2010	Fellow, Intersociety Multicultural Fellows Committee, Harvard Medical School
2007-2008	Executive Board, John Warren Surgical Society, Harvard Medical School

#### TEACHING AND MENTORING

2014	Morbidity and Mortality Panelist in Internal Medicine: Branch Retinal Artery
	Occlusion, Mt Zion Hospital: July 25, 2014
2014	Morbidity and Mortality Panelist in Internal Medicine: Orbital Granulomatosis
	and Polyangiitis, UCSF: July 9, 2014
2013	Morbidity and Mortality Panelist in Internal Medicine: Oncology Case
	Presentation. San Francisco, UCSF: May 22, 2013
2013	Morbidity and Mortality Panelist in Internal Medicine: Neurosyphilis. San
	Francisco, UCSF: March 6, 2013

2011-2012	Non-resident Tutor, Harvard University, Winthrop Hall. Cambridge, MA.
2010-2011	Tutor, Patient Doctor II. Harvard Medical School, Boston, MA.
2008-2009	Resident Advisor. Vanderbilt Hall, Harvard Medical School, Boston, MA.
2006-2007	Teaching Assistant, Introductory Biology. MIT, Cambridge MA.
2005-2007	Tutor, Chemical Engineering. MIT, Cambridge MA.

# **PRESENTATIONS**

2015	ARVO Women in Retina Luncheon: Fellow Eye Comparisons in SEVEN-UP
	Study. Denver, CO: May 3, 2015
2014	Internal Medicine Noon Conference: Inpatient Ophthalmology Consultation,
	UCSF: August 1, 2014
2014	Alexander R. Irvine Residents' Day: Fungemia and Fungal Endophthalmitis,
	UCSF: April 10, 2014
2014	Pacific Retina Club: Neurosyphilis, Grand Hyatt San Francisco: March 29, 2014
2014	Grand Rounds Presenter in Ophthalmology: Crack Cocaine Keratitis, UCSF:
	March 13, 2014
2014	Grand Rounds Presenter in Ophthalmology: Acute Macular Neuro-retinitis,
	UCSF: February 27, 2014
2014	Grand Rounds Presenter in Ophthalmology: UGH syndrome, UCSF: January 30,
	2014
2014	Grand Rounds Presenter in Ophthalmology: Brown's Syndrome, UCSF: January
	16, 2014
2013	Grand Rounds Presenter in Ophthalmology: Levator Palsy in Neurosurgical
	Patients, UCSF: October 24, 2013
2013	Grand Rounds Presenter in Ophthalmology: Leukemic Uveitis. San Francisco,
	UCSF: April 25, 2013
2013	Grand Rounds Presenter in Ophthalmology: Neurosyphilis. San Francisco,
	UCSF: January 17, 2013
2012	Grand Rounds Presenter in Ophthalmology: Choroidal Melanoma. San
	Francisco, UCSF: November 29, 2012.
2012	Grand Rounds Presenter in Ophthalmology: Sino-orbital Mucormycosis. San
	Francisco, UCSF: November 1, 2012.
2011	Grand Rounds Presenter in Medicine: Neisseria Meningitidis Pericarditis.
	Cambridge, MA. Mount Auburn Hospital: November 10, 2011.

## **PUBLICATIONS**

- 1. Heier JS, Kherani S, **Desai SJ** et al. Intravitreous injection of AAV2-sFLT01 in patients with advanced neovascular age-related macular degeneration: a phase 1, open-label trial. The Lancet. 2017 (Online First).
- 2.**Desai SJ,** Chen X, Heier JS. Chapter "Retinal Vein Occlusion" Yanoff and Duker Ophthalmology 5<sup>th</sup> Edition. Elsevier Publishing, 2017.
- 3. **Desai SJ** and Yasin Alibhai. Chapter "Angioid Streaks" The Retina Atlas 3<sup>rd</sup> Edition. Elsevier Publishing, 2017.
- 4. **Desai SJ** and Yasin Alibhai. Chapter "Cone Dystrophy" The Retina Atlas 3<sup>rd</sup> Edition. Elsevier Publishing, 2017.
- 5. **Desai SJ** and Yasin Alibhai. Chapter "Isolated CME" The Retina Atlas 3<sup>rd</sup> Edition. Elsevier Publishing 2017.
- 6.**Desai SJ** and Yasin Alibhai. Chapter "Retinitis Pigmentosa" The Retina Atlas 3<sup>rd</sup> Edition. Elsevier Publishing 2017.

- 7. **Desai SJ** and Yasin Alibhai. Chapter "Vitelliform Dystrophy" The Retina Atlas 3<sup>rd</sup> Edition. Elsevier Publishing 2017.
- 8. **Desai SJ**, Reichel E. Future Treatment in Wet AMD. Current Ophthalmology Reports. Accepted.
- 9. **Desai SJ**, Baumal C. Chapter "Retinal Vein Occlusion" Anti-VEGF Use in Ophthalmology. SLACK publishing, 2016.
- 10. Bhisitkul R, **Desai SJ**, Boyer D, Sadda SR, Zhang K. Fellow eye comparisons for 7-year outcomes in ranibizumab-treated AMD subjects from ANCHOR, MARINA, and HORIZON (SEVEN-UP Study). Ophthalmology. 2016. 123(6): 1269-77.
- 11. Desai SJ, Heier JS. Retained Intra-Ocular Air. JAMA Ophthalmology. 2016. 134(7): 842-843.
- 12. **Desai SJ**, Layer N, Geske MJ, Jeng BH, Bloomer MM, Vagefi MR. Local and Regional Spread of Primary Conjunctival Squamous Cell Caricnoma. Eye & Contact Lens. 16 April 2016
- 13. **Desai SJ**, Lawton MT, McDermott MW, Horton JC. Vertical Gaze Limitation and Ptosis from Removal of the Orbital Roof during Pterional Craniotomy. Ophthalmology. 2015. 122(3): 631-638.
- 14. **Desai SJ,** Kim HJ, Kersten RC, Bloomer MM, Vagefi MR. Extra-scleral spread of choroidal melanoma via Tantalum Marker Suture Track. JAMA Ophthalmology. 2013 Dec; 131(12): 1643-5.
- 15. Gorovoy I, **Desai SJ**. Syphilitic posterior placoid chorioretinitis. Sexually Transmitted Diseases. 2013. 40(11): 852-853.
- 16. **Desai SJ**, Julian K. Blurred Vision. UCSF Outpatient Medicine Handbook. AgileMD. Palo Alto. 2013.
- 17. **Desai SJ** and Martha Murray. Graduate Thesis: Functional and Histologic Healing of the Porcine Anterior Cruciate Ligament Enhanced by Collagen-Platelet Composite. Harvard Medical School. 2011.
- 18. **Joshi SM**, Mastrangelo AN, Magarian EM, Fleming BC, Murray MM. Collagen-Platelet Composite Enhances Biomechanical and Histologic Healing of the Porcine Anterior Cruciate Ligament. American Journal of Sports Medicine. 2009. 37(12): 2401 2410.
- 19. Vavken P, **Joshi SM**, Murray MM. Fibrin concentration affects ACL fibroblast proliferation and collagen synthesis. The Knee. 2010. 18(1): 42 46.
- 20. Vavken P, **Joshi SM**, Murray MM. Triton-X is the most effective among three decellularization agents for ACL tissue engineering. Journal of Orthopaedic Research. 2009. 27(12): 1612 1618.
- 21. **Joshi, SM**. Acknowledgement, Chapter 24 "Tissue Engineering of Ligaments and Tendons" in Fundamentals of Tissue Engineering and Regenerative Medicine. Springer, 2009.

#### **ABSTRACTS**

- 1. **Desai SJ,** Chen X, Duker JS. Unilateral White Spot. ASRS 2017 Annual Meeting. (Boston, MA, 2017)
- 2. **Desai SJ**, Novais E, Sanayei N, Cole E, Louzada R, Fugimoto J, Baumal CR, Duker JS, Waheed NK. "Choriocapillaris changes on OCT Angiography after Anti-VEGF injection in exudative age related macular degeneration" New England Ophthalmic Society (Boston, MA 2016)
- 3. **Desai SJ**, Novais E, Sanayei N, Cole E, Louzada R, Fugimoto J, Baumal CR, Duker JS, Waheed NK. "Choriocapillaris changes on OCT Angiography after Anti-VEGF injection in exudative age related macular degeneration" ARVO 2016 Annual Meeting (Seattle, WA, 2016)
- 4. **Desai SJ**, Bhisitkul RB, Rofagha S, Enanoria W, Boyer D, Sadda SR, Zhang K. "Fellow Eye Comparisons for 7-year vision outcomes in Ranibizumab-traeted AMD Subjects from ANCHOR, MARINA, and HORIZON (SEVEN-UP). ARVO 2015 Annual Meeting (Denver, CO, 2015).
- 5. **Desai SJ**, Lawton MT, McDermott MW, Horton JC. "Vertical Gaze Limitation and Ptosis from Removal of the Orbital Roof during Pterional Craniotomy" ARVO 2014 Annual Meeting (Orlando, FL, 2014)
- 6. **Desai SJ**, Schallhorn J, Schallhorn S, Ou Y. "Intraocular Pressure and Central Corneal Thickness in 91,000 Refractive Surgery Patients" ARVO 2013 Annual Meeting, (Seattle, WA, 2013)

- 7. **Joshi, SM**, Mastrangelo, AN, Murray, MM "Collagen-Platelet Composite Enhances Histologic Healing of the ACL" ORS 55<sup>th</sup> Annual Meeting, (Las Vegas, NV, 2009)
- 8. **Joshi SM**, Mastrangelo AN, and Murray MM. "Collagen-Platelet Composite Enhances Histologic Healing of the ACL." Center for Integration of Medicine & Innovative Technology Congress (Boston, MA, 2008)
- 9. Vavken, P, **Joshi SM**, Murray, MM. "Decellularized porcine anterior cruciate ligament as a biomaterial for ACL tissue engineering." ORS 55<sup>th</sup> Annual Meeting (Las Vegas, NV, 2009)
- 10. Vavken P, **Joshi SM**, Murray MM. "Decellularized porcine anterior cruciate ligament as a biomaterial for ACL tissue engineering." Center for Integration of Medicine & Innovative Technology Congress (Boston, MA, 2008)
- 11. Vavken P, **Joshi SM**, Murray MM. "ACL fibroblast proliferation and biosynthesis are attenuated by high fibrin concentration." Center for Integration of Medicine & Innovative Technology Congress (Boston, MA, 2008)
- 12. Zaman NT, Tan FE, **Joshi SM**, Ying JY. "Targeted Stimuli-Responsive Dextran Conjugates for Doxorubicin Delivery to Hepatocytes." MIT-Singapore Alliance. (Singapore; Boston, MA, 2006)