CHEMICAL HERITAGE FOUNDATION

MARK D. FLEMING

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview Conducted by

Karen A. Frenkel

at

Children's Hospital Boston, Massachusetts

on

1, 2, and 3 October 2007

(With Subsequent Corrections and Additions)



Mark D. Fleming

ACKNOWLEDGEMENT

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.

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MARK D. FLEMING

1965	Born in Poughkeepsie, New York on 4 November
	<u>Education</u>
1987	A.B., molecular biology, Princeton University
1990	D.Phil., organic chemistry, University of Oxford, Oxford, England
1993	M.D., Harvard Medical School
	Professional Experience
	Harvard University School of Public Health
1990-1992	Medical Student Research Assistant in Cancer Biology
	Brigham and Women's Hospital, Boston, Massachusetts
1990-1992	Resident in Anatomic Pathology
1995-1996	Fellow in Hematopathology
1996	Senior Resident in Surgical Pathology
1997- present	Associate Pathologist
	Children's Hospital, Boston, Massachusetts
1997-2000	Post-doctoral Fellow in Hematology/Oncology
1999-2005	Assistant in Pathology
2005- present	Pathologist
2007	Vice Chairman, Department of Pathology
2007- present	Interim Pathologist-in-Chief
	Harvard Medical School
1993-1998	Clinical Fellow in Pathology
1998-2000	Instructor in Pathology
2000-2005	Assistant Professor in Pathology
2006- present	Associate Professor in Pathology
	Dana-Farber Cancer Institute, Boston, Massachusetts
1998- present	Pathologist
-	-

Honors

1987	Marshall Scholarship, Oxford University, Oxford, E	ngland
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1987	Senior Prize for Academic Excellence, Department of Molecular Biology,
	Princeton University
1987	Phi Beta Kappa, Princeton University
1987	Summa Cum Laude, Princeton University
1993	Harold Lamport Biomedical Research Prize, Harvard Medical School
1993	Magna Cum Laude, Harvard Medical School
1997	American Society of Hematology Travel Award
1998	American Liver Foundation Research Fellowship
1998	American Society of hematology Fellow Scholar Award
1999	Pew Scholar in the Biomedical Sciences
2004	Ramzi Cotran Teaching Award, Children's Hospital

ABSTRACT

Mark D. Fleming begins the interview discussing his childhood, which was dominated by his father's job at IBM [International Business Machines]. Fleming moved to various communities in the Eastern United States, where the majority of his friends also had fathers working for IBM; a scientific and technological atmosphere pervaded his childhood. Fleming discussed his matriculation at Princeton University and the academic influence of organic chemistry professor Maitland Jones, Jr. Throughout his undergraduate career, Fleming conducted research during summers at the University of Vermont, where he met his future wife as well as where he developed an interest in blood research. Following graduation from Princeton, Fleming received a Marshall Scholarship, which allowed him to pursue D.Phil. work with Sir Jack E. Baldwin at the University of Oxford; Fleming described the differences between scientific research in Europe and the United States in some detail. Following his D.Phil. work, Fleming undertook medical training at the Harvard Medical School's Health, Sciences, and Technology Program, which was academically rigorous and stimulating. He developed into a clinically-oriented research pathologist, beginning with his work in Laurie Glimcher's laboratory at the Harvard University School of Public Health and continuing into his post-doctoral research with Nancy Andrews at Children's Hospital. Due to a unique job offer at Children's Hospital, Fleming smoothly transitioned from post-doctoral researcher to full-time principal investigator. Throughout the interview, Fleming discussed issues related to funding and laboratory management and the manner in which he encourages the academic growth of his own research students. The interview concludes with a discussion of broader issues in the biomedical sciences including increasing the racial diversity of students and of faculty in the sciences, scientific literacy, and collaborations.

INTERVIEWER

Karen A. Frenkel is a writer, documentary producer, and author specializing in science and technology and their impacts on society. She wrote *Robots: Machines in Man's Image* (Harmony 1985) with Isaac Asimov. Her articles have appeared in many magazines and newspapers including *The New York Times, CyberTimes, Business Week, Communications Magazine, Discover, Forbes, New Media, Personal Computing, Scientific American, Scientific American MIND, The Village Voice,* and *Technology Review*. Ms. Frenkel's award-winning documentary films, *Net Learning* and *Minerva's Machine: Women and Computing* aired on Public Television. She has been an interviewer for Columbia University's Oral History Research Center's 9/11 Narrative and Memory project, The National Press Foundation's Oral History of Women in Journalism, and the International Psychoanalytic Institute for Training and Research's Oral History. Professional memberships include: The Authors Guild, National Association of Science Writers, Writer's Guild of America East, and New York Women in Film and Television: Past Member of the Board and Director of Programming. Her website is www.Karenafrenkel.com

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Biomedical Sciences

Funding. Service to the community. Scientific literacy. Consulting. Immunohistochemistry and Pathology. Collaborations. Scientific Outreach.

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