CHEMICAL HERITAGE FOUNDATION

PAMELA B. MELUH

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

David Caruso

at

Johns Hopkins University
Baltimore, Maryland

on

26 and 28 November 2007
(With Subsequent Corrections and Additions)

ACKNOWLEDGMENT

This oral history is part of a series supported by a grant from the Pew Charitable Trusts based on the Pew Scholars Program in the Biomedical Sciences. This collection is an important resource for the history of biomedicine, recording the life and careers of young, distinguished biomedical scientists and of Pew Scholars Program in the Biomedical Sciences Advisory Committee members.

This oral history is made possible through the generosity of

CHEMICAL HERITAGE FOUNDATION
Center for Oral History
FINAL RELEASE FORM

This document governs access to the audio- and/or video-recorded interview conducted by David Caruso on 26 and 28 November 2007 with Pamela B. Meluh. The interviewee elected not to return the original transcript supplied by the Chemical Heritage Foundation within the agreed-upon timeframe for review.

1. The recordings, transcripts, photographs, research materials, and memorabilia (collectively called the "Work") will be maintained by the Chemical Heritage Foundation and made available in accordance with general policies for research and other scholarly purposes.

2. The Chemical Heritage Foundation maintains all right, title, and interest in the Work, including the literary rights and the copyright in perpetuity.

3. The manuscript may be read and the recording(s) heard/viewed by scholars approved by the Chemical Heritage Foundation.

(Signature) _____
David J. Caruso, Director, Center for Oral History

(Date) 25 January 2018

OPTIONAL: The following restrictions are in place on the use of this interview:

_____

_____

Regardless of any restrictions that may be placed on the transcript of the interview, the Chemical Heritage Foundation retains the rights to all materials generated about the oral history interview, including the title page, abstract, table of contents, chronology, index, et cetera (collectively called the "Front Matter and Index"), all of which will be made available on the Chemical Heritage Foundation's website. Should the Chemical Heritage Foundation wish to post to the Internet the content of the oral history interview, that is, direct quotations, audio clips, video clips, or other material from the oral history recordings or the transcription of the recordings, the Chemical Heritage Foundation will be bound by the restrictions for use placed on the Work as detailed above. Should the Chemical Heritage Foundation wish to post to the Internet the entire oral history interview during the interviewee's lifetime, he or she will have the opportunity to permit or deny this posting.

The Chemical Heritage Foundation will enforce the above restrictions for a period of five years, after which any restrictions will be removed.

This oral history is designated **Free Access**.

***Please note*:** Users citing this interview for purposes of publication are obliged under the terms of the Chemical Heritage Foundation (CHF) Center for Oral History to credit CHF using the format below:

> Pamela B. Meluh, interview by David Caruso at Johns Hopkins University, Baltimore, Maryland on 26 and 28 November 2007 (Philadelphia: Chemical Heritage Foundation, Oral History Transcript # 0387).

Chemical Heritage Foundation
Center for Oral History
315 Chestnut Street
Philadelphia, Pennsylvania 19106

The Chemical Heritage Foundation (CHF) serves the community of the chemical and molecular sciences, and the wider public, by treasuring the past, educating the present, and inspiring the future. CHF maintains a world-class collection of materials that document the history and heritage of the chemical and molecular sciences, technologies, and industries; encourages research in CHF collections; and carries out a program of outreach and interpretation in order to advance an understanding of the role of the chemical and molecular sciences, technologies, and industries in shaping society.

PAMELA B. MELUH

EDUCATION

1980-1984	B.S., biology, Loyola College in Maryland
1984-1986	M.S., applied molecular biology, University of Maryland, Baltimore County
1986-1992	Ph.D., molecular biology, Princeton University

PROFESSIONAL EXPERIENCE

	Carnegie Institution of Washington
1992-1997	Postdoctoral Research
	Memorial Sloan-Kettering Cancer Center
1998-2004	Assistant Member, Program in Molecular Biology
1998-2004	Assistant Professor, Molecular and Cell Biology, Weill Medical College of Cornell University
	Johns Hopkins University
2005-present	Research Associate, Molecular Biology and Genetics Program

HONORS

1990-1991	Porter Ogden Jacobus Honorific Fellowship, Princeton University
1993-1996	Helen Hay Whitney Foundation Postdoctoral Research Fellowship
1998-2003	Rosanne H. Silbermann Fellow
1998-2000	Society of Memorial Sloan-Kettering Grant
2000-2004	Pew Scholar in the Biomedical Sciences

ABSTRACT

Pamela Meluh grew up in suburban Baltimore, Maryland, one of two children. Her father was a diesel mechanic, her mother a housewife. Although they did not have advanced education her parents always encouraged Pamela to do her best in school, in whatever field she chose. Her father liked to take Meluh exploring or sometimes working with him. She attended public schools, which she says were very good. She knew at a young age that she wanted to go to college and to study science. She attended Loyola College in Baltimore, receiving a broad education and majoring in biology. Next, Meluh entered the new Applied Molecular Biology Program at University of Maryland, Baltimore County, for a master's degree in applied biology. She spent a summer at Merck & Co. and a summer at Woods Hole Marine Biological Laboratory; the latter remains a major influence in her career.

Accepted into Princeton University's PhD program, Meluh rotated into Mark Rose's lab to work with microtubules. Using the dideoxy method of sequencing, she cloned KAR3, the first microtubule-associated protein in yeast; it is also a kinesin. This work generated a "landmark" *Cell* paper and contributed to her winning the Jacobus Fellowship. Still excited by mitosis and cell segregation, Meluh chose Douglas Koshland's lab at Carnegie Institution of Washington for postdoctoral work. There she won a Helen Hay Whitney Fellowship. Despite sabotage of her buffers she published her work on MIF-2 and centromere's function in yeast and higher eukaryotes and the implications for microtubules. She invented the name "CHIP" for chromatin and histone immunoprecipitations and is sorry she did not copyright the name.

Meluh accepted an offer of Assistant Membership from Sloan Kettering Institute (SKI), with its accompanying assistant professorship at Weill Cornell Medicine, because their science was a good fit with hers. She was given a good startup package, but she would have preferred help with staffing her lab. Meluh won the Pew Scholars award, proposing to study how the SUMO (small ubiquitin-like modifier) pathway affects centromere function and chromatin structure. She learned the hard way about the low retention/promotion rate at SKI when she was denied promotion. Meluh next became Research Associate at Johns Hopkins University's High Throughput Center, which had been established by Jef Boeke. There she continues her work on the SUMO pathway and yeast. She says Boeke is always active and interactive, and she finds Hopkins open and friendly. She discusses her lab management style as "mother hen" and rigidly insistent on careful notes and accuracy. She talks more about the Pew award, praising its emphasis on risk and creativity, and saying she has enjoyed the meetings and made new friends and colleagues. Her Pew application noted that she thinks science is and should be fun. She talks about other funding types and bemoans the state of publication, both print and on-line. Meluh concludes by reiterating her satisfaction with working at Hopkins.

INTERVIEWER

David J. Caruso earned a BA in the history of science, medicine, and technology from Johns Hopkins University in 2001 and a PhD in science and technology studies from Cornell University in 2008. Caruso is the director of the Chemical Heritage Foundation's (CHF) Center for Oral History, president of Oral History in the Mid-Atlantic Region, and the book review editor for the *Oral History Review*. In addition to overseeing all oral history research at CHF, he also holds an annual training institute that focuses on conducting interviews with scientists and

engineers, he consults on various oral history projects, like at the San Diego Technology Archives, and is adjunct faculty at the University of Pennsylvania, teaching courses on the history of military medicine and technology and on oral history. His current research interests are the discipline formation of biomedical science in 20th-century America and the organizational structures that have contributed to such formation.

TABLE OF CONTENTS

INDEX