

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

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

## ACKNOWLEDGEMENT

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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."

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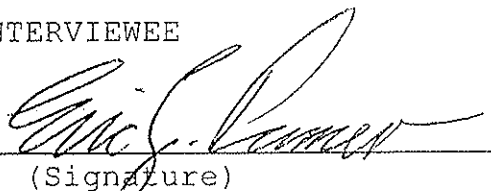
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Department of Internal Medicine, Section  
of Infectious Disease  
Yale University  
333 Cedar Street  
New Haven, CT 06520

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INTERVIEWEE

  
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(Typed Name)

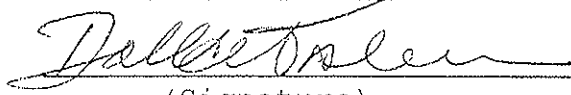
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Date August 1, 2000

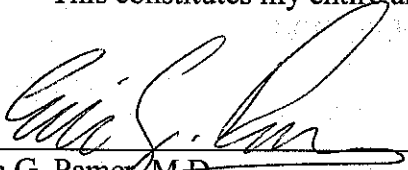
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## ERIC G. PAMER

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

1982-1983 University of California, San Diego, California  
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

1989-1990 Scripps Clinic and Research Foundation  
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 Ib 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 *Trypanosoma brucei*. *Molecular and Biochemical Parasitology* 33:27-32.
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- 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* 158:3366-71.
- 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 Day of 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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