

CHEMICAL HERITAGE FOUNDATION

**DONNA J. NELSON**

Transcript of Interview  
Conducted by

Hilary Domush and Leah Webb-Halpern

at

University of Oklahoma  
Norman, Oklahoma

on

21 and 22 July 2008

(With Subsequent Corrections and Additions)



Donna J. Nelson

CHEMICAL HERITAGE FOUNDATION  
Oral History Program  
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## DONNA J. NELSON

### Education

1974 B.S., University of Oklahoma, Chemistry  
1980 Ph.D., University of Texas, Austin, Chemistry, with Michael J. S. Dewar

### Professional Experience

Purdue University  
1980-1983 Post-Doctorate, Chemistry, with Herbert C. Brown

University of Oklahoma  
1983-1990 Assistant Professor, Chemistry  
1989-1990 Provost's Faculty Administrative Fellow  
1990-present Associate Professor, Chemistry  
2005-2007 Assistant to ACS President Ann Nalley  
2008 Organic Division Chair, Chemistry  
2008 Development Officer, Chemistry

Massachusetts Institute of Technology  
2003-2004 Visiting Professor

### Honors

1977-1979 Robert A. Welch Predoctoral Fellow  
1980 Robert A. Welch Postdoctoral Fellow  
1984 University of Oklahoma Junior Faculty Research Fellow  
1985 ACS Petroleum Research Foundation Type G Award  
1985 Research Corporation Cottrell Scholar Award  
1985-1986 Oklahoma University Associates' Distinguished Lecturer  
1994 The Iotan Member Spotlight  
1995 Oklahoma University Sooners Football Team Honorary Faculty Coach  
1999 Alpha Phi Omega Leader of the 20<sup>th</sup> Century  
2001 Capitol Hill Briefing  
2003 Woman of Achievement, *US Black Engineer and Information Technology Magazine*

2003-2004 Ford Foundation Fellowship  
2003 Guggenheim Award  
2004 Capitol Hill Briefing  
2004 Capitol Hill Press Conference Speaker

2004 Woman of Courage Award, National Organization for Women  
2004 SACNAS National Conference Keynote Speaker  
2004-2005 Outstanding Professor, Oklahoma Educator's Leadership Academy  
2005 Minority Health Professions Foundation Hall of Fame Inductee  
2005 Twentieth Anniversary MIT Women's Studies Program Opening Speaker  
2005 Fellow, American Association for the Advancement of Sciences  
2004-2006 50 Making a Difference, Oklahoma City's *Journal Record*  
2006 21 Leaders for the 21<sup>st</sup> Century, Women's eNews  
2006 Research Featured on ACS Organic Division Calendar  
2006 SACNAS Distinguished Scientist of the Year  
2006-2009 NSF ADVANCE Leadership Award  
2007 Fulbright Scholar  
2008 Dow Chemical Company Advisory Board

## ABSTRACT

**Donna J. Nelson's** oral history begins with a discussion of her childhood in Eufaula, Oklahoma—a small town with Native American influences that grew into a much larger town throughout her youth. Heavily influenced by her parents, Nelson was a motivated student who wanted to work with and help people as her step-father, the town's only physician, had done. Nelson entered the University of Oklahoma with the intentions of pursuing medicine and possibly majoring in math. After joining the chemistry department, Nelson was immediately confronted with the contrasts between female and male students; she excelled in the coursework but needed to work harder in the laboratory to maintain parity with the male students (the male students, Nelson believed, were used to the manual dexterity of lab work from experience working on cars). After graduating, Nelson spent a brief time working on MINDO/3 calculations at Auburn University for Philip B. Shevlin and S. David Worley. There Nelson decided that, for graduate school, she only wanted to work with Michael J. S. Dewar at the University of Texas, Austin who developed the methodology. Near the end of her time in Austin, Dewar helped Nelson secure a post-doctoral position with Herbert C. Brown at Purdue University, where she became Brown's first female post-doctorate. Nelson described her work and other experiences under Brown, which included giving birth to her son Christopher and returning to lab the following week. After detailing her early experiences as the first tenure-track female faculty member of the University of Oklahoma chemistry department, Nelson moved on to explaining the importance of listening to women's experiences in order to help develop true parity in the scientific community. Throughout the interview Nelson referenced what she learned as a member of a Women in Science group at Purdue, and also what she learned by seeking advice from colleagues, that is, that "the best path to follow is a well-educated decision; no one can tell you what to do or what is best for you, but their experiences can help you to shape your own decisions." Nelson continued the interview by explaining how a 2000 *C&E News* article, prompted her to conduct a survey of women and minorities in the top chemistry departments. She described the initial survey work that led to further surveys of other disciplines whose departments were ranked by the National Science Foundation. Her survey work and research have been quoted in such varied places as *Ms. Magazine* and Harvard University's chemistry department website. Since the survey work, much of Nelson's time has been spent researching issues surrounding women and minorities in chemistry and the sciences and working with Marye Anne Fox at University of California, San Diego, as well as with SACNAS.

## 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*.

**Leah Webb-Halpern** graduated from Smith College with a major in history and a minor in Latin American studies. Prior to joining Chemical Heritage Foundation as the oral history program assistant, she was a research assistant at the McNeil Center for Early American Studies. Leah has moved on from the CHF and is currently a Ph.D. student in the Department of History at the University of Wisconsin, Madison.



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