



CURRICULUM VITAE

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PLACE OF BIRTH: Zhejiang, P. R. China

Visa Status/Citizenship Permanent Resident of United States / P. R. China

EDUCATION:

1988-1993 *M.D.*, Zhejiang Medical University (*Preventive Medicine*)

1993-1996 *M.P.H.*, Zhejiang Medical University (*Toxicology*)

1998-2000 *M.S.*, University of Michigan School of Public Health (*Biostatistics*)

2000-2004 *Ph.D.*, University of Pennsylvania School of Medicine (*Biostatistics*)

ACADEMIC APPOINTMENTS:

2004- *Assistant Professor (Clinician-Educator Track)*, Department of Ophthalmology,
Scheie Eye Institute, University of Pennsylvania School of Medicine

2004- *Director*, Biostatistics Module,
Core Grant for Vision Research, Department of Ophthalmology,
University of Pennsylvania School of Medicine

2005- *Associate Scholar*, Biostatistics Unit
the Center for Clinical Epidemiology and Biostatistics
University of Pennsylvania School of Medicine

2005- *Faculty Member*, Graduate Group
Department of Biostatistics and Epidemiology
University of Pennsylvania School of Medicine

HONORS AND AWARDS:

1989-1993 Scholarship from Zhejiang Medical University
1993 Best Bachelor Thesis Award from Zhejiang Medical University
1993 Outstanding Graduate Award from Zhejiang Medical University
1994-1995 Graduate Fellowship from Graduate School of Zhejiang Medical University
2007 McCabe Pilot Award to research proposal “Optimal prediction of patient accrual, trial length and cost in randomized clinical trials”
2008 The ARVO Foundation for Eye Research/ Retina Research Foundation/
Joseph M. and Eula C. Lawrence Travel Scholarship Travel Grant

PROFESSIONAL EXPERIENCE:

1993-1996 *Research Assistant*, Department of Toxicology, Zhejiang Medical University
1996-1998 *Research Assistant*, Department of Disability and Human Development,
University of Illinois at Chicago
1998 *Teacher Assistant*, Department of Biostatistics, School of Public Health,
University of Michigan
1999 (Summer) *Biostatistician Internship*, Department of Biostatistics, STATPROBE Inc.
1999-2000 *Research Assistant*, Department of Environmental Health Sciences,
School of Public Health, University of Michigan
2000- 2004 *Biostatistician*, Clinical Trial Coordinating Center, Department of Ophthalmology,
University of Pennsylvania School of Medicine
2004- *Senior Biostatistician*, Clinical Trial Coordinating Center, Department of
Ophthalmology, University of Pennsylvania School of Medicine

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES:

2001- Society for Clinical Trials, *Member*
2001- Association for Research in Vision and Ophthalmology, *Member*
2003- American Statistical Association, *Member*
2003- The International Biometrics Society, *Member*
March, 2008 Ad Hoc Grant Reviewer, National Eye Institute

May, 2009

Grant Reviewer, Juvenile Diabetes Research Foundation

EDITORIAL POSITIONS:

Reviewer:

2002-	Ophthalmology
2006-	Archives of Ophthalmology
2007-	Diabetes Care
2008-	The American Statistician
2009-	Journal of American Association for Pediatric Ophthalmology and Strabismus

COMMITTEE MEMBERSHIPS:

Executive Committee member, Vision in Preschoolers (VIP) Study. 2004 – 2007.

PUBLICATIONS:

Research Publications, peer reviewed:

Schenk M, Schwartz AG, O'Neal E, Kinnard M, Greenson JK, Fryzek JP, Ying GS, Garabrant DH. Familial risk of pancreas cancer. *J Natl Cancer Inst* 2001; 93:640-4.

Garabrant DH, Roth HD, Parsad R, Ying GS. Latex sensitization in health care workers and in the U.S. general population. *Am J Epidemiol* 2001; 153:515-21.

Aleman TS, LaVail MM, Montemayor R, Ying GS, Maguire MG, Laties AM, Jacobson SG, Cideciyan AV. Augmented rod bipolar cell function in partial photoreceptor loss: an ERG study in P23H rhodopsin transgenic and aging normal rats. *Vision Research* 2001; 41:2779-97.

Dunaief JL, Dentchev T, Ying GS, Milam AH. The role of apoptosis in age-related macular degeneration. *Arch Ophthalmol* 2002; 120:1435-42.

Loman J, Quinn GE, Kamoun L, Ying GS, Maguire MG, Hudesman D, Stone RA. Darkness and near work: myopia and its progression in third-year law students. *Ophthalmology* 2002; 109:1032-8.

Heller T, Ying GS, Rimmer JS, Marks BA. Determinants of exercise in adults with cerebral palsy. *Public Health Nurs* 2002; 19:223-31.

Vannas AE, Ying GS, Stone RA, Maguire MG, Jormanainen V, Tervo T. Myopia and natural lighting extremes: risk factors in Finnish army conscripts. *Acta Ophthalmol Scand* 2003; 81:588-95.

Hahn P, Lindsten T, Ying GS, Bennett J, Milam AH, Thompson CB, Dunaief JL. Proapoptotic Bcl-2 family members, *Bax* and *Bak*, are essential for developmental photoreceptor apoptosis. *Invest Ophthalmol Vis Sci* 2003; 44:3598-605.

Quinn GE, Francis EL, Nipper KS, Flitcroft DI, Ying GS, Rees R, Schmid G, Maguire MG, Stone RA. Highly precise eye length measurements in children aged 3 through 12 years. *Arch Ophthalmol* 2003; 121:985-90.

Prenner JL, Rosenblatt BJ, Tolentino MJ, Ying GS, Javornik NB, Maguire MG, Ho AC, the CNVPT Research Group. Risk factors for choroidal neovascularization and vision loss in the Fellow Eye Study of CNVPT. *Retina*

2003; 23:307-14.

Balcer LJ, Baier ML, Cohen JA, Kooijmans MF, Sandrock AW, Nano-Schiavi L, Pfohl DC, Mills M, Bowen J, Ford C, Heidenreich FR, Jacobs DA, Markowitz CE, Stuart WH, Ying GS, Galetta SL, Maguire MG, Cutter CR. Contrast letter acuity as a visual component for the Multiple Sclerosis Functional Composite. *Neurology* 2003; 61:1367-73.

Lee MS, Balcer LJ, Volpe NJ, Liu GT, Ying GS, Galetta SL. Laser pointer visual field screening. *Neuroophthalmol* 2003; 23:260-3.

PUBLICATIONS - Research Publications, peer reviewed (Continued):

Stone RA, Quinn GE, Francis EL, Ying GS, Flitcroft DI, Parekh P, Brown J, Orlov J, Schmid G. Diurnal axial length fluctuations in human eyes. *Invest Ophthalmol Vis Sci* 2004; 45:63-70.

Ying GS, Heitjan DF, Chen T. Nonparametric prediction of event times in randomized clinical trials. *Clinical Trials* 2004; 1:352-61.

Ibarra MS, Hsu J, Mirza N, Wu I-H, Ying GS, Mainster MA, Tolentino MJ. Retinal temperature increase during transpupillary thermotherapy: effects of pigmentation, subretinal blood, and choroidal blood flow. *Invest Ophthalmol Vis Sci* 2004; 45:3678-82.

Hahn P, Lindsten T, Lyubarsky A, Ying GS, Pugh EN, Thompson CB, Dunaief JL. Deficiency of Bax and Bak protects photoreceptors from light damage *in vivo*. *Cell Death and Differentiation* 2004; 11:1192-7.

Metelitsina TI, Grunwald JE, Dupont JC, Ying GS. Effects of Niacin on the choroidal circulation of patients with Age-related Macular Degeneration (AMD). *British Journal of Ophthalmology* 2004; 88:1568-72.

Roman AJ, Schwartz SB, Alman TS, Cideciyan AV, Chico JD, Windsor E, Gardner LM, Ying GS, Smilko EE, Maguire MG, Jacobson SG. Quantifying rod photoreceptor-mediated vision in retinal degenerations: dark-adapted thresholds as outcome measures. *Experimental Eye Research* 2005; 80:259-72.

Grunwald JE, Metelitsin TI, DuPont JC, Ying GS, Maguire MG. Reduced foveolar choroidal blood flow in eyes with increasing AMD severity. *Invest Ophthalmol Vis Sci* 2005; 46:1033-8.

Heidary G, Ying GS, Maguire MG, Young TL. The impact of sphere on cylinder type and severity in a high myopia cohort. *Optom Vis Sci* 2005, 82:244-7.

Metelitsina TI, Grunwald JE, DuPont JC, Ying GS. Effect of Viagra on the ocular circulation of AMD patients. *Experimental Eye Research* 2005, 81:159-64.

Kupersmith MJ, Ying GS. Ocular motor dysfunction in ocular myasthenia gravis: effects of treat. *British Journal of Ophthalmology* 2005, 89:1330-4.

Metelitsina TI, Grunwald JE, DuPont JC, Ying GS. Effect of systemic hypertension on foveolar choroidal blood flow in age rated macular degeneration (AMD). *British Journal of Ophthalmology* 2006, 90:342-6.

Metelitsina TI, Grunwald JE, DuPont JC, Ying GS, Liu CC. Effect of Viagra on the retinal vein diameter in AMD patients. *Experimental Eye Research* 2006, 83:128-32.

Wilson LB, Quinn GE, Ying GS, Francis EL, Schmid G, Lam A, Orlov J, Stone RA. The relation of axial length and intraocular pressure fluctuations in human eyes. *Invest Ophthalmol Vis Sci* 2006, 47:1778-84.

Komaromy AM, Garg CD, Ying GS, Liu CC. The effect of head position on intraocular pressure in horses. *American Journal of Veterinary Research* 2006, 67:1232-5.

Stone RA, Wilson LB, Ying GS, Liu CC, Criss JS, Orlow J, Lindstrom JM, Quinn GE. Associations between Childhood Myopia and Parental Smoking. *Invest Ophthalmol Vis Sci* 2006, 47:4277-87.

Tania TY, Mills MD, Beck AD, Joos KM, Ying GS, Liu CC, Piltz-Seymour JR. Central Corneal Thickness and Corneal Diameter in Patients with Childhood Glaucoma. *Journal of Glaucoma* 2006, 15:524-8.

PUBLICATIONS - Research Publications, peer reviewed (Continued):

Hahn P, Ying GS, Beard J, Dunaief JL. Iron levels in human retina: sex difference and increase with age. *Neuroreport* 2006, 17:1803-6.

Rabinowitz MP, Grunwald JE, Karp KA, Quinn GE, Ying GS, Mills MD. Progression to severe retinopathy predicted by retinal vessel diameter between 31 and 34 weeks of postconception age. *Archives of Ophthalmology* 2007;125:1495-500.

Orlin A, Mills MD, Ying GS, Liu CC. A Comparison of Hang-Back with Conventional Recession Surgery for Exotropia. *J AAPOS* 2007;11:597-600.

Cote ML, Schenk M, Schwartz AG, Vigneau FD, Kinnard M, Greenson JK, Fryzek JP, Ying GS, Garabrant DH. Risk of other cancers in individuals with a family history of pancreas cancer. *Journal of Gastrointestinal Cancer* 2007;38:119-26.

Ying GS, Heitjan DF. Weibull Prediction of Event Times in Randomized Clinical Trials. *Pharmaceutical Statistics* 2008; 7:107-20.

Metelitsina TI, Grunwald JE, Dupoint JC, Ying GS, Brucker AJ, Dunaief JL. Foveolar choroidal blood flow and choroidal neovascularization in age-related macular degeneration. *Invest Ophthalmol Vis Sci* 2008;49:358-63.

Greller AL, Hoffman AB, Liu C, Ying GS, Vudathala D, Acland GM, Komáromy AM. Effects of the topically applied calcium-channel blocker flunarizine on intraocular pressure in clinically normal dogs. *Am J Vet Res* 2008;69:273-8.

Ranchod TM, Guercio JR, Ying GS, Brucker AJ, Stoltz RA. Effect of aspirin therapy on photodynamic therapy with verteporfin for choroidal neovascularization. *Retina* 2008; 28:711-6.

Skalet AH, Quinn GE, Ying GS, Gordillo L, Dodobara L, Cocker K, Fielder AR, Ells AL, Mills MD, Wilson C, Gilbert C. Telemedicine screening for Retinopathy of Prematurity (ROP) in developing countries using digital retinal images: A feasibility project. *J AAPOS* 2008; 12:252-8.

Zaveri M, Conger A, Salter A, Frohman TC, Galetta SL, Markowitz CE, Jacobs DA, Cutter GR, Ying GS, Maguire MG, Calabresi PA, Balcer LJ, Frohman EM. Retinal Imaging by Laser Polarimetry and Optical Coherence Tomography Evidence of Axonal Degeneration in Multiple Sclerosis. *Archives of Neurology* 2008; 65:924-8.

Ying GS, Maguire MG, Liu CC, Antoszyk A, and Complications of Age-related Macular Degeneration Prevention Trial Research Group. Night vision and progression of Age-related Macular Degeneration (AMD) in the Complications of Age-related Macular Degeneration Prevention Trial. *Ophthalmology* 2008; 115:1876-82.

Brown JS, Flitcroft DI, Ying GS, Francis EL, Quinn GE, Stone RA. In Vivo human choroidal thickness measurements: Evidence of diurnal fluctuations. *Invest Ophthalmol Vis Sci.* 2009; 50:5-12.

Okeke CO, Quigley HA, Jampel HD, Ying GS, Plyler RJ, Jiang YZ, Friedman DS. Adherence with Topical Glaucoma Medication Monitored Electronically: The Travatan Dosing Aid Study. *Ophthalmology* 2009; 116:191-9.

PUBLICATIONS - Research Publications, peer reviewed (Continued):

Lukinova N, Iacovelli J, Dentchev T, Wolkow N, Hunter A, Amado D, Ying GS, Sparrow J, Dunaief JL. Iron chelation protects the retinal pigment epithelial cell line ARPE-19 against cell death triggered by diverse stimuli. *Invest Ophthalmol Vis Sci.* 2009; 50:1440-7.

Ranchod TM, Brucker AJ, Liu CC, Cukras CA, Hopkins TB, Ying GS. Evaluation of actual versus expected PDT spot size. *Am J Ophthalmol.* 2009; 147:859-64.

Friedman DS, Okeke CO, Jampel HD, Plyler RJ, Ying GS, Jiang YZ, Quigley HA. Risk factors of poor adherence with eyedrops in electronically monitored glaucoma patients. *Ophthalmology* 2009; 116:1097-1105.

Grunwald L, Mills MD, Johnson K, Karp KA, Quinn GQ, Ying GS, Grunwald JE. Does change in retinal vessel diameter over time predict severe retinopathy of prematurity? *Am J of Ophthalmol* 2009; 147:1086-1091.

Hahn P, Song Y, Ying GS, He X, Beard J, Dunaief JL. Age-dependent and gender-specific changes in mouse tissue iron by strain. *Experimental Gerontology* 2009 Jun 26. [Epub ahead of print].

Ying GS, Maguire MG, Alexander J, Martin R, Antoszyk A. Description of the AREDS 9-step severity scale applied to participants in CAPT. *Archives of Ophthalmology (in press)*.

Volpe NJ, Dadvand L, Kim SK, Maguire MG, Ying GS, Moster ML, Galetta SL, M. D. Computerized Binocular Pupillography of the Swinging Flashlight Test Detects Afferent Pupillary Defects. *Current Eye Research* (in press).

Garcia MM, Ying GS, Cocomes CA, Tanaka JC, Komaromy AM. Behavioral test for visual assessment of canine achromatopsia. *American Journal of Veterinary Research (in press)*.

Okeke CO, Quigley HA, Jampel HD, Ying GS, Plyler RJ, Jiang YZ, Friedman DS. Interventions Improve Poor Adherence with Once Daily Glaucoma Medications in Electronically Monitored Patients. *Ophthalmology (in press)*.

Shah DN, Wilson C, Ying GS, Karp K, Cocker K, Ng J, Fielder A, Mills MD, Quinn GE. Comparison of expert graders to computer assisted image analysis of the retina in retinopathy of prematurity. *J APPOS (in press)*.

Nemani D, Karp K, Ying GS, Mills MD, Quinn G. Image analysis of posterior pole vessels identifies Type 1 retinopathy of prematurity. *J APPOS (in press)*.

Maguire MG, Ying GS, McCannel C, Liu CC, Dai Y. Statin use and the incidence of advanced age-related macular degeneration in the Complications of Age-related Macular Degeneration Prevention Trial (CAPT). *Ophthalmology (in press)*.

Zaida AA, Ying GS, Daniel E, Gangaputra S, Rosenbaum JT, Suhler EB, Throne JE, Foster CS, Jabs DA, Levy-

Clarke GA, Nussenblatt RB, Kempem JH. Hypopyon in patients with uveitis. *Ophthalmology* (in press).

Contributions to peer-reviewed clinical research publications as a writing team leader or member:

Choroidal Neovascularization Prevention Trial Research Group (**Writing team member**). Laser treatment in fellow eyes with large drusen: updated findings from a pilot randomized clinical trial. *Ophthalmology* 2003; 110:971-8.

Vision in Preschoolers (VIP) Study Group (**Writing team member**, Biostatistician for the Coordinating Center). Visual acuity results in school-aged children and adults: Lea Symbols chart versus Bailey-Lovie chart. *Optom Vis Sci* 2003; 80:650-4.

Vision in Preschoolers (VIP) Study Group (**Writing team member**; Biostatistician for the Coordinating Center). Comparison of Preschool Vision Screening Tests as Administered by Licensed Eyecare Professionals in the Vision in Preschoolers (VIP) Study. *Ophthalmology* 2004; 111:637-50.

Complications of Age-related Macular Degeneration Prevention Trial Research Group (**Writing team leader**, Biostatistician for the Coordinating Center). Baseline Characteristics, the NEI-VFQ-25, and Their Associations in the Complications of Age-Related Macular Degeneration Prevention Trial (CAPT). *Ophthalmology* 2004; 111:1307-16.

Vision in Preschoolers (VIP) Study Group (**Writing team leader**; Senior Biostatistician for the Coordinating Center). Sensitivity of screening tests for detecting VIP-targeted vision disorders when specificity is 94%. *Optom Vis Sci* 2005; 82:432-8.

Vision in Preschoolers (VIP) Study Group (**Writing team member**; Senior Biostatistician for the Coordinating Center). Preschool vision screening tests administered by nurse screeners compared to lay screeners in the Vision in Preschoolers Study *Invest Ophthalmol Vis Sci* 2005; 46:2639-48.

Complications of Age-related Macular Degeneration Prevention Trial Research Group. (**Writing team member**, Senior Biostatistician for the Coordinating Center). Laser treatment in patients with bilateral large drusen - The Complications of Age-related Macular Degeneration Prevention Trial. *Ophthalmology* 2006; 113:1974-86.

Vision in Preschoolers (VIP) Study Group (**Writing team leader**; Senior Biostatistician for the Coordinating Center). Impact of confidence number on the screening accuracy of the Retinomax Autorefractor. *Optom Vis Sci* 2007; 84:181-188.

Vision in Preschoolers (VIP) Study Group (**Writing team member**; Senior Biostatistician for the Coordinating Center). Does Assessing eye alignment along with refractive error or visual acuity increase sensitivity for detection of strabismus in Preschool Vision Screening? *Invest Ophthalmol Vis Sci*. 2007; 48:3115-3125.

Complications of Age-related Macular Degeneration Prevention Trial Research Group. (**Writing team leader**, Senior Biostatistician for the Coordinating Center). Risk factors for Choroidal Neovascularization and Geographic Atrophy in the Complications of Age-related Macular Degeneration Prevention Trial. *Ophthalmology* 2008; 115:1474-79.

Vision in Preschoolers (VIP) Study Group (**Writing team member**; Senior Biostatistician for the Coordinating Center). Findings from the Vision in Preschoolers (VIP) Study. *Optom Vis Sci* 2009; 86:619-23.