

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

From the Original Collection of the University of California, Los Angeles

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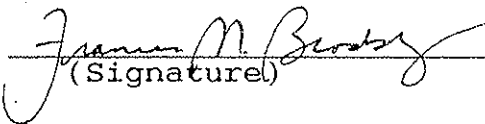
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## **FRANCES M. BRODSKY**

1955 Born in Worcester, Massachusetts on 3 March

### Education

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

### Professional Experience

1979-1980 Harvard Biological Laboratories  
Postdoctoral Fellow

1980-1982 Stanford University School of Medicine  
Postdoctoral Fellow

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

1987-1991 University of California, San Francisco  
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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