CHEMICAL HERITAGE FOUNDATION

ERIC G. PAMER

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Helene L. Cohen

at

Yale University
New Haven, Connecticut

on

24, 25 and 26 July 2000

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 Biomedical Scholar Advisory Committee members.

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REFORMATTING:

Kim Phan, Program Intern, Oral History, Chemical Heritage Foundation. B.A. expected 2011, Anthropology, Cornell University.

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UNIVERSITY OF CALIFORNIA, LOS ANGELES

Oral History Interview Agreement No. T0731004

This Interview Agreement is made and entered into this 1st day of August, 2000 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 ERIC G. PAMER having an address at Department of Internal Medicine, Section of Infectious Disease, Yale University, 333 Cedar Street, New Haven, CT 06520, hereinafter called "Interviewee."

Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about July 24, 2000, and tentatively entitled "Interview with Eric G. Pamer". 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."

In consideration of the mutual covenants, conditions, and terms set forth below, the parties hereto hereby agree as follows:

1. Interviewee irrevocably assigns to University all his copyright, title and interest in and to the Work. This assignment applies to University, its successors, and assigns, for and during the existence of the copyright and all renewals and extensions thereof.

2. By virtue of this assignment, University will have the right to use the Work for any research, educational, or other purpose, including electronic reproduction, that University may deem appropriate.

3. Interviewee acknowledges that he will receive no remuneration or compensation for his participation in the interviews or for the rights assigned hereunder.

4. Interviewee will receive from University, free of charge, one bound copy of the typewritten manuscript of the interviews.

5. To insure against substantive error or misquotation, Interviewee will have the right to review the manuscript before it is put into final form. University therefore will send Interviewee a copy of the edited transcript for review and comment. Interviewee will return transcript and comments to University within 30 days of receipt of the transcript. In the event that Interviewee does not respond within 30 days, University will assume that Interviewee has given full approval of the transcript.

6. All notices and other official correspondence concerning this Agreement will be sent to the following:

If to University: Oral History Program
University of California, Los Angeles
Box 951575
Los Angeles, California 90095-1575

Attention: Director

If to Interviewee: Eric G. Pamer
Department of Internal Medicine, Section of Infectious Disease
Yale University
333 Cedar Street
New Haven, CT 06520

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

INTERVIEWEE

Eric G. Pamer
(Signature)

Eric G. Pamer
(Typed Name)

Yale University
(Address)

333 Cedar Street

New Haven, CT 06520

Date July 24, 2000

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Dale E. Treleven
(Signature)

Dale E. Treleven
(Typed Name)

Director, Oral History Program
(Title)

Date August 1, 2000

Pew Scholars in the Biomedical Sciences

Chemical Heritage Foundation Internet Posting Release Form

I, Eric G. Pamer, M.D., hereby request that my wishes be followed as per the checked selection below with regards to posting portions of the digital copy of the audio-taped interview of me and the related written transcript on the internet for non-commercial, educational use only.

Please check one:

a. _____ **No restrictions for Internet Posting.**
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c. X **Restricted access.** (Do not post.)

This constitutes my entire and complete understanding.

Eric G. Pamer, M.D.

2/4/08

Date

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

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ERIC G. PAMER

1955	Born in Los Angeles, California, on 4 June

Education

1977	B.A., Case Western Reserve University
1982	M.D., Case Western Reserve Medical School

Professional Experience

	University of California, San Diego, California
1982-1983	Resident, Department of Surgery
1983-1985	Resident, Department of Internal Medicine
1985-1986	Chief Resident, Department of Internal Medicine
1986-1989	Fellow, Division of Infectious Diseases
	Scripps Clinic and Research Foundation
1989-1990	Research Fellow
1990-1992	University of Washington
	Acting Instructor, Department of Immunology and Department of Internal Medicine, Division of Infectious Diseases
1992-1996	Yale University, New Haven, Connecticut
	Assistant Professor, Infectious Diseases Section, Department of Medicine
1994-1996	Assistant Professor, Immunobiology Section
1996-1999	Associate Professor, Infectious Diseases Section, Department of Medicine
1996-1999	Associate Professor, Immunobiology Section
1999-present	Associate Professor, Infectious Diseases Section, Department of Medicine

Honors

1989	National Institutes of Health, Clinical Investigator Award
1993	Arthritis Investigator Award
1994	Smith-Kline Beecham Young Investigator Award
1994-1998	Pew Scholar Award in the Biomedical Sciences
1998	American Society for Clinical Investigation

Selected Publications

Busch, D.H. et al., 1998. Coordinate regulation of complex T cell populations responding to bacteria infection. *Immunity* 8:353-62.

Busch, D.H. and E.G. Pamer, 1999. T cell affinity maturation by selective expansion during infection. *The Journal of Experimental Medicine* 189:701-9.

Gulden, P.H. et al., 1996. A *Listeria monocytogenes* pentapeptide is presented to cytolytic T lymphocytes by the H2-M3 MHC class lb molecule. *Immunity* 5:7379.

Kerksiek, K.M. et al., 1999. H2-M3 restricted T cells in bacterial infection: Rapid primary but diminished memory responses. *The Journal of Experimental Medicine* 190:195-205.

Pamer, E.G. et al., 1989. Identification of a developmentally regulated cysteine protease of *Ttypanosoma brucei. Molecular and Biochemical Parasitology* 33:27-32.

Pamer, E.G. et al., 1991. Precise prediction of a dominant class I MHC restricted epitope of *Listeria monocytogenes. Nature* 353:852-55.

Pamer, E.G. et al., 1992. 2M3 presents a *Listeria monocytogenes* peptide to cytotoxic T lymphocytes. *Cell* 70:215-23.

Pamer, E.G., 1994. Direct sequence identification and kinetic analysis of an MHC class I restricted *Listeria monocytogenes* CTL epitope. *Journal of Immunology* 152:686-94.

Sijts, A.J.A.M. et al., 1996. CTL epitope generation is tightly linked to cellular proteolysis of a *Listeria monocytogenes* antigen. *Journal of Immunology* 156:1497-1503.

Vijh, S. and E.G. Pamer, 1997. Immunodominant and subdominant CTL responses to *Listeria monocytogenes* infection. *Journal of Immunology* 158:336671.

Villanueva, M.S. et al., 1994. Efficiency of MHC class I antigen processing: A quantitative analysis. *Immunity* 1:479-89.

Villanueva, M.S. et al., 1995. Listeriolysin is efficiently processed into an MHC class I associated epitope in *Listeria monocytogenes* infected cells. *Journal of Immunology* 155:5227-34.

ABSTRACT

Eric G. Pamer was born in Los Angeles, California, where he spent his first several years. His father, who came from Austria, was an engineer with Cleveland Crane; he was transferred to Luxembourg to open a company branch, and the family stayed there for five or six years. Then they returned to Cleveland, Ohio, where Pamer senior became president of Cleveland Crane. Eric's mother had come from Russia and ended up in Los Angeles, where she met and married Eric's father. Eric has a younger sister as well, who has ended up living in Hamburg, Germany.

Eric started first grade in Luxembourg in an international school; Eric's classes were in German, but he also studied French, and the family spoke English at home. Just before sixth grade the Pamers returned to Cleveland. Junior high school did not have good teachers or classes and was, in fact, dangerous. High school was better; there Eric had John Hurst as a biology teacher as well as cross-country and track coach. Eric had always liked nature and ecology, and he became very interested in biology. He loved collecting and cataloguing; eventually he studied daphnia as his senior project. He also loved to take long bike rides. Eric completed his BA in biology at Case Western Reserve University, initially studying hydra in Georgia Lesh's lab and working summers at the Cleveland Clinic. Deciding he wanted to go to medical school, he became a good student and finished in three years. He worked on hydra in Georgia Lesh's lab and worked summers at the Cleveland Clinic. He spent a month in Europe, liking it so much he worked as a technician for a year to earn money to travel around the world. He applied to Case Western Reserve University School of Medicine and, granted deferment, he spent a year traveling around the world.

When he entered medical school he began in Abdel Mahmoud's lab, working on immune defense against schistosomiasis. During his fourth year he spent three months working in a Kenyan hospital. His surgery internship was at University of California at San Diego; he switched to medicine, first as an intern, then as a resident, and finally as chief resident. During this time he met and married his wife, Wendy, and they began their family.

Next came three fellowship years in Charles Davis' lab at UCSD. During his first year Pamer worked on African sleeping sickness. He became interested in the study of infectious disease and immunology. He moved his cysteine protease research to Magdalene So's lab at Scripps Research Institute when Davis' lab became too small. From there he and his family moved to Seattle so that he could work on immunity in *Listeria* in Michael Bevan's lab. After two years and a strong paper, Pamer was offered an assistant professorship at Yale University; he has been there since. He is, however, about to move to Memorial Sloan Kettering Cancer Center, where he wants to build up the infectious disease service. His own work continues to be the study of the interface between the immune system and microbes. His lab has mice whose response to *Listeria* has been to build immunity rapidly and completely; Pamer wants to study how to use that response in humans to protect such diseases as malaria, tuberculosis, and HIV.

Pamer has had a number of grants and published many papers. He teaches; he has some administrative duties; he manages his medium-sized lab; he is attending physician at Yale-New Haven Hospital and the Veterans Administration Hospital two months each year; he continues to publish; he is preparing to move himself and his lab to New York City. Most important, he attempts to balance all this with his life with his wife and two children. If he could not be a scientist he would travel and write books about his experiences.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Helene L. Cohen, Interviewer, UCLA Oral History Program. B.S., Nursing, UCLA; P.N.P., University of California, San Diego/UCLA; MA., Theater, San Diego State University.

TIME AND SETTING OF INTERVIEW:

Place: Pamer's office, Department of Medicine, Yale University.

Dates, length of sessions: July 24, 2000 (127 minutes); July 25, 2000 (134); July 26, 2000 (137).

Total number of recorded hours: 6.6

Persons present during interview: Pamer and Cohen.

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's 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 Oral History Program and three UCLA faculty project consultants developed a topic outline. In preparing for this interview, Cohen held a telephone preinterview conversation with Pamer to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in Pamer's file at the Pew Scholars Program office in San Francisco, including his proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members. For technical background, Cohen consulted J.D. Watson et al., *Molecular Biology of the Gene.* 4th ed. Menlo Park, California: Benjamin/Cummings, 1987; Bruce Alberts et al., *Molecular Biology of the Cell.* 3rd ed. New York: Garland, 1994; Horace F. Judson, *The Eighth Dayof Creation.* New York: Simon and Schuster, 1979; and recent issues of *Science* and *Nature.*

The interview is organized chronologically, beginning with Pamer's childhood in Cleveland, Ohio, and continuing through his education at Case Western Reserve University and Case Western Reserve Medical School, his residency at University of California, San Diego, and the establishment of his own laboratory at Yale University. Major topics discussed include his research in the Charles E. Davis laboratory on ubiquitin in *Trypanosoma brucei,* his current research on the immune response to *Listeria,* and the issue of genetic profiling.

ORIGINAL EDITING:

Stephen Wilson, editorial assistant, 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.

Pamer did not review the transcript, and therefore some names have not been verified.

William Van Benschoten, editor, prepared the table of contents. Deborah Kolosova, editorial assistant, assembled the biographical summary, interview history, and index.

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