

CHEMICAL HERITAGE FOUNDATION

HELEN MURRAY FREE

Transcript of an Interview

Conducted by

James J. Bohning

at

Elkhart, Indiana

on

14 December, 1998

(With Subsequent Corrections and Additions)

Helen M. Free

CHEMICAL HERITAGE FOUNDATION
Oral History Program
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HELEN MURRAY FREE

1923 Born in Pittsburgh, Pennsylvania on 20 February

Education

1944 B.S., chemistry, The College of Wooster
1978 M.A., management, Central Michigan University

Professional Experience

Miles Laboratories, Inc.
1944-1946 Control Chemist
1946-1959 Research Chemist, Biochemistry Section,
Miles-Ames Research Laboratory
1959-1964 Associate Research Biochemistry and Group Leader,
Ames Research Laboratory
1964-1966 Ames Product Development Laboratory
1966-1969 Ames Technical Services
1969-1974 New Products Manager, Chemical, Medical or Clinical Test Systems,
Ames Growth and Development
1974-1976 Manager, Microbiological Test Systems
1976-1978 Director, Specialty Test Systems, Ames Company
1978-1979 Director Clinical Laboratory Reagents, Research Products Division
1979-1982 Director, Marketing Services

Miles, Inc./Bayer Diagnostics
1982-present Professional Relations Consultant

Indiana University at South Bend
1977-present Adjunct Faculty

Honors

1967 Honor Scroll Award, Chicago Chapter, American Institute of Chemists
1976 Professional Achievement Award, American Society for Medical
Technology
1977 Ames Company Honoree, YWCA Honors Luncheon #1
1978 Bellringer's Award, Elkhart United Fund
1978 Honorary Member, Iota Sigma Pi

- 1980 Distinguished Alumni Award, The College of Wooster
- 1980 Garvan Medal for Distinguished Service to Chemistry, American Chemical Society
- 1981 Silver Bowl Award, Elkhart YWCA Honors for Professions
- 1981 Service Award, St. Joseph Valley Section, American Chemical Society
- 1983 Mosher Award, Santa Clara Valley Section, American Chemical Society
- 1986 Al Dietz Service Award, Chicago Section, American Association for Clinical Chemistry, Inc.
- 1986 Medical Economics Forty-Year Award
- 1991 Diploma of Honor, Association of Clinical Scientists
- 1992 Woman of the Year, Business and Profession Division, St. Joseph County YWCA
- 1992 Sigma Delta Epsilon, Honorary Member
- 1992 Hall of Excellence Award, Ohio Foundation of Independent Colleges
- 1992 Honorary Doctorate of Science, The College of Wooster
- 1993 Honorary Doctorate of Science, Central Michigan University
- 1994 Laboratory Public Service National Leadership Award, Washington G-2 Reports
- 1995 Helen M. Free Award in Public Outreach, American Chemical Society
- 1995 Alumna of the Year Award, Poland, OH Schools
- 1996 Engineering and Science Hall of Fame Induction
- 1996 Kirby Foundation Award

ABSTRACT

Helen Free begins the interview with a discussion of her family and childhood years growing up in Ohio. Free attended Poland Seminary High School in Ohio. There, she was greatly influenced by her English teacher and intended to become an English and Latin teacher. In September 1941, Free entered the College of Wooster. After the attack on Pearl Harbor in December of the same year, many young men either joined or were drafted into the armed forces, leaving academics behind. As a result, Free's housemother encouraged female students to pursue careers in science. Without reservation, Free switched her major and received her B.S. in chemistry in 1944. After graduation, Free immediately began working as a control chemist with Miles Laboratories. In 1946, she moved into the new biochemistry department at Miles, where she worked for her future husband, Alfred Free. She first researched assays of antibiotics before moving to dry reagent test systems. Working with tablets, Free helped develop tests to detect abnormal levels of bilirubin, glucose, ketone, and protein in urine. Later, Free worked with her husband to move the tests from tablets to strips, introducing Clinistix[®] in 1956. Several other testing strips were developed and added to the market, including Uristix[®], Ketostix[®], Dextrostox[®], Labstix[®], and a still-current product, Multistix[®]. When Bayer Corporation acquired Miles Laboratories, Free stayed with the company, moving into the Growth and Development Department, then becoming Director of Specialty Test Systems. Free formally retired in 1982, but continues to work as a consultant for Bayer Corporation's Diagnostics Division. Free served as the president of the American Chemical Society in 1993 and continues to be involved with the organization. Free is also affiliated with the American Association for Clinical Chemistry, Inc. and remains personally involved in several chemistry awareness programs, including the International Chemistry Celebration, National Chemistry Week, National Science and Technology Week, the National Chemical Historical Landmark Program, and Medical Laboratory Week. Free concludes the interview with a discussion of her children and thoughts on the National Registry in Clinical Chemistry.

INTERVIEWER

James J. Bohning is currently Visiting Research Scientist at Lehigh University. He has served as Professor of Chemistry Emeritus at Wilkes University, where he was a faculty member from 1959 to 1990. He served there as chemistry department chair from 1970 to 1986 and environmental science department chair from 1987 to 1990. He was chair of the American Chemical Society's Division of the History of Chemistry in 1986, received the Division's outstanding paper award in 1989, and presented more than twenty-five papers before the Division at national meetings of the Society. He has written for the American Chemical Society News Service, and he has been on the advisory committee of the Society's National Historic Chemical Landmarks committee since its inception in 1992. He developed the oral history program of the Chemical Heritage Foundation beginning in 1985, and was the Foundation's Director of Oral History from 1990 to 1995.

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