

BIOGRAPHICAL SKETCH

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NAME Yokoyama, Ruth		POSITION TITLE Senior Research Associate	
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)
University of Houston		B.S.	1978
Washington University		Ph.D.	1985
			Biology Cell/Mol Biology

Please refer to the application instructions in order to complete sections A, B, and C of the Biographical Sketch.

A. Positions and Honors.**Positions and Employment**

1985-1987	Research Associate, Washington University, MO
1987-1991	Research Associate, University of Illinois, IL
1991-1995	Research Associate, Syracuse University, NY
1996-2003	Research Associate, Upstate Medical University, Syracuse, NY
2003-present	Research Associate, Emory University, Atlanta, GA

B. Peer-reviewed publications.

1. Yokoyama, R. W. and Yao, M.-C. (1980) Elimination of DNA sequences during macronuclear differentiation in *Tetrahymena thermophila*. J. Cell Biol. **87**:104a.
2. Yokoyama, S., Rice, J. P. and Yokoyama, R. W. (1980) The effect of social selection due to familial mental retardation on the marriage frequency of normal individuals. Soc. Biol. **27**:194-198.
3. Yokoyama, R. W. and Yao, M.-C. (1982) Elimination of DNA sequence during macronuclear differentiation in *Tetrahymena thermophila*, as detected by in situ hybridization. Chromosoma **85**:11-22..
4. Yokoyama, R. W. and Yao, M.-C. (1984) Internal micronuclear DNA regions which include sequences homologous to macronuclear telomeres are deleted during development in *Tetrahymena*. Nucleic Acids Res. **12**:6103-6116.
5. Yokoyama, R. W. and Yao, M.-C. (1986) Sequence characterization of Tetrahymena macronuclear DNA ends. Nucleic Acids Res. **14**:2109-2122.
6. Yokoyama, S., Yokoyama, R. and Rotwein, P. (1987) Molecular characterization of cDNA clones encoding the human alcohol dehydrogenase β 1 and the evolutionary relationship to the other class I subunits α and γ . Jpn. J. Genet. **62**:241-256.
7. Yokoyama, S. and Yokoyama, R. (1989) Molecular evolution of the human visual pigment genes. Mol. Biol. Evol. **6**: 186-197.
8. Matsuo, Y., Yokoyama, R. and Yokoyama, S. (1989) Human alcohol dehydrogenase β 1 and β 2 are specified by a single nucleotide difference. Eur. J. Biochem. **183**:317-320.
9. Yokoyama, S., Yokoyama, R., Kinlaw, C. S. and Harry, D. E. (1990) Molecular evolution of the zinc-containing long-chain alcohol dehydrogenase genes. Mol. Biol. Evol. **7**:143-154.

10. Yokoyama, R. and Yokoyama, S. (1990) Isolation, DNA sequence and evolution of a color visual pigment gene of the blind cave fish *Astyanax fasciatus*. *Vision Res.* **30**: 807-816.
11. Yokoyama, R. and Yokoyama, S. (1990) Convergent evolution of the red- and green-like visual pigment genes in fish, *Astyanax fasciatus*, and human. *Proc. Natl. Acad. Sci. USA* **87**: 9315-9318.
12. Yokoyama, S. and Yokoyama, R. (1990) Molecular evolution of visual pigment gene and other G-protein-coupled receptor genes. in *Population Biology of Genes and Molecules* (N. Takahata & J. F. Crow, eds.), pp. 307-322, Baifukan, Tokyo.
13. Yokoyama, S., Matsuo, Y., Rajasekharan and Yokoyama, R. (1992) Molecular structure of the human alcohol dehydrogenase 3 gene. *Jpn. J. Genet.* **67**: 167-171.
14. Yokoyama, S., Starmer, W. T. and Yokoyama, R. (1993) Paralogous origin of the red- and green-sensitive visual pigment genes in vertebrates. *Mol. Biol. Evol.* **10**: 527-538.
15. Yokoyama, R. and Yokoyama, S. (1993) Molecular characterization of the blue visual pigment gene in the fish (*Astyanax fasciatus*). *FEBS Lett.* **334**: 27-31.
16. Register, E. A., Yokoyama, R. and Yokoyama, S. (1994) Molecular characterization of a novel visual pigment gene of *Astyanax fasciatus*. *J. Mol. Evol.* **39**: 268-273.
17. Yokoyama, S., Matsuo, Y., Ramsbotham, R. and Yokoyama, R. (1994) Molecular characterization of a class IV human alcohol dehydrogenase gene (*ADH7*). *FEBS Lett.* **351**: 411-415.
18. Yokoyama, R., Knox, B. E. and Yokoyama, S. (1995) Rhodopsin from the fish, *Astyanax*: Role of tyrosine 261 in the red-shift. *Invest. Ophthalmol. Visual Sci.* **36**: 939-945.
19. Yokoyama, S., Meany, A., Wilkens, H. and Yokoyama, R. (1995) Initial mutational steps towards loss of opsin gene function in cavefish. *Mol. Biol. Evol.* **12**:527-532.
20. Yokoyama, S. and Yokoyama, R. (1996) Evolution of photoreceptor cells and visual pigments. *Annu. Rev. Ecol. Syst.* **27**:543-567.
21. Yokoyama, S. and Yokoyama, R. (2000) Comparative molecular biology of visual pigments. in *Molecular Mechanisms in Visual Transduction* (D. G. Stavenga, W. J. de Grip & E. N. Pugh, Jr, eds.), pp. 257-296, Elsevier, Amsterdam.

C. Research Support: None