

BIOGRAPHICAL SKETCH

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NAME Janey L. Wiggs, M.D., Ph.D.		POSITION TITLE Assistant Professor of Ophthalmology Harvard Medical School Massachusetts Eye and Ear Infirmary	
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of California, Berkeley	A.B.	1976	Biochemistry
University of California, Berkeley	Ph.D.	1981	Biochemistry
Harvard Medical School, Boston, Massachusetts	M.D.	1984	Medicine

A. Positions and Honors**PROFESSIONAL EXPERIENCE**

1984-1985 Intern in Medicine, Beth Israel Hospital, Boston
 1985-1986 Resident in Medicine, Beth Israel Hospital, Boston
 1986-1987 Research Fellow in Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston
 1987-1990 Resident in Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston
 1990-1991 Research Fellow in Molecular Genetics, Massachusetts Eye & Ear Infirmary, Boston
 1991-1992 Clinical Fellow in Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston
 1992-1993 Instructor in Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston
 1993- 2001 Assistant Professor of Ophthalmology, Genetics and Pediatrics
 New England Medical Center, Tufts University School of Medicine
 2001- Assistant Professor of Ophthalmology
 Harvard Medical School, Massachusetts Eye and Ear Infirmary
 2002- Member, National Eye Advisory Council, NEI, NIH

AWARDS

1976 Graduate with Honors in Biochemistry
 1983-1984 Pearl and Martin Silverstein Scholar in Health Sciences and Technology
 1986 Individual National NRSA (National Research Service Award) NIH
 1987 Heed Foundation Fellowship, special distinction as the Heed Fellows Society Fellow
 1990 Fight for Sight Postdoctoral Fellowship Award
 1991 Knights Templar Eye Foundation Award
 1991 Fight for Sight Grant-in-Aid
 1992 Board Certification in Ophthalmology
 1992 Knights Templar Eye Foundation Award
 1992 Hood Foundation Award
 1993 Teacher of the Year, Massachusetts Eye and Ear Infirmary
 1994 Earl P. Charlton Fund Research Award
 1995 Research to Prevent Blindness Miriam & Benedict Wolf Scholars Award
 1999 Board Certification in Medical Genetics/ Clinical Molecular Genetics

B. Selected peer-reviewed publications:

- Gonzales N, **Wiggs J**, and Chamberlin MJ. (1977) A simple procedure for resolution of Escherichia Coli RNA polymerase holoenzyme from corepolymerase. Arch. Biochem. Biophys. 182: 404-408.
- Wiggs JL**, Bush JW, and Chamberlin MJ (1979) Utilization of promoter and terminator sites on bacteriophage T7 DNA by RNA polymerases from a variety of bacterial orders. Cell 16:97-109.
- Jaehning JA, **Wiggs JL**, and Chamberlin MJ. (1979) Altered promoter selection by a novel form of Bacillus subtilis RNA polymerase. Proc. Nat. Acad. Sci. USA 76:5470-5474.
- Chamberlin MJ, Nierman WC, **Wiggs JL**, Neff N. (1979) A quantitative assay for bacterial RNA polymerases. J. Biol. Chem. 254:10061-10069.
- Ballou L, Grove RJ, Roon RH, **Wiggs J**, and Ballou CE. (1981) Temperature-Sensitive Glucosamine Auxotrophy of Saccharomyces cerevisiae. Molecular and Cellular Biology 1:9-12.
- Wiggs JL**, Gilman MZ and Chamberlin MJ. (1981) Heterogeneity of RNA polymerase in Bacillus subtilis: evidence for an additional sigma factor in vegetative cells. Proc. Nat. Acad. Sci. USA 78:2762-2766.
- Gilman MZ, **Wiggs JL**, and Chamberlin MJ. (1981) Nucleotide sequences of two Bacillus subtilis promoters used by Bacillus subtilis sigma-28 RNA polymerase. Nucleic Acids Research 9:5991-6000.
- Wiggs J**, Nordenskjold M, Yandell D, Rapaport J, Grondin V, Janson M, Werelius B, Petersen R, Craft A, Riedel K, Liberfarb R, Walton D, Wilson W, and Dryja T. (1988). Prediction of the risk of hereditary retinoblastoma, using DNA polymorphisms within the retinoblastoma gene. New Engl. Journal of Medicine 318:151-157.
- Wiggs JL** and Dryja TP (1988) Predicting the risk of hereditary retinoblastoma. American J. of Ophthalmology 106:346-351.
- Shiang R, Murray JC, **Wiggs J**, Dryja T. (1988) A TaqI RFLP identified at the retinoblastoma locus on chromosome 13. Nucleic Acids Research 16:9069.
- Reichel E, **Wiggs JL**, Mukai S, D'Amico D. (1992) Oxycephaly, Bilateral Ectopia Lentis and Retinal Detachment. Annals of Ophthalmology 24:97-98.
- Wiggs JL**, Haines J, Paglinauan CM, Fine A, Sporn C, Lou D. (1994) Genetic linkage of autosomal dominant juvenile glaucoma to 1q21-q31 in three affected pedigrees. Genomics 21:299-303.
- Paglinauan C, Haines JL, DelBono EA, Schuman J, Stawski S, **Wiggs JL**. (1995) Exclusion of chromosome 1q21-q31 from linkage to three pedigrees affected by the pigment dispersion syndrome. Am J Hum Genet 56:1240-1243
- Wiggs JL**, DelBono EA, Schuman JS, Hutchinson BT, Walton DS. (1995) Clinical features of five pedigrees genetically linked to the juvenile glaucoma locus on chromosome 1q21-q31. Ophthalmology 102:1782-1789.
- Wiggs JL**, Damji KF, Haines JL, Pericak-Vance MA, Allingham RR. (1996) The distinction between juvenile and adult-onset primary open-angle glaucoma (letter-to-editor), Am J Hum Genet 58:243-244.
- Phillips JC, DelBono EA, Haines JL, Pralea AM, Cohen JS, Greff LJ, **Wiggs JL**. (1996) A second locus for Rieger syndrome maps to chromosome 13q14. Am J Hum Genet 59:613-619.
- Wiggs JL**. (1997) Genomic mapping of Kjer dominant optic atrophy. Arch Ophthalmol 115:115-16.
- Andersen JS, Pralea AM, DelBono EA, Haines JL, Gorin MB, Schuman JS, Mattox CG, **Wiggs JL**. (1997) A gene responsible for the pigment dispersion syndrome maps to chromosome 7q35-36. Archives of Ophthalmology 115:384-388.
- Chang JT, Milligan S, Li Y, Chew CE, **Wiggs J**, Copeland NG, Jenkins NA, Campochiaro PA, Hyde DR, Zack DJ. (1997) Mammalian homolog of Drosophila retinal degeneration B rescues the mutant fly phenotype. J Neurosci 17:5881-5890.
- Wiggs JL**, Allingham RR, Vollrath D, Jones KH, DeLaPaz M, Kern J, Patterson K, Babb VL, DelBono EA, Broome BW, Pericak-Vance MA, Haines JL. (1998) Prevalence of mutations in TIGR/Myocilin in patients with adult and juvenile primary open-angle glaucoma. Am J Hum Genet 63:1549-1552.
- Allingham RR, **Wiggs JL**, Damji KF, Herndon L, Youn J, Tallett DA, Jones KH, DelBono EA, Reardon M, Haines JL, Pericak-Vance MA. (1998) Adult-onset primary open angle glaucoma does not localize to chromosome 2cen-q13 in North American families. Hum Hered 48:251-255.
- Allingham RR, **Wiggs JL**, DeLaPaz MA, Vollrath D, Tallett DA, Broome B, Jones KH, DelBono EA, Kern J, Patterson K, Haines JL, Pericak-Vance MA. (1998) Gln368STOP myocilin mutation in families with late-onset primary open-angle glaucoma. Invest Ophthalmol Vis Sci 39:2288-2295.
- Pacella R, McLellan J, Grice K, DelBono EA, **Wiggs JL**, Gwiazda J. (1999) Role of genetic factors in the etiology of juvenile-onset myopia based on a longitudinal study of refractive error. Optometry and Vision Science 76:381-386.

- Wiggs JL**, Allingham RR, Hossain A, Kern J, Auguste, DelBono EA, Broomer B, Lennon Graham F, Hauser M, Pericak-Vance M, Haines JL. (2000) Genome-wide scan for adult onset primary open angle glaucoma. *Human Molecular Genetics* 9:1109-1117.
- Finzi S, Pinto CF, **Wiggs JL** (2001) Molecular and clinical characterization of a patient with a chromosomes 4p deletion, Wolf Hirschhorn syndrome, and congenital glaucoma *Ophthalmic Genetics* 1:35-41.
- Wiggs JL**, Vollrath D.(2001) Molecular and Clinical Evaluation of a patient Hemizygous for TIGR/MYOC. *Archives of Ophthalmology*, 119:1674-1678.
- Lynch S, Yanagi G, DelBono E, **Wiggs JL**. (2002) DNA sequence variants in the tyrosinase-related protein 1 (TYRP1) gene are not associated with human pigmentary glaucoma. *Mol Vis* 8:127-129.
- Andersen MG, Smith RS, Hawes NL, Zabaleta A, Chang B, **Wiggs JL**, John SW. (2002) Mutations in genes encoding melanosomal proteins cause pigmentary glaucoma in DBA/2Jmice. *Nature Genetics* 30:81-85.
- Wiggs JL**, Auguste J, Allingham RR, Flor JD, Perciak-Vance, MA, Rogers K, LaRocque KR, Graham FL, Broomer B, Del Bono E, Haines JL, Hauser M. (2003) Mutations in optineurin are not associated with disease in patients with adult onset primary open angle glaucoma. *Arch Ophthalmol* 121:1181-3.
- Figueiredo Sena D, Finzi S, Rogers K, DelBono E, Haines JL, **Wiggs JL**. (2004) CYP1B1 founder mutations in congenital glaucoma patients from the U.S. and Brazil. *J Med Genet* 41(1):e6.
- Wiggs JL**, Lynch S, Ynagi G, Maselli M, Auguste J, Del Bono EA, Olson LM, Haines JL. (2004) A genomewide scan identifies novel early-onset primary open-angle glaucoma loci on 9q22 and 20p12. *Am J Hum Genet* 74(6):1314-1320.
- Allingham RR, **Wiggs JL**, Hauser EA, Larocque-Abramson KR, Santiago-Turla C, Broomer B, Del Bono EA, Graham FL, Haines JL, Hauser MA, Pericak-Vance MA. (2005) Early adult-onset POAG linked to 15q11-13 using ordered subsets analysis. *IOVS in press*.

C. Research Support (ongoing or completed last three years):

- Mass Eye Ear Infirmary/ R01 EY09847-11 (Wiggs P.I.) 12/1/98-11/30/08
NIH/NEI
Linkage Study of Juvenile Glaucoma
For this project, we are concentrating on the identification of genetic defects that are responsible for three forms of juvenile onset glaucoma inherited as autosomal dominant Mendelian traits: pigment dispersion syndrome and pigmentary glaucoma, Rieger syndrome and juvenile onset primary open angle glaucoma.
- Mass Eye Ear Infirmary/ R01 EY015872-01 (Wiggs P.I.) 12/1/04-11/30/09
NIH/NEI
Genetic Etiologies of Primary Open Angle Glaucoma
The goal of this project is to confirm and refine the chromosomal loci on chromosome 14q12 associated with adult onset primary open angle glaucoma, to identify and characterize candidate genes located within this region, and to determine the relationships between specific genetic defects and glaucoma phenotypes.
- Mass Eye Ear Infirmary/ R01 EY13882-03 (Wiggs P.I.) 5/1/01-4/30/05
NIH/NEI
Genetic Studies of Pseudoexfoliation Glaucoma
The major goal of this project is to identify genes that are associated with pseudoexfoliation syndrome.
- Mass Eye Ear Infirmary/ R01 EY015473-01 (Pasquale P.I.) 12/01/04-11/30/09
NIH/NEI
Gene Environment Interactions In Glaucoma
The major goal of this project is to investigate gene environment interactions that contribute to adult onset primary open angle glaucoma.
- Mass Eye Ear Infirmary/ R01 EY10886 (Wiggs P.I.) 12/1/99-11/30/04
NIH/NEI

Principal Investigator/Program Director (Last, First, Middle):

Familial Primary Open Angle Glaucoma

The major goal of this project is to identify POAG susceptibility genes and determine the relationships between specific genetic defects and clinical phenotype.