

CHEMICAL HERITAGE FOUNDATION

AMY H. NEWMAN

Transcript of Interviews
Conducted by

Hilary Domush

at

National Institutes of Health
Baltimore, Maryland

on

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(With Subsequent Corrections and Additions)

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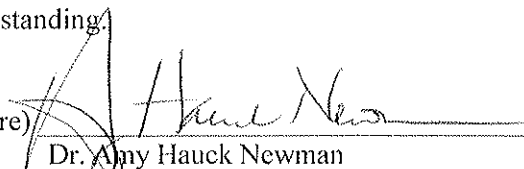
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AMY H. NEWMAN

1958 Born in Buffalo, New York on 22 August

Education

1980 B.S., Chemistry. Mary Washington College
1985 Ph.D., Medical Chemistry, Medical College of Virginia, Virginia
Commonwealth University

Professional Experience

National Institute of Diabetes and Digestive and Kidney Diseases,
National Institutes of Health
1985-1988 Postdoctorate, Medicinal/Organic Chemistry, under Kenner C.
Rice
1988-1990 Walter Reed Army Institute of Research
Research Chemist, Applied Biochemistry
National Institute on Drug Abuse Intramural Research Program, National
Institutes of Health
1990-1994 Senior Staff Fellow, Psychobiology Section
1994-1999 Investigator, tenure-track, Psychobiology Section
1999-present Senior Investigator and Chief, Medicinal Chemistry Section
2008-2009 Associate Director for Translational Research
2009-present Acting Deputy Scientific Director

Honors

1980-1981 A.D. Williams Teaching Fellowship, School of Pharmacy, Medical
College of Virginia, Virginia Commonwealth University
1982-1983 Rho Chi Pharmaceutical Sciences Honor Society Graduate Teaching
Assistant of the Year Award
1984 Rho Chi Pharmaceutical Sciences Honor Society
1984 Watts Day Research Original Proposal Award
1985-1987 National Research Service Award, National Institute on Drug Abuse
1986 Committee on Problems of Drug Dependence Travel Award Scholarship
1994 Division of Intramural Research Scientific Director's Award, National
Institute on Drug Abuse

- 1996 National Institutes of Health Director's Seminar Series Invited Lecturer
- 1998 Guest Editor of *Medicinal Chemistry Research*, Special Issue, v.8 (1 & 2)
- 1998 HHS Special Service Award
- 1998 Sato International Memorial Award, Pharmaceutical Society of Japan
- 2004 National Institute on Drug Abuse Director's Award of Merit
- 2006 National Institute on Drug Abuse Director's Award for EEO, Diversity and Quality of Worklife
- 2009 Featured in *National Institutes of Health: Women in Science* by the National Institutes of Health Office of Research on Women's Health
- 2009 First recipient of the National Institute on Drug Abuse/National Institutes of Health Women Scientists Advisory Achievement Award

ABSTRACT

Amy Hauck Newman was raised in Buffalo, New York, one of two sisters. Her mother was an elementary school teacher; her father, a mechanical engineer. She enjoyed school from a young age and was interested in literature, poetry, and the sciences. She wanted to become a pediatrician, although her high school discouraged her from pursuing science. As an undergraduate at Mary Washington College, she majored in chemistry and undertook pre-medical coursework. Most of her peers were women and she found the college to be a very supportive environment; she decided to go to graduate school for medicinal chemistry. Graduate school was challenging, but her program was fairly streamlined, and she finished her degree in four years.

Newman did her postdoctorate with Kenner C. Rice at NIH, where she focused on opiate synthesis and benzodiazepene receptors. Rice was an encouraging mentor, teaching her to write scientifically and to pursue collaborations. Since NIH had few opportunities for permanent positions, she then took a position at Walter Reed Army Institute of Research. At Rice's suggestion, she began researching sigma receptor ligands; she continued to seek collaborators, including Jeffrey M. Witkin at NIH, which eventually led to the opportunity to begin a medicinal chemistry program back at NIH. At NIH she found a work environment supportive of her growing family and she began conducting research on analogues of benzotropine—a dopamine transporter ligand like cocaine that does not have cocaine-like effects on the body.

Newman's role as an NIH scientist is to develop the basic science of compounds in the hopes that pharmaceutical companies will continue to develop them into medications. Her lab also conducts research synthesizing amide analogues with an affinity for glutamate receptors, which also play a role in drug abuse. She has intentionally kept her lab small, though has maintained a vigorous research program; she has also taken on additional administrative responsibilities like committees. At the end of the interview Newman discusses balancing her family and career; she comments on science education in the United States; and she shares her frustrations with how the communication of science to the public leads to unrealistic expectations for drug development and with the process of drug development itself. Newman notes how public perceptions of addiction have changed, and hopes that will translate into more attention from pharmaceutical companies. She concludes her interview by reflecting on the types of mentors she has had, and her efforts to be a strong mentor.

INTERVIEWER

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*.

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