BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
Thaddeus P. Dryja	Professor of Ophthalmology
eRA COMMONS USER NAME	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Yale College, New Haven, CT	B.A.	1972	Chemistry
Yale University School of Medicine, CT	M.D.	1976	Medicine
Waterbury Hospital, CT	Internship	1977	Medicine
Harvard Medical School, MA	Residency	1981	Ophthalmology

A. Positions and Honors

Positions and Employment:

1977-1978 Research Fellow, Experimental Eye Pathology, Mass. Eye and Ear, Harvard Medical School
1981-1983 Research Fellow, Genetics & Ophthalmology, Children's Hospital Med. Center, Harvard Medical School
1982-1984 Instructor of Ophthalmology, Harvard Medical School
1984-1987 Assistant Professor of Ophthalmology, Harvard Medical School
1987-1992 Associate Professor of Ophthalmology, Harvard Medical School
1992-1993 Professor of Ophthalmology, Harvard Medical School
1993- David Glendenning Cogan Professor of Ophthalmology, Harvard Medical School
1992- Director, David G. Cogan Pathology Laboratory, Massachusetts Eye and Ear Infirmary

Other Experience and Professonal Memberships:

1990-1992 NIH Study Section, Visual Sciences A2
1994-1998 Board of Scientific Counselors, National Eye Institute
1996- National Academy of Sciences, Section of Medical Genetics, Hematology, and Oncology

Awards and Honors:

1987, 1997 Alcon Awards from the Alcon Research Institute
1987 Dolly Green Award from Research to Prevent Blindness, Inc.
1988 Cogan Award from the Association for Research in Vision and Ophthalmology
1990 Franceschetti Medal from the International Society for Genetic Eye Diseases
1991 Doyne Medal from the Oxford Ophthalmological Congress for contributions to ophthalmology
1993 Rosenthal Award in the Visual Sciences from the Richard and Hinda Rosenthal Foundation
1993 Paul Kayser International Award of Merit in Retina Research, Retina Research Foundation
1995 Research to Prevent Blindness Senior Scientific Investigator Award
1998 Waardenburg Medal, International Congress of Ophthalmology
2000 Moran Prize for distinction in retina research
2000 LVII Edward L. Jackson Memorial Lecture, American Academy of Ophthalmology

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from 171 peer-reviewed publications)

1. Cavenee WK, Dryja TP, Phillips RA, Benedict WF, Godbout R, Gallie BL, Murphree AL, et al. Expression of recessive alleles by chromosomal mechanisms in retinoblastoma. Nature 305:779-784, 1983.
2. Dryja TP, Cavenee W, White R, Rapaport JM, Petersen RA, Albert DM, Bruns GAP. Homozygosity of chromosome 13 in retinoblastoma. N Eng J Med 310:550-553, 1984.
3. Friend SH, Bernards R, Rogelj S, Weinberg RA, Rapaport JM, Albert DM, Dryja TP. A human DNA segment with properties of the gene that predisposes to retinoblastoma and osteosarcoma. Nature 323:643-646, 1986.
4. Dryja TP, McGee TL, Reichel E, Hahn LB, Cowley GS, Yandell DW, Sandberg MA, Berson EL. A point mutation of the rhodopsin gene in one form of retinitis pigmentosa. Nature 343:364-366, 1990.

5. Olsson JE, Gordon JW, Pawlyk BS, Roof D, Hayes A, Molday RS, Mukai S, Cowley GS, Berson EL, Dryja TP. Transgenic mice with a rhodopsin mutation (Pro23His): A mouse model of autosomal dominant retinitis pigmentosa. Neuron 9:815-830, 1992.
6. Dryja TP, Hahn LB, Reboul T, Arnaud B. Missense mutation in the gene encoding the α subunit of rod transducin in the Nougaret form of congenital stationary night blindness. Nature Genet 13:358-36, 1996.
7. McGee TL, Devoto M, Ott J, Berson EL, Dryja TP. Evidence that the penetrance of mutations at the RP11 locus causing dominant retinitis pigmentosa is influenced by a gene linked to the homologous RP11 allele. Am J Hum Genet 61:1059-1066, 1997.
8. Yamamoto S, Sippel KC, Berson EL, Dryja TP. Defects in the rhodopsin kinase gene in patients with the Oguchi form of stationary night blindness. Nature Genet 15:175-178, 1997.
9. Hagstrom SA, North MA, Nishina PM, Berson EL, Dryja TP. Recessive mutations in the gene encoding the tubby-like protein TULP1 in patients with retinitis pigmentosa. Nature Genet 18:174-176, 1998.
10. Morimura H, Fishman GA, Grover SA, Fulton AB, Berson EL, Dryja TP. Mutations in the RPE65 gene in patients with autosomal recessive retinitis pigmentosa or Leber congenital amaurosis. Proc Natl Acad Sci USA 95:3088-3093, 1998.
11. Hagstrom SA, Dryja TP. Mitotic recombination map of 13cen-13q14 derived from an investigation of loss of heterozygosity in retinoblastomas. Proc Natl Acad Sci USA 96:2952-2957, 1999.
12. Morimura H, Berson EL, Dryja TP. Recessive mutations in the gene encoding cellular retinaldehyde-binding protein in a form of retinitis punctata albescens. Invest Ophthalmol Vis Sci 40:1000-1004, 1999.
13. Yamamoto H, Simon A, Eriksson U, Harris E, Berson EL, Dryja TP. Mutations in the gene encoding 11-cis retinol dehydrogenase cause delayed dark adaptation and fundus albipunctatus. Nat Genet 22:188-191, 1999.
14. Morimura H, Saindelle-Ribeaudeau F, Berson EL, Dryja TP. Mutations in *RGR*, encoding a light-sensitive opsin homologue, in patients with retinitis pigmentosa. Nature Genet 23:393-394, 1999.
15. Pierce EA, Quinn T, Meehan T, McGee TL, Berson EL, Dryja TP. Mutations in a gene encoding a new oxygen-regulated photoreceptor protein cause dominant retinitis pigmentosa. Nature Genet 22:248-254, 1999.
16. Sharon D, Bruns GAP, McGee TL, Sandberg MA, Berson EL, Dryja TP. X-linked retinitis pigmentosa: mutation spectrum of the RPGR and RP2 genes and correlation with visual function. Invest Ophthal Vis Sci 41:2712-2721, 2000.
17. Rivolta C, Sweklo EA, Berson EL, Dryja TP. Missense mutation in the USH2A gene associated with recessive retinitis pigmentosa without hearing loss. Am J Hum Genet 66:1975-1978, 2000.
18. Dryja TP, Adams SM, Grimsby JL, McGee TL, Hong D-H, Li T, Andreasson S, Berson EL. Null *RPGRIP1* alleles in patients with Leber congenital amaurosis. Am J Hum Genet 68:1295-1298, 2001.
19. Sharon D, Blackshaw S, Cepko CL, Dryja TP. Profile of the genes expressed in the human peripheral retina, macula, and retinal pigment epithelium determined through serial analysis of gene expression (SAGE). Proc Natl Acad Sci USA 99: 315-320, 2002.
20. Nishiguchi KM, Sandberg MA, Kooijman AC, Martemyanov KA, Pott JWR, Hagstrom SA, Arshavsky VY, Berson EL, Dryja TP. Defects in RGS9 or its anchor protein R9AP in patients with slow photoreceptor deactivation. Nature 427:75-78, 2004.
21. DeAngelis MM, Lane AM, Shah CP, Ott J, Dryja TP, Miller JW. Extremely discordant sib-pair study design to determine risk factors for neovascular age-related macular degeneration. Arch Ophthal 122:575-580, 2004.
22. Fishman GA, Roberts MF, Derlacki DJ, Grimsby JL, Yamamoto H, Sharon D, Nishiguchi JM, Dryja TP. Novel mutations in the cellular retinaldehyde-binding protein gene (RLBP1) asociated with retinitis punctata albescens. Evidence of interfamilial genetic heterogeneity and fundus changes in heterozygotes. Arch Ophthalmol 122:70-75; 2004.
23. Nighiguchi JM, Sokal I, Yang L, Roychowdbury N, Palczewski K, Berson EL, Dryja TP, Baehr W. A novel mutation (I143NT) in guanylate cyclase-activating protein 1 (GCAP1) associated with autosomal dominant cone degeneration. Invest Ophthalmol Vis Sci 45:3863-3870, 2004.
24. Seyedahmadi BJ, Rivolta C, Keene JA, Berson EL, Dryja TP. Comprehensive screening of USH2A gene in Usher syndrome type II and non-syndromic recessive retinitis pigmentosa. Exp Eye Res 79:167-173, 2004.
25. Nishiguchi KM, Friedman JS, Sandberg MA, Swaroop A, Berson EL, Dryja TP. Recessive loss-of-function mutations in the NRL gene in patients with clumped pigmentary retinal degeneration and relative preservation of macular blue cone function. Proc Nat Acad Sci USA 101:17819-17824, 2004.
26. Nishiguchi KM, Sandberg MA, Gorji N, Berson EL, Dryja TP. Cone cGMP-gated channel mutations and clinical findings in patients with achromatopsia, macular degeneration, and other hereditary cone diseases. Hum Mutat 25:248-258, 2005.