CHEMICAL HERITAGE FOUNDATION

CHAVELA M. CARR

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Hilary Domush and David Caruso

at

University of Medicine and Dentistry of New Jersey
Robert Wood Johnson Medical School
Piscataway, New Jersey

on

16 and 17 June 2008

(With Subsequent Corrections and Additions)

ACKNOWLEDGEMENT

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CHAVELA M. CARR

1965 Born in Indianapolis, Indiana on 20 November

Education

1988 B.A., Vanderbilt University, Nashville, Tennessee, Molecular Biology
1995 Ph.D., Massachusetts Institute of Technology, Biology

Professional Experience

Yale University
1995-2000 Postdoctorate, Cell Biology under Peter J. Novick

Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey, Piscataway, New Jersey
2000-present Associate Professor, Department of Pathology & Laboratory Medicine

Honors

1988 Phi Beta Kappa
1988 Magna cum Laude, with Honors, Vanderbilt University
1988 Genetics Society of America Undergraduate Research Award
1994 Sigma Xi
1995-1998 Damon Runyon/Walter Winchell Post-Doctoral Fellowship
2002-2006 Pew Scholar in the Biomedical Sciences

ABSTRACT

Chavela M. Carr grew up near Indianapolis, Indiana in a large family. From early childhood she was interested in school, finding the math-based sciences interesting. Due to a high school human genetics course, Carr decided to pursue molecular biology as an undergraduate. She attended Vanderbilt University, studying German, earning Phi Beta Kappa, and remaining involved in choir and musical theatre. More importantly for her future career, however, Carr also worked with Douglas R. Cavener on Drosophila genetics, a research laboratory experience that differed in distinct ways from her general science laboratory courses. After graduating from Vanderbilt University with honors and awards, Carr attended MIT for graduate work in biology. Soon she joined the laboratory of Peter S. Kim (Pew Scholar Class of 1990) and began researching protein-protein interactions and coiled coils. There she began a long-term collaboration and friendship with Frederick M. Hughson. In 1993 Carr published a *Cell* paper on the spring-loaded mechanism of conformational change in flu-virus—a paper which merited news releases in the *New York Times* and *Washington Post*. After completing her Ph.D., Carr moved to New Haven, Connecticut to join Peter J. Novick's laboratory at Yale University, where she wanted to begin working on a yeast model system; her work and publications on the Sec1 proteins binding to SNARES proved controversial and have only recently been resolved. While at Yale Carr met her husband Hays S. Rye, introducing the 'two-body' problem to both of their career tracks. Upon receiving a position at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, Carr began her research group and soon received the Pew Scholar in the Biomedical Science Award, which she recounted at length. Carr discussed her current research and the difficulties associated with publishing and funding during the oral history and she ended the interview talking about biomedical science more broadly, including the public perception of science and science education.

INTERVIEWERS

Hilary Domush earned a B.S. in chemistry from Bates College in Lewiston, Maine in 2003. Since then she has completed a M.S. in chemistry and a M.A. in history of science both from the University of Wisconsin. 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. Hilary is currently Program Associate for Oral History at CHF, where she combines these two divergent academic paths. Her current work focuses on the Pew Biomedical Scholars and Women in Chemistry oral history projects. She also contributes to the podcast *Distillations* and the magazine *Chemical Heritage*.

David J. Caruso earned a B.A. in the History of Science, Medicine, and Technology from the Johns Hopkins University in 2001 and a Ph.D. in Science and Technology Studies from Cornell University in 2008. His graduate work focused on the interaction of American military and medical personnel from the Spanish-American War through World War I and the institutional transformations that resulted in the development of American military medicine as a unique form of knowledge and practice. David is currently the Program Manager for Oral History at the CHF. His current research interest focuses on the discipline formation of

biomedical science in 20th-century America and the organizational structures that have contributed to such formation.

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