CHEMICAL HERITAGE FOUNDATION

FRANCES M. BRODSKY

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Steven J. Novak

at

University of California, Berkeley
Berkeley, California

on

21-23 August 1995

ACKNOWLEDGEMENT

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Hilary Domush, Program Assistant, Biomedical Sciences and Technologies, Chemical Heritage Foundation. B.S. Chemistry, Bates College, M.S. Chemistry, University of Wisconsin, M.A. History of Science, University of Wisconsin.

David J. Caruso, Program Manager, Biomedical Sciences and Technologies, Chemical Heritage Foundation. B.A., History of Science, Medicine, and Technology, Johns Hopkins University; PhD., Science and Technology Studies, Cornell University.

UNIVERSITY OF CALIFORNIA, LOS ANGELES

Oral History Interview Agreement No. 970409

This Interview Agreement is made and entered into this 26th day of May, 1998 by and between THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a California corporation, on behalf of the Oral History Program at the UCLA campus, hereinafter called "University," and FRANCES M. BRODSKY having an address at Hooper Foundation, University of California, San Francisco, Box 0552, Third and Parnassus Avenues, San Francisco, California, 94143, hereinafter called "Interviewee."

Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about August 21, 1995, and tentatively entitled "Interview with Frances M. Brodsky". This Agreement relates to any and all materials originating from the interviews, namely the tape recordings of the interviews and a written manuscript prepared from the tapes, hereinafter collectively called "the Work."

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If to Interviewee:

Frances M. Brodsky
University of California, San Francisco
Hooper Foundation
Box 0552
Third and Parnassus Avenues
San Francisco, CA 94143

University and Interviewee have executed this Agreement on the date first written above.

INTERVIEWEE

X _____
(Signature)

Frances M. Brodsky
(Typed Name)

University of California, San Francisco
(Address)

Third and Parnassus Avenues

San Francisco, CA 94143

X Date 4/1/97

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

_____
(Signature)

for Carli V. Rogers
(Typed Name)

Copyright Officer
(Title)

Date 5/28/98

Pew Scholars in the Biomedical Sciences

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Date

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FRANCES M. BRODSKY

1955 Born in Worcester, Massachusetts on 3 March

Education

1976 B.A., Harvard University
1979 D.Phil., Oxford University

Professional Experience

Harvard Biological Laboratories
1979-1980 Postdoctoral Fellow

Stanford University School of Medicine
1980-1982 Postdoctoral Fellow

Becton Dickinson Immunocytometry Systems
1982-1986 Manager, Cell Biology Program

University of California, San Francisco
1987-1991 Assistant Professor
1991-1994 Associate Professor
1994-present Professor

Honors

1975 Phi Beta Kappa
1976-1979 Camille and Henry Dreyfus Fellowship for Summer Research, Marshall Scholarship for Graduate Study in the United Kingdom
1980-1982 Damon Runyon-Walter Winchell Fund Postdoctoral Fellowship
1987 Pharmaceutical Manufacturers Association Fund Research Starter Grant
1988-1992 Pew Scholar in the Biomedical Sciences

Selected Publications

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ABSTRACT

Frances M. Brodsky grew up in Princeton, New Jersey. Her father worked at ETS (Educational Testing Service), a job he began shortly after the company was founded. Her mother, an artist, was a professor at Rutgers and director of the Rutgers Center for Innovative Printmaking. Frances had a privileged and happy childhood and adolescence, complete with good friends, supportive parents, and an excellent education in Princeton, New Jersey, public schools. Brodsky's seventh-grade teacher got her interested in biology. Somehow, with primitive microscopes, the students did microscopy. Brodsky's parents encouraged her interest in science, hoping that she would become a medical doctor. She describes her most exciting high school teachers as those who taught biology, math, French, and Russian.

In 1972 Brodsky entered Radcliffe, her mother's alma mater, where she majored in biochemical sciences. Although she cultivated an interest in medicine in deference to her parents, she eventually faced the reality that "I fundamentally was interested in the principle, but not the practice of medicine." Through the biochemistry mentoring program of the Boston-based universities, Brodsky was able to work for three summers in Paul D. Gottlieb's laboratory at the Massachusetts Institute of Technology. Still planning on medical school, Brodsky applied to M.D./Ph.D. programs but instead earned a Marshall Fellowship to study at Oxford University. There she worked in Walter F. Bodmer's laboratory, where she began her research on monoclonal antibodies.

After earning her Ph.D., Brodsky attended Harvard Medical School for one semester, but the practice of medicine no longer interested her. Instead she undertook postdoctoral research on clathrin and HLA with Jack L. Strominger and later moved to Stanford University for further postdoctoral research with Peter Parham, her collaborator from her time in Oxford and her partner. Becton Dickinson Immunocytometry Systems then hired Brodsky as a program manager; there she ran her own lab, performing basic research in monoclonal antibodies and cell surface biology. She learned a great deal of cell biology by attending the ASCB Annual Meeting to meet others in the field, ("infiltrating" cell biology, as she thinks of it). After four years in industry, Brodsky made the then-uncommon decision to go back to the academic world, taking a position as assistant professor at University of California, San Francisco, where she is now a full professor.

Brodsky discusses the years she spent working at Becton-Dickinson as the ideal way by which to switch from immunology to cell biology while expanding the clathrin antibody research. Throughout the interview Brodsky discusses the changing issues surrounding funding and how that affects her laboratory management, the recent decision by the Board of Regents of the University of California to abolish the affirmative action policy, and the ways scientific collaboration and controversies have affected her. The end of the interview includes a note regarding Brodsky's pseudonymously authored first mystery novel.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Steven J. Novak, B.A., University of Colorado; Ph.D., American History, University of California, Berkeley; M.B.A., UCLA Graduate School of Management; senior editor, UCLA Oral History Program.

TIME AND SETTING OF INTERVIEW:

Place: Tapes I-II, part of III, and IV-V in Brodsky's office, Hooper Research Foundation, University of California, San Francisco; part of Tape III in Leon Levintow's office, University of California, San Francisco.

Dates, length of sessions: August 21, 1995 (74 minutes); August 22, 1995 (123); August 23, 1995 (95).

Total number of recorded hours: 4.9

Persons present during interview: Brodsky and Novak.

CONDUCT OF INTERVIEW:

This interview is one in a series with Pew scholars in the biomedical sciences conducted by the UCLA Oral History Program in conjunction with the Pew Charitable Trusts' Pew Scholars in the Biomedical Sciences Oral History and Archives Project. The Project has been designed to document the backgrounds, education, and research of biomedical scientists awarded four-year Pew scholarships since 1988.

To provide an overall framework for Project interviews, the director of the UCLA History Program and three UCLA faculty consultants developed a topic outline. In preparing for this interview, Novak held a telephone preinterview conversation with Brodsky to obtain written background information (curriculum vitae, copies of published articles, etc.) and to agree on an interviewing schedule. He also reviewed prior Pew scholars' interviews and the documentation in Brodsky's file at the Pew Scholars Program office in San Francisco, including her proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members. For technical background, Novak consulted J.D. Watson et al., *Molecular Biology of the Gene.* 4th ed. Menlo Park, CA: Benjamin/Cummings, 1987 and Bruce Alberts et al., *Molecular Biology of the Cell.* 3d ed. New York: Garland, 1994.

The interview is organized chronologically, beginning with Brodsky's childhood in Princeton, New Jersey, and continuing through her education at Radcliffe College and Oxford University, her postdocs at Harvard University and Stanford University, and the creation of her own laboratory at University of California, San Francisco. Major topics discussed include immunology, histocompatibility molecules, the clinical applications of basic science research, the biotechnology industry, laboratory management, science funding, ethics in science, and the status of women in science.

ORIGINAL EDITING:

Kristian London, editor, edited the interview. He checked the verbatim transcript of the interview against the original tape recordings, edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Brodsky reviewed the transcript. She verified proper names and made minor corrections.

The interviewer prepared the table of contents, interview history, and index. London assembled the biographical summary.

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