

## Specialty

**Comprehensive Ophthalmology**

Board-certified

## Academic Appointments

**Clinical Instructor**

**Stanford University Medical Center**  
Palo Alto, CA

September 2010 – present

**Chief, Ophthalmology and Eye Care Services**  
**Veterans Affairs Palo Alto Health Care System**  
Palo Alto, CA

July 2013 – present

## Licensure

**Physician and Surgeon, state of California**

August 2007

## Education and Postdoctoral Training

**AHRQ Fellowship in Health Care Research and Health Policy** June 2013  
Stanford University  
Palo Alto, CA

**Master of Science, Health Research and Policy** June 2013  
Stanford University  
Palo Alto, CA

**Ophthalmology Residency** June 2010  
Stanford University  
Palo Alto, CA

**Transitional (Rotating) Internship** June 2007  
Scripps Mercy Hospital  
San Diego, CA

**Doctor of Medicine (M.D.)** May 2006  
Medical University of South Carolina (MUSC)  
Charleston, SC.

**Bachelor of Arts: Chemistry** May 2002  
Summa Cum Laude  
Sonoma State University  
Rohnert Park, CA

## Leadership

Member, American Academy of Ophthalmology (AAO) Clinical Data Registry Workgroup, 2012-present  
AAO Representative, International Consortium for Health Outcomes Measurement (ICHOM), 2013-present  
Coordinator and Director, Residency Initiative, AOA National Medical Honor Society, 2009-present  
Board of Directors, Alpha Omega Alpha (AOA) National Medical Honor Society, 2009-present  
Secretary, Peninsula Eye Society, 2013-present

Member-in-Training Councilor, California Association of Eye Physicians and Surgeons, 2009-2010  
Elected to one-year term on Board of Councilors of California section of American Academy of Ophthalmology  
Advocacy Ambassador to American Academy of Ophthalmology Mid-Year Forum, April 2009  
Sponsored by Women in Ophthalmology  
Admissions Panel, Stanford University School of Medicine, 2012-present  
Review of medical school applications and serving as interviewer/rater for Multiple Mini Interviews (MMI)  
Chief Resident, Department of Ophthalmology, Stanford University, 2009-2010  
Administrative management, education of junior residents and medical students, conference and lecture scheduling  
Committee Member, Infection Control Committee, Stanford University Medical Center, 2011-present  
Committee Member, Criterion-Based Evaluation Initiative Development, Stanford School of Medicine  
2009-2010. Medical Knowledge and Practice Based Learning Working Group. Involved in formulating  
guidelines for the development of new Criterion-Based medical student Evaluation Initiative  
President, Alpha Chapter of ΑΩΑ Medical Honor Society, South Carolina, 2005-2006  
<http://www.musc.edu/aoa>. Initiated a program during presidency to recruit talented and motivated students from  
South Carolina colleges to the MUSC College of Medicine (M.D. program) and Medical Scientist Training  
Program (M.D./Ph.D. program), via annual information/recruitment session as well as funded scholarships.  
Chair, Grant Writing Division, Finance Committee  
Medical Student Ophthalmology Society, MUSC, 2004-2005  
Chair, Epidemiology/Population Health Committee, Public Health Interest Group, MUSC, 2004-2005  
Chair, Faculty Excellence Awards Committee, MUSC, 2003-2004  
Leader, Gift Program Study Skills Workshop, MUSC, 2004  
MUSC College of Medicine Student Council member, 2003-2004, 2005-2006  
Member, Careers in Medicine Committee, MUSC, 2005-2006

## Teaching

Co-Instructor, HRP 222A/Law 413L: Advising Congress on Health Policy, Stanford Univ., 2013-present  
Multidisciplinary policy lab in collaboration between School of Medicine, School of Law, and  
Graduate School of Business. Working directly with MedPAC (Medicare Payment Advisory  
Commission) to address issues identified as timely.  
Co-Director, Medical Student 300A Ophthalmology Clerkship, Stanford University, 2012-present  
Ophthalmology Residency Program Clinical Competency Committee, 2013-present  
Mentor, HB-REX Stanford University summer program  
Mentored research experience with a sophomore undergraduate Human Biology major at Stanford  
University (Lauren Wedekind), sponsored for Summer 2014  
Mentor, Albert Schweitzer Fellowship, 2013-present  
Medical student initiative to develop a community preschool vision screening program in  
collaboration with Prevent Blindness Northern California (Karen Hong)  
Teaching Assistant, Health Policy, Finance, and Regulation course (HRP 391/LAW 348), Stanford  
University, Winter quarter 2013  
Mentor, Stanford Immersion in Medicine Series, 2008-present  
Sponsored Stanford premedical students interested in medicine for shadowing and counseling.  
Resident education and mentorship, 2010-present  
Clinical and surgical teaching in OR, clinic, and on wards (staffing inpatient consults at Stanford  
Hospital), and via lectures and small-group sessions  
Medical student career and research mentorship  
Mentored medical students individually for research projects and career guidance

## Grants and Awards

Stanford Society of Physician Scholars Collaborative Research Grant, 2013  
Collaborating with and mentoring a medical student on a database research project (Michael Hurley)

Stanford Society of Physician Scholars Collaborative Research Grant, 2012

Collaborating and mentoring medical student on a cost-effectiveness research project (Brian Matesic)

MUSC President's Clinical Science Award, 2006

Merck Award for Academic Excellence, 2006

American Medical Women's Association Glasgow-Rubin Certificate of Commendation for Academic Achievement, 2006

MUSC Provost Scholarship, 2005

Collegiate All-American Scholar Award, United States Achievement Academy, 2006

National Collegiate Physical Sciences Award, United States Achievement Academy, 2006

## Honors

Stanford Society of Physician Scholars, 2011-present

Alpha Omega Alpha Medical Honor Society (ΑΩΑ), elected as junior, 2004-present

Honors, Ophthalmology Clerkship, 2005

Honors, Senior Otolaryngology/Head and Neck Surgery Clerkship, 2005

Honors, Senior Psychiatry Clerkship, 2006

Honors, Neurology Clerkship, 2005

Honors, Surgery Clerkship, 2005

Honors, Internal Medicine Clerkship, 2005

Honors, Psychiatry Clerkship, 2005

Honors, Pediatrics Clerkship, 2004

Honors, Obstetrics and Gynecology Clerkship, 2004

Nominee, Gold Humanism in Medicine Honor Society, 2005

Honor grade, Medical Physiology, 2003

Honor grade, Medical Neuroscience, 2003

Honors, Essentials of Scientific Practice III, 2003

## Peer-Reviewed Publications (\* denotes corresponding author)

1. DeMarchis E, Moshfeghi DM, Pershing S. **Clinical-Pathologic Correlation: Vitrectomy with Epiretinal and Internal Limiting Membrane Peel.** Accepted for publication in *Ophthalmic Surgery, Lasers, and Imaging Retina*.
2. Pershing S,\* Matesic B, Enns E, Owens DK, Goldhaber-Fiebert JD. **Cost-Effectiveness of Treatment for Diabetic Macular Edema: Ranibizumab, Triamcinolone, and Laser Therapies.** *Annals of Internal Medicine*. 2014 Jan;160(1):18-30
3. Pershing S,\* Fuchs VR. **Restructuring Medical Education to Meet Current and Future Health Care Needs.** *Academic Medicine*. 2013 Dec;88(12):1798-801.
4. Pershing S, Bakri S,\* Moshfeghi DM. **Ocular Hypertension and Intraocular Pressure Asymmetry after Intravitreal Injection of Anti-Vascular Endothelial Growth Factor Agents.** *Ophthalmic Surgery, Lasers, and Imaging Retina* 2013 Sep-Oct;44(5):460-4
5. Amato M,\* Pershing S, Walvick M, Tanaka S. **Trends in Ophthalmic Manifestations of Methicillin Resistant Staph Aureus (MRSA) in a Northern California Pediatric Population.** *Journal of American Association for Pediatric Ophthalmology and Strabismus*. 2013 Jun;17(3):243-7
6. Fijalkowski N, Pershing S, Moshfeghi DM.\* **The Importance of Keeping a Broad Differential in Retina Clinic: The Spectrum of Ophthalmic Disease Seen by Retinal Specialists in a Tertiary Outpatient Clinic SettCAVITing.** *Ophthalmic Surgery, Lasers, and Imaging Retina*. 2013; 44(2):133-9

7. Pershing S,\* Kumar A. **Phacoemulsification versus Extracapsular Cataract Extraction: Where Do We Stand?** *Current Opinion in Ophthalmology*. 2011; 22(1):37-42.
8. Pershing, S, Dunn, J, Khan, A, Liao, YJ.\* **Cytomegalovirus Infection with MRI Signal Abnormalities Affecting the Optic Nerves, Optic Chiasm, and Optic Tracts.** *Journal of Neuroophthalmology*. 2009; 29(3):223-6
9. Wilson Jr ME,\* Trivedi RH, Bartholomew L, Pershing S. **Comparison of anterior vitrectorhexis and continuous curvilinear capsulorhexis in pediatric cataract and intraocular lens implantation surgery: a 10-year analysis.** *Journal of American Association for Pediatric Ophthalmology and Strabismus*. 2007; 11(5):443-6.

### Manuscripts Submitted/in Preparation

1. Vaziri K, Pershing S, Albin TA, Moshfeghi DM, Moshfeghi AA. **Risk Factors Predictive of Endogenous Endophthalmitis among Hospitalized US Patients with Bloodstream Infections.** Submitted to *American Journal of Ophthalmology*.
2. Pershing S, Morrison DE, Hernandez-Boussard T. **Complications and Readmissions following Cataract Surgery: Prevalence, Patient Age, and Practice Variation.** In preparation
3. Pershing S, Moshfeghi DM, Bakri S. **Elevated Intraocular Pressure after Intravitreal Injection of anti-Vascular Endothelial Growth Factor Agents: Mechanisms of a Class Effect.** In preparation as an invited perspective to *American Journal of Ophthalmology*.
4. Albin T, Fijalkowski N, Pershing S, Wang SK, Moshfeghi AA, Moshfeghi DM. **Trends in Hospital Admissions for Syphilitic Uveitis in the United States from 1998-2009.** In preparation
5. ICHOM Cataract Surgery Working Group: Haripriya Aravind, Anders Boman, Ingrid Kossler, Mats Lundstrom, Imran Mahmud, Nigel Morlet, Suzann Pershing, Konrad Pesudovs, Goh Pik Pin, John Sparrow (authorship order to be determined). **Cataract Surgery: Defining a Standard Set of Outcome Measures.** Manuscript in preparation

### Book Chapters

1. Pershing S and Alcorn DM. Pediatric Ophthalmology. In *Pediatrics for Medical Students*, edited by Bernstein D and Shelov SP. 3<sup>rd</sup> edition. Lippincott Williams and Wilkins. July 29, 2011

### Non-Peer Reviewed Publications

1. Al-Aswad L, Green LK, Kao SA, Mamalis N, Pershing S, Tipperman R. Scattered Blue Deposits after Cataract Surgery. *Cataract and Refractive Surgery Today*. October 2011, p 45-48. Available at [http://bmctoday.net/crstoday/pdfs/CRST1011\\_catcomp.pdf](http://bmctoday.net/crstoday/pdfs/CRST1011_catcomp.pdf) (last accessed 2/5/2014)

### Presentations

1. He L, Myung D, Pershing S, Chang R. **iPhone Photography of Eye Pathology for Remote Triage.** Submitted for presentation at the Association for Research in Vision and Ophthalmology 2014 Annual Meeting

2. Vaziri K, Pershing S, Albin T, Moshfeghi DM, Moshfeghi AA. **Risk Factors Associated with Developing Endogenous Endophthalmitis.** Submitted for presentation at the Association for Research in Vision and Ophthalmology 2014 Annual Meeting
3. Choi D, Chang R, Vaziri K, Moshfeghi D, Moshfeghi A, Pershing S. **Increasing Incidence of Conjunctival Lesion Excisions After Popularization of Prostaglandin Analogs.** Accepted for presentation as a paper at the American Society of Cataract and Refractive Surgery 2014 annual meeting.
4. Hernandez-Boussard T, Morrison D, Pershing S. **Procedure-related Readmissions following Cataract Surgery.** Presented at the 30<sup>th</sup> International Conference of the International Society for Quality in Health Care (October 2013)
5. Pershing S, Matesic B, Enns E, Owens DK, Goldhaber-Fiebert JD. **Cost-Effectiveness of Treatment Options for Diabetic Macular Edema.** Presented as a poster at the 34<sup>th</sup> annual meeting of the Society for Medical Decision Making (October 2012)
6. Enns EA, Pershing S, Wang Y, Goldhaber-Fiebert JD. **Calibration Methods for Inferring Transition Probabilities from Cross-sectional Studies.** Presented as a paper at the 34<sup>th</sup> annual meeting of the Society for Medical Decision Making (October 2012)
7. Fijalkowski, N, Pershing, S, Moshfeghi, DM. **The Incidence and Spectrum of Ophthalmic Disease Among New Patients Treated by Retinal Specialists in a Tertiary Outpatient Clinic Setting.** Presented as a poster at the 2012 American Academy of Ophthalmology Annual Meeting (November 2012).
8. Hernandez-Boussard T, Curtin C, Pershing S, McDonald KM. **Quality of Health Care Delivery in US Ambulatory Surgical Centers.** Presented at the 29<sup>th</sup> International Conference of the International Society for Quality in Health Care (October 2012)
9. Moshfeghi DM, Fijalkowski N, Pershing S. **The Incidence and Spectrum of Ophthalmic Disease Among New Patients Treated by Retinal Specialists in a Tertiary Outpatient Clinic Setting.** Presented as a poster at the 30<sup>th</sup> annual meeting of the American Society of Retina Specialists (August 2012)
10. Alcorn, DM, Fredrick, D, Pershing, S. **Prospective study of Endogenous Endophthalmitis in a Pediatric Population from a Tertiary Care Children's Hospital.** Presented as a paper at 2<sup>nd</sup> World Congress of Paediatric Ophthalmology (September 2012).
11. Amato M, Walvick M, Pershing S, Tanaka, S. **Trends in Ophthalmic Manifestations of Methicillin-resistant Staphylococcus Aureus in a Pediatric Population.** Presented as a paper at the 2009 Scientific Symposium of the American Society of Ophthalmic Plastic and Reconstructive Surgeons, San Francisco, CA.
12. Walvick M, Amato M, Pershing S. **Ophthalmic Methicillin-Resistant Staphylococcus aureus Infections: Sensitivity and Resistance Profile of 234 Specimens.** Presented as a poster at the 2009 Scientific Symposium of the Academy of Ophthalmology, San Francisco, CA.
13. Pershing, S, Charalel, RA, Banaei, N, Liao, YJ, Shrivastava, A. **In Vitro Activity of Antibiotic-Permeated Intraocular Lenses.** Presented as a poster at Association for Research in Vision and Ophthalmology 2009 Annual Meeting. Ft. Lauderdale, FL.

14. Bababeygy, SR, Pershing, S, Manche, EE. **Visual Outcome of Wavefront-guided PRK in Eyes with High Myopia and Compound Astigmatism.** Presented as a paper at the American Society of Cataract and Refractive Surgery 2009 Symposium, Chicago, IL.
15. Pershing, S, Bababeygy, SR, Manche, EE. **Photorefractive Keratectomy for Low-Moderate and High Myopia.** Presented as a paper at American Society of Cataract and Refractive Surgery 2008 Symposium.
16. Wilson Jr ME,\* Trivedi RH, Bartholomew L, Pershing S. **Anterior Capsulotomy: Intraoperative Performance and Tear Rate During Pediatric Cataract Surgery.** *Journal of American Association for Pediatric Ophthalmology and Strabismus.* 2006; 10(1): 70. Presented as a paper at American Academy for Pediatric Ophthalmology and Strabismus 2006 annual meeting

## Research

### Current

#### **Predicting individualized complication risk with cataract surgery**

May 2013 – present.

The goal of this project is to comprehensively evaluate risk factors for specific complications during and after cataract surgery---including interactions among risk factors and complications---using free text extraction and natural language processing of electronic visit notes, ultimately to create a predictive risk calculator.

Role: co-investigator/project lead

Collaborators: Nigam Shah MBBS PhD (co-project lead; Stanford), Tyler Cole (Stanford), Greg Gaskin (Stanford), Carson Lam MD (Stanford)

#### **Marketscan national database analysis for diagnosis, treatment, and practice patterns.**

July 2013 – present.

The goal of this project is to evaluate diagnosis incidence and relative risk factors, practice variation over time and by provider/location, and impact of employment/demographic and insurance factors on provision of service for a spectrum of ophthalmic conditions (including endogenous endophthalmitis, syphilis uveitis, prostaglandins agonists and cystoid macular edema, and conjunctival pigmentation)

Role: co-investigator

Collaborators: Andrew Moshfeghi MD MBA (Project Lead; Bascom Palmer Eye Institute), Darius Moshfeghi MD (Stanford), Thomas Albin MD (Bascom Palmer Eye Institute), Kam Vaziri (Bascom Palmer Eye Institute)

#### **Cost-effectiveness analysis of new cataract surgery techniques**

March 2013 – present

The goal of this project is to evaluate relative cost-effectiveness of cataract surgery techniques, including phacoemulsification, manual small incision cataract surgery, and femtosecond laser–assisted cataract surgery, and to analyze the effect of quantifying visual function beyond best-corrected visual acuity (including contrast sensitivity, astigmatism, and near and distance vision).

Role: primary investigator

Collaborators: Christopher Sales MD (Stanford; resident)

### **Use of free medication samples in ophthalmology**

February 2013 – present

The goal of this project is to analyze temporal trends, physician characteristics, and patient characteristics in use of free medication samples, using the National Disease and Therapeutic Index database.

Ophthalmology is unique as a specialty with increasing use of sample medications over the past decade.

Role: co-investigator

Collaborator: Michael Hurley MS (Stanford; medical student). Funded through Stanford Society of Physician Scholars collaborative research grant

### **Cataract surgical complication and quality analysis using AHRQ statewide datasets**

February 2012 – present

The goal of this project is to identify rates and demographic characteristics of cataract surgery complications necessitating return to OR within 30 days.

Role: co-investigator.

Collaborators: Tina Hernandez-Boussard, PhD

### **HCUP.net Nationwide Inpatient Sample database analysis for diagnosis incidence and associations**

August 2012 – present.

The goal of this project is to determine ophthalmic disease incidence, prevalence, and risk factors in an inpatient setting using a representative nationwide sample. Current focus has been on syphilis uveitis (manuscript in preparation); next areas of analysis will include fungal endophthalmitis, corneal abrasion, and orbital fracture management.

Role: co-investigator

Collaborators: Darius Moshfeghi MD (Stanford), Andrew Moshfeghi MD MBA (Bascom Palmer Eye Institute), Thomas Albin MD (Bascom Palmer Eye Institute), Natalia Fijalkowski BA (Stanford)

### **US ophthalmology program faculty training and careers**

September 2012 – present

The goal of this project is to determine the influence of medical school and residency location on choice of an academic ophthalmology career and academic productivity

Role: co-investigator

Collaborators: Darius Moshfeghi MD (Stanford), Andrew Moshfeghi MD MBA (Bascom Palmer Eye Institute), Korey Jaben MD (Brigham and Women's Hospital), Luo-Luo Zheng BS (Bascom Palmer Eye Institute), Jon Yang MD (Stanford), Theodore Leng MD MS (Stanford), Mitchell Maltenfort PhD (Thomas Jefferson Univ.), Peter Campbell MD (Thomas Jefferson Univ.), John Ratliff (Thomas Jefferson Univ.)

### **Visual outcomes following vitrectomy with epiretinal membrane/internal limiting membrane peeling**

July 2013 – present

The goal of this project is to determine visual outcomes using electronic text extraction from electronic medical record visit notes. We aim to compare results using different surgical techniques.

Role: co-investigator

Collaborators: Gomathi Krishnan PhD (Stanford), Darius Moshfeghi MD (Stanford), Peter Karth MD MBA (Stanford)

### **Medicare claims analysis of drug utilization for wet Age-Related Macular Degeneration**

March 2012 – present

The goal of this project is to characterize temporal changes in adoption and regional variation in use of vascular endothelial growth factor (VEGF) inhibitors (chiefly, bevacizumab and ranibizumab) for wet age-related macular degeneration, using a nationally-representative 20% sample of Medicare claims data.

Role: primary investigator

Collaborators: Jay Bhattacharya MD PhD (Stanford)

### **Adult endogenous endophthalmitis study**

July 2011 – present

The goal of this prospective study is to investigate rates of infectious endophthalmitis in adult patients with systemic infection.

Role: co-investigator

Collaborators: Theodore Leng MD MS (Stanford), Yannis Paulus MD (Stanford; resident)

### **Pediatric endogenous endophthalmitis study**

June 2009 – present

The goal of this prospective study is to investigate rates of infectious endophthalmitis in adult patients with systemic infection

Role: co-investigator

Collaborators: Deborah Alcorn MD (Stanford)

### **Pending**

### **Enhanced Dissemination of Evidence Based Outcomes in Macular Degeneration**

Submitted to AHRQ 9/2013; grant presently in preparation for resubmission to VA QUERI 2/2014

The goal of this project will be to identify patients with age-related macular degeneration at the initial point of contact with the health care system, and institute established protocols of patient centered outcome research in a novel kiosk and teleretinal imaging process.

Role: co-investigator

Collaborators: Leonard Goldschmidt MD PhD (VA Palo Alto Livermore; PI), Gregory Goodrich PhD (VA Palo Alto), Ruth Cronkite PhD (VA Palo Alto)

### **Evaluating Provider and Organizational Roots of Practice Variation in Ophthalmology**

Pilot grant resubmitted in 12/2013 (VA Health Services Research and Development)

The goal of this project will be to evaluate practice variation treatment of age-related macular degeneration (ARMD) within the VA system, and to develop methods for evaluation of organizational and provider roots of practice variation, using treatment of ARMD with VEGF inhibitors as a model.

Role: primary investigator

Collaborators: Steven Asch MD MPH (VA/Stanford), Manisha Desai PhD (Stanford), Todd Wagner PhD (VA/Stanford), Mary Goldstein MD MS (VA/Stanford)

### **Diabetic Macular Edema Barometer Survey Project**

Proposal submitted 1/2014: Stanford University/Oxford University Big Data for Human Health seed grant

The goal of this project will be to identify and characterize the burden of disease associated with Diabetic Macular Edema internationally, and the public policies in place to address this burden.'

Role: co-investigator

Collaborators: Walter Greenleaf PhD (Stanford), Sanjay Basu MD PhD (Stanford), Adele Hayutin PhD (Stanford), Dawn Carr PhD (Stanford)



### **Statins TO prevent progression of glaucoma (STOP glaucoma) clinical trial**

In preparatory-to-research phase, determining approximate number of eligible patients. Planned submission as a clinical site in May

The goal of this project will be a multicenter clinical trial to evaluate the efficacy and safety of statin therapy for the treatment of open-angle glaucoma

Role: potential clinical site co-leader

Collaborators: Robert Chang MD (Stanford), Joshua Stein MD MS (University of Michigan; project PI), David Musch PhD MPH (University of Michigan; PI)

### **Completed**

#### **Cost-effectiveness analysis of diabetic macular edema**

September 2011 – April 2013

The goal of this project was to determine relative cost-effectiveness of treatment for diabetic macular edema, via a lifetime-horizon Markov model, from a societal perspective.

Role: primary investigator

Collaborators: Doug Owens MD MS (Stanford), Jeremy Goldhaber-Fiebert PhD (Stanford), Eva Enns PhD (University of Minnesota), Brian Matesic BS (Stanford)

#### **Clinicopathologic correlation of epiretinal membrane and internal limiting membrane specimens**

June 2012 – present

The goal of this project is to determine accuracy of surgeon intraoperative diagnosis from vitrectomy with membrane peeling.

Role: co-investigator

Collaborators: Darius Moshfeghi MD (Stanford), Emilia DeMarchis BA (Stanford; medical student)

#### **Intraocular Pressure Elevation after VEGF Inhibitor Intravitreal Injection**

March 2009 – 2011

The goal of this project was to evaluate cases of ocular hypertension/glaucoma occurring after intravitreal injection of bevacizumab or ranibizumab, via retrospective review of charts from two medical centers (Stanford University and Mayo Clinic).

Role: co-investigator

Collaborators: Darius Moshfeghi MD (Stanford), Sophie Bakri MD (Mayo Clinic)

#### **Intraocular Succinate Levels as a Correlate to Ocular Ischemia**

August 2009 – 2010

The goal of this project was to analyze and compare intraocular succinate concentrations in ischemic diabetic eyes pre- and post- laser photocoagulation (clinical regression of ischemic neovascularization), to evaluate for a relationship in humans that was suggested by animal models.

Role: resident co-investigator

Collaborators (Mentor): Ray Gariano MD PhD (Stanford/Santa Clara Valley Medical Center)

#### **Trends in Periorbital/Ocular MRSA**

October 2008 – December 2009

The goal of this retrospective chart review was to characterize periorbital pediatric MRSA infections in the Northern California Kaiser Permanente healthcare system over the past ten years.

Role: resident co-investigator

Collaborators: Malena Amato MD (Kaiser Permanente), Matthew Walvick DO (Touro University College of Osteopathic Medicine), Stephen Tanaka MD (Kaiser Permanente)

### **Ethylene Vinyl Acetate Polymer coupled to Intraocular Lenses as a potential method for Drug Release**

December 2008 – June 2009

The goal of this project was to investigate the ability of synthetic ethylene vinyl acetate to contain and release medications commonly administered to/in the eyes, with intent to anneal the polymers to intraocular lenses and use for longer-duration drug release following cataract surgery. Demonstrated detectable release of commonly-used antibacterial and anti-inflammatory compounds from the polymer.

Role: resident investigator

### **In Vitro Antibacterial Activity of Antibiotic-Permeated Intraocular Lenses**

January 2008 – June 2009

The goal of this project was to investigate the ability of intraocular lenses to serve as a passive reservoir for antibiotic uptake and release, with potential application for infection prophylaxis in cataract surgery. Demonstrated time- and concentration-dependent release of fluoroquinolones from hydrophobic acrylic intraocular lenses.

Role: resident investigator

### **Photorefractive Keratectomy Outcomes in Variable Levels of Myopia**

September 2007 – May 2009

The goal of this project was to retrospectively evaluate the efficacy, predictability, and safety of custom photorefractive keratectomy (PRK) for the treatment of low to moderate versus high myopia and myopic astigmatism.

Role: resident co-investigator

Collaborators (Mentor): Edward Manche MD (Stanford)

### **Proteomics of Rhodopsin and Retinal Membrane Proteins:**

May – July 2003

This project was an introduction to protein sequencing and identification using tandem mass spectrometry, applied to rhodopsin and other retinal membrane proteins.

Role: medical student research assistant

Mentor: Daniel Knapp PhD (Pharmacology Dept., Medical University of South Carolina)

### **Anterior Capsulotomy Techniques for Pediatric Cataract Surgery**

April 2005 – December 2005

The goal of this project was to determine relative rates of tear with different anterior capsulotomy techniques in pediatric cataract surgery, via retrospective review of clinic visit notes and operative dictations.

Role: medical student research assistant

Mentor: M. Edward Wilson MD (Storm Eye Institute, Medical University of South Carolina)

## **Employment**

### **Staff Surgeon and Chief, Ophthalmology Section**

Veterans Affairs Palo Alto Health Care System

July 2013-present

### **Clinical Instructor**

Stanford University School of Medicine

July 2010-present

### **Ophthalmology Resident**

Stanford University

Stanford University Hospital and Clinics, Lucile Packard Children's Hospital, Palo Alto Veterans Administration Hospital, and Santa Clara Valley Medical Center

July 2007 – June 2010

### **Medical Intern (Transitional/Rotating)**

Scripps Mercy Hospital

Scripps Mercy Hospital and Naval Medical Center San Diego

June 2006 – June 2007

### **Medical School Supplemental Instructor**

MUSC Center for Academic Excellence

Tutored small group of fellow classmates for pathology (Mechanisms of Disease II course)

Spring 2004

### **University Tutor**

Sonoma State University Tutorial Center

Tutored students for general biology, chemistry, and physics courses.

2001-2002

### **Volunteer Activities**

Stanford Pacific Free Clinic, volunteer attending ophthalmologist

Stanford Vision and Ophthalmology Interest Group, Spring 2008 – 2010

Taught examination and microscopic surgical techniques to medical students interested in ophthalmology at twice-yearly skills sessions.

Ward Tips for the Medical School Clerkship Year, April 19, 2005

Served as member of student-directed question-and-answer advice panel for students entering their clerkship year

Fight for Sight, 2004-2005

Screened patients for eye diseases at monthly clinics for underserved patients in the Charleston area

AOA Cares Project, 2005-2006

Coordinated and arranged member donation of canned goods and other household items for local charities and shelters at monthly AOA meetings

Each One Reach One, 2004-2005

Volunteered at monthly activities for children who had experienced the death of a family member

Habitat for Humanity, February 18, 2006

Volunteered to move, clean, and organize store inventory at the Charleston Habitat for Humanity outlet store with other College of Medicine Student Council and AOA members

Moultrie Middle School Panel for Girls: Careers in the Health Professions, March 27, 2006

Served as panel speaker to motivate young girls toward careers in health professions

Yul Brynner Cancer Awareness Week, April 11, 2003

Assisted with free head and neck cancer screenings

Belle Hall Elementary School Career Fair, February 27, 2003

Worked at medical career booth

Race for the Cure, October 26, 2002

Volunteered as race staff

MUSC Treelighting Ceremony, 2002-2003

Baked cookies for and attended annual childrens' event

Ronald McDonald House, 2002-2003

Baked and delivered pastries to patients and families, weekly and for holidays

## **Other Honors/Awards**

Summa Cum Laude, Chemistry, Sonoma State University, 2002  
Youth National Verbal Award, Johns Hopkins University, 2000  
Dean's Honor List, Sonoma State University, 1998-2001  
Lela M. Emad Scholarship, Sonoma State University, 1999  
Summit State Bank Scholarship, Sonoma State University, 1999  
Ernest L. and Ruth W. Finley Foundation Scholarship, Sonoma State University

## **Organizations**

American Academy of Ophthalmology, 2008-present  
Women in Ophthalmology, 2009-present  
American Medical Association, 2002-present  
American Medical Women's Association, 2003-present  
American College of Physicians, 2003-present  
Alpha Omega Alpha Medical Honor Society, 2004-present  
California Association of Eye Physicians and Surgeons, 2008-present  
Pan-American Association of Ophthalmology, 2010-present  
American Society of Cataract and Refractive Surgery, 2007-present  
Association for Research in Vision and Ophthalmology, 2008-present  
Cross-disciplinary Healthcare Innovation Partnership at Stanford, 2009-2010  
Stanford Health Care Business Club, 2008-2010  
Peninsula Eye Society, 2007-present

## **Meetings and Courses**

Stanford University Fresh Thinking 2.0 Workshop – Medical Education: It's Time for a Change  
Invited to participate in workshop coordinated by Dr. Victor Fuchs. November 8-9, 2012  
Stanford University Health Policy, Finance, and Economics Course, 2009-2010  
Nominated by Stanford ophthalmology department to attend; selected to participate from among pool of applicants  
American Academy of Ophthalmology Mid-Year Forum, Washington, DC, April 22-25, 2009  
Harvard Intensive Cataract Surgical Training Conference, Boston, MA, May 30-31, 2009  
Course on Ophthalmic Advanced Surgical Techniques, San Francisco, CA, March 7-8, 2009  
Course on Ophthalmic Advanced Surgical Techniques, San Francisco, CA, May 15-16, 2010

## **Invited Lectures**

Guest Speaker, Public Health 196: Global Perspectives on Vision  
UC Berkeley School of Public Health  
February 13, 2014  
Big Data: In Pursuit of Better Outcomes  
Lecture at Bay Area American Society of Ophthalmic Registered Nurses (ASORN) Annual Meeting  
Palo Alto VA Medical Center  
September 14, 2013  
A Dearth of Data: The Quality Conundrum and Health Care Reform  
Byers Eye Institute Grand Rounds  
November 1, 2012  
Cost-Effectiveness of Treatment Options for Diabetic Macular Edema  
6<sup>th</sup> Annual Stanford Ophthalmology Day  
Byers Eye Institute  
June 23, 2012

Cornea: The First Defense

Lecture at Bay Area American Society of Ophthalmic Registered Nurses (ASORN) Annual Meeting

Palo Alto VA Medical Center

September 10, 2011

General Ophthalmology Lecture to Stanford Internal Medicine Residents

August 20, 2009, January 21, 2010, and June 10, 2010

Lecture to Stanford Ophthalmic Technicians in preparation for certification exam

May 25, 2010

Clinical Perspective on Ocular Microbiology

Lecture to Stanford Microbiology Lab

June 8, 2010