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MARILYN D. RESH

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Susan Lindee

at

New York City, New York

on

20 June 1991

(With Subsequent Corrections and Additions)

ACKNOWLEDGMENT

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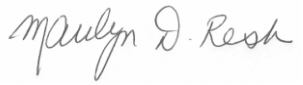

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MARILYN D. RESH

1955 Born in Brooklyn, New York, 15 August

Education

1977 AB, *magna cum laude*, Biochemistry Princeton University
1983 PhD, Biochemistry and Molecular Biology, Harvard University

Professional Experience

Harvard University, Cambridge, Massachusetts
1983-1986 Postdoctoral Fellow, Biochemistry
Princeton University, Princeton, New Jersey
1986-present Assistant Professor

Honors

1977 Associate member, Sigma Xi Scientific Research Society
1983-1986 NIH-NRSA Postdoctoral Fellowship
1987- 1991 Pew Scholar in the Biomedical Sciences

ABSTRACT

Marilyn Resh grew up in what she calls a typical Long Island town. When she was in high school she discovered science, particularly chemistry, but continued her extensive violin playing throughout college and graduate school. She entered Princeton University because it provided an outstanding education and was undergraduate-oriented. Under the aegis of Meredithe Applebury she did her senior thesis on the effects of light on rhodopsin. This thesis and an intensive lab course convinced her that biochemistry was the right career for her.

Resh earned her PhD at Harvard University, working on sodium-potassium ATPase in Guido Guidotti's lab. She had seven publications in graduate school. Resh stayed at Harvard for postdoctoral work. Because the insulin receptor was becoming understood as a tyrosine kinase and possibly an oncogene, Resh switched fields into cancer research under Raymond Erikson, who was the first to identify Src as an oncogene and a tyrosine kinase. Resh's project was studying membrane-binding properties. When she had finished her three-year grant and learned many new techniques from Erikson she took an assistant professorship at Princeton. She set up her lab with a technician and three students and stayed there for about four years. Resh is now at Memorial Sloan Kettering Cancer Center, which has a much larger biomedical research community compared to Princeton. It provides a new lab in a new building, extensive institutional support, and access to many more scientists in all fields. She and her new husband love the cultural life of New York City, and Resh's family lives nearby.

Resh considers herself one of the top researchers in Src oncogene. She says her niche is the membrane association of oncogenes; her specific problem is to find how Src gets to the membrane and why it is important for causing cancer. As technology has evolved, so has the subset of questions it is now possible to consider; she gives the example of her lab's discovery of how protein myristoylation regulates Src association with the membrane.

Resh finds science fulfilling, exciting, flexible, demanding; but she also acknowledges publication and grant pressure; the need for a tough ego; science's time-consuming nature. She likes the people and the cooperation in science. She is said to practice "clean" science. She talks about funding in general and her own in particular. She discusses women in science, but refuses to accept gender as an excuse for failure. She tries to lead her students by example, hoping to show them that it is possible to combine work and family. She hopes that twenty years from now she will still be in the lab; perhaps will be the editor of a top journal or will be a top speaker or possibly chairman of a department.

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