CHEMICAL HERITAGE FOUNDATION

EMMA R. PARMEE

Transcript of an Interview
Conducted by

Hilary L. Domush

at

Merck and Co.
West Point, Pennsylvania

on

30 and 31 January 2012

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
Oral History Program
FINAL RELEASE FORM

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EMMA R. PARMEE

1965	Born in Keynsham, United Kingdom

Education

1983	The Maynard High School for Girls, Exeter, UK
1987	BA, Exeter College, Oxford University, Honors Chemistry
1990	DPhil, Linacre College, Oxford University, Organic chemistry

Professional Experience

Massachusetts Institute of Technology

1990-1992	NATO Postdoctoral Fellowship

Merck & Co.

1992-1995	Senior Research Chemist
1995-2000	Research Fellow
2000-2004	Senior Research Fellow
2004-2008	Director, Medicinal Chemistry
2008-2010	Senior Director, Medicinal Chemistry
2010-2013	Executive Director, Discovery Chemistry Site Head
2013-present	Associate Vice President, Head of Exploratory Chemistry

Honors

2007	Thomas Alva Edison Patent Award from the R&D Council of NJ
2007	Member of team awarded Prix Galien USA for JANUVIA™
2009	SCI Gordon E. Moore Medal for Innovation
2010	YWCA Central New Jersey, Tribute to Women and Industry Honoree

ABSTRACT

Emma Parmee grew up in Keynsham, England, the youngest of four children. Her father was a banker, her mother a housewife. She had always liked math and science, but she also liked languages. She attended all-girls schools, and, beginning to like chemistry in high school, she entered Exeter College at the University of Oxford. The system was rigorous and structured; Eric Thomas was her organic chemistry tutor and became her advisor for her PhD. Parmee's publication on milbemycin E was awarded the prize for best dissertation in that year.

From Oxford Parmee went to a postdoctoral position in Satoru Masamune's lab at Massachusetts Institute of Technology (MIT); there she grew more interested in synthesis than in process. After a year in that lab she began her job hunt. She was recruited by Merck & Co. to work in Rahway, New Jersey, on Ann Weber's medicinal chemistry team. Parmee worked on obesity projects, helping develop L507. She met her husband at Merck and made the decision to stay in the United States. She describes the process of discovery and development of a compound, and explains the evolution of the corresponding work teams. Moving more into team leadership and management, she ran a group of six while also working on smaller projects. She is credited with being instrumental in the discovery of sitagliptin, trademarked JANUVIA, which is used to treat diabetes.

Parmee was able to continue her regular work while helping oversee and organize the merger with Schering-Plough and was named Executive Director, Discovery Chemistry Site Head. This necessitated moving the whole family to West Point, Pennsylvania. She maintains that balancing family life with her extraordinary career has been possible only because her husband shares family duties and because Merck is so flexible. After the move to Pennsylvania Parmee switched fields from metabolic and cardiovascular disorders to neuroscience and infectious disease.

Parmee discusses globalization and Merck's various sites. She praises Merck's emphasis on teamwork and collaboration. She talks about her views of science education and the public's skewed perceptions of drug companies. She says women are still underrepresented in upper levels of management in drug companies but that things are improving. No longer at the bench, she takes her satisfaction in teaching and helping others. She is proud of her three compounds that went to proof of concept in man: β3-agonist, glucagon, DPP-4 (sitagliptin). Her advice to new researchers: do what you love.

INTERVIEWER

Hilary Domush was a Program Associate in the Center for Oral History at CHF from 2007-2015. Previously, she earned a BS in chemistry from Bates College in Lewiston, Maine in 2003. She then completed an MS in chemistry and an MA in history of science both from the University of Wisconsin-Madison. Her graduate work in the history of science focused on early nineteenth-century chemistry in the city of Edinburgh, while her work in the chemistry was in a total synthesis laboratory. At CHF, she worked on projects such as the Pew Biomedical Scholars, Women in Chemistry, Atmospheric Science, and Catalysis.

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