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## Judith Kimble, Ph.D.



Judith Kimble is the Vilas Professor in the Laboratory of Molecular Biology and Department of Biochemistry at the University of Wisconsin-Madison. She is also a Howard Hughes Medical Institute investigator. Her research focuses on the molecular regulation of germline development and organogenesis.

Dr. Kimble received an A.B. from the University of California, Berkeley and a Ph.D. from the University of Colorado, Boulder in 1978. For her doctoral thesis in the lab of David Hirsh, she determined the complete cell lineage of the gonad of *Caenorhabditis elegans*. As a postdoctoral fellow with John Sulston at the MRC in Cambridge, England, she showed that a single cell at the tip of the gonad is essential to maintain nearby germ cells in mitosis. This discovery marked the first direct identification of a stem cell "niche," the unique microenvironment that regulates stem cell behavior. In 1983, Dr. Kimble joined the faculty of the University of Wisconsin. There, she showed that Notch signaling and a complex network of RNA-binding proteins are essential to maintain germline stem cells. Surprisingly, she found that many of the same molecules also function in specifying whether germ cells differentiate into oocyte or sperm.

Dr. Kimble is a member of the National Academy of Sciences and of the American Academy of Arts and Sciences. In 1988 she received the Pound Award for Excellence in Research and in 2003 the Hilldale Award from the University of Wisconsin-Madison. She was President of the Genetics Society of America in 2000 and President of the Society for Developmental Biology in 2004. She is a member of several boards, including the Scientific Advisory Board for the Gurdon Institute, Cambridge, England, and the NIH Pioneer Award Advisory Committee to the Director. In 2008, she was elected to the Council of the National Academy of Sciences.

