

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed on Form Page 2.  
Photocopy this page or follow this format for each person.

NAME		POSITION TITLE	
<b>Kathryn V. Anderson, Ph.D</b>		Member, Developmental Biology Program	
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	BA	1973	Biochemistry
Stanford University	MS	1975	Neurosciences
University of California, Los Angeles	Ph.D.	1980	Biology
Max Planck Institut, Tübingen, Germany	Postdoctoral	1981-4	Dev. Genetics

**A. Positions and Honors.****Professional Experience**

1985-1990	Assistant Professor, Dept of Molecular and Cell Biology, U. C. Berkeley
1990-1993	Associate Professor, Dept of Molecular and Cell Biology, U. C. Berkeley
1993-1996	Professor, Dept Of Molecular And Cell Biology, U. C. Berkeley
1996-2002	Member, Molecular Biology Program, Sloan-Kettering Institute
1996-	Professor, Graduate School of Medical Sciences, Cornell University
2002-	Member, Developmental Biology Program, Sloan-Kettering Institute
2002-	Chair, Developmental Biology Program, Sloan-Kettering Institute
1999-2003	Member, Genetics Study Section, NIH
2003-	Member, Searle Scholar Advisory Panel
2003-	Member, Damon Runyon Scholar Panel

**Honors and Awards**

1973	Phi Beta Kappa
1985-1990	Presidential Young Investigator, National Science Foundation
1991-1996	Faculty Awards for Women, National Science Foundation
1995	Fellow, American Association for the Advancement of Science
1996	Fellow, American Academy of Arts and Sciences
1998-99	President, Society for Developmental Biology
2002	Member, National Academy of Sciences
2003	Enid A. Haupt Chair in Developmental Biology, 2003

**B. Selected Publications**

Anderson, K.V. and Nüsslein-Volhard, C. (1984) Information for the dorsal-ventral pattern of the *Drosophila* embryo is stored as maternal mRNA. *Nature* 311: 223-227.

Hashimoto, C., Hudson, K.L. and Anderson, K.V. (1988) The *Toll* gene of *Drosophila*, required for dorsal-ventral embryonic polarity, appears to encode a transmembrane protein. *Cell* 52: 269-279.

Ferguson, E. L. and Anderson, K. V. (1992) *decapentaplegic* acts as a morphogen to organize dorsal-ventral pattern in the *Drosophila* embryo. *Cell* 71: 451-461.

Morisato, D. and Anderson, K. V. (1994) The *spätzle* gene encodes a component of the extracellular signaling pathway establishing the dorsal-ventral pattern of the *Drosophila* embryo. *Cell* 76: 677-688.

Anderson, Kathryn V.

Wu, L. P. and Anderson, K. V. (1998) Regulated nuclear import of Rel proteins in the *Drosophila* immune response. *Nature* 392: 93-97.

Kasarskis, A., Manova, K. and Anderson, K. V. (1998) A phenotype-based screen for ENU-induced embryonic lethal mutations in the mouse. *Proc. Natl. Acad. Sci. USA* 95: 7485-7490.

Eggenschwiler, J. T., Espinoza, E. and Anderson, K. V. (2001) Rab23 is an essential negative regulator of the mouse Sonic hedgehog signaling pathway. *Nature* 412: 194-198.

Choe, K.-M., Werner, T., Stöven, S., Hultmark, D. and Anderson, K. V. (2002) A peptidoglycan recognition protein (PGRP) required for Relish activation and the antibacterial immune response in *Drosophila*. *Science*, 296: 359-362.

Caspary, T., García-García, M. J., Huangfu, D., Eggenschwiler, J. T., Wyler, M. R., Rakeman, A. S., Alcorn, H. L. and Anderson, K. (2002) Mouse *Dispatched homolog1* is required for long-range but not juxtacrine Hh signaling. *Curr. Biol.* 12: 1628-1632.

García-García, M. J. and Anderson, K. V. (2003) Essential role of glycosaminoglycans in Fgf signaling during mouse gastrulation. *Cell* 114: 727-737.

Huangfu, D., Liu, A., Rakeman, A. S., Murcia, N. S., Niswander, L. and Anderson, K. V. (2003) Hedgehog signalling in the mouse requires intraflagellar transport proteins. *Nature* 426: 83-87.

Merrill, B. J., Pasolli, H. A., Polak, L., Rendl, M., Garcia-Garcia, M. J., Anderson, K. V, and Fuchs, E. (2004) Tcf3: a transcriptional regulator of axis induction in the early embryo. *Development* 131: 263-274.

Bulgakov, O. V., Eggenschwiler, J. T., Hong, D.-H., Anderson, K. V. and Li, T. (2004) FKBP8 is a negative regulator of mouse sonic hedgehog signaling in neural tissues *Development* 131: 2149-2159.

Choe, K.-M., Lee, H. and Anderson, K. V. (2005) *Drosophila* peptidoglycan recognition protein LC (PGRP-LC) acts as a signal-transducing innate immune receptor. *Proc. Natl. Acad. Sci. U S A* 102: 1122-1126.

García-García, M. J., Eggenschwiler, J. T., Caspary, T., Alcorn, H. L., Wyler, M. R., Huangfu, D., Rakeman, A. S., Lee, J. D., Feinberg, E. H, Timmer, J. R. and Anderson, K. V. (2005) Analysis of Mouse Embryonic Patterning and Morphogenesis by Forward Genetics. *Proc. Natl. Acad. Sci. USA*. 102: 5913-5919.

Huangfu, D. and Anderson, K. V. (2005) Cilia and Hedgehog responsiveness in the mouse. *Proc. Natl. Acad. Sci. USA* 102: 11325-11330.

Eggenschwiler, J. T., Bulgakov, O. V., Qin, J., Li, T., Anderson, K. V. (2006) Mouse Rab23 regulates Hedgehog signaling from Smoothed to Gli proteins. *Dev. Biol.* 290: 1-12.

Shapiro, R. S. and Anderson, K. V. (2006) *Drosophila* Ik2, a member of the I $\kappa$ B kinase family, is required for mRNA localization during oogenesis. *Development* 133: 1467-1475.

Zohn, I. E., Li, Y., Skolnik, E. Y., Anderson, K. V., Han, J. and Niswander, L. (2006) p38 and a p38-interacting protein are critical for downregulation of E-cadherin during mouse gastrulation. *Cell* 125: 957-969.

Rakeman, A. S. and Anderson, K. V. (2006) Axis specification and morphogenesis in the mouse embryo require *Nap1*, a regulator of WAVE-mediated actin branching. *Development* 133: 3075-3083.