

CHEMICAL HERITAGE FOUNDATION

EROL FIKRIG

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Helene L. Cohen

at

The Yale University School of Medicine
New Haven, Connecticut

on

17-19 July 2000

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



Erol Fikrig

ACKNOWLEDGEMENT

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about July 17, 2000, and tentatively entitled "Interview with Erol Fikrig". 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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Attention: Director

If to Interviewee: Erol Fikrig
Department of Internal Medicine
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New Haven, CT 06520-8031

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

INTERVIEWEE

Erol Fikrig
(Signature)

Erol Fikrig
(Typed Name)

Yale University
(Address)

333 Cedar Street

New Haven, CT 06520-8031

Date JUL 18, 2000

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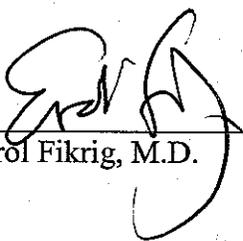
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Erol Fikrig, M.D.

Date

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EROL FIKRIG

1959 Born in Istanbul, Turkey on 15 December

Education

1977 B.A., Cornell University
1981 M.D., Cornell University

Professional Experience

Vanderbilt University School of Medicine
1985-1986 Intern, Internal Medicine
1986-1987 Resident, Internal Medicine

Yale University School of Medicine
1988-1989 Clinical Fellow, Infectious Diseases
1989-1992 Fellow, Infectious Diseases and Immunobiology
1992-1996 Assistant Professor of Medicine, Section of Rheumatology
1996-2000 Associate Professor of Medicine, Section of Rheumatology
2000-present Associate Professor of Medicine (without term), Epidemiology and Public Health

Honors

1991 National Foundation of Infectious Disease Young Investigator Award
1991-1992 Daland Fellow of the American Philosophical Society
1992 Dean's Young Faculty Award, Yale School of Medicine
1992-1994 Infectious Diseases Society of America Vaccine Development Award
1993-1995 American Heart Association Young Investigator Award
1993-1996 Arthritis Foundation Investigator Award
1993-1997 Pew Scholar in the Biomedical Sciences
1996-2001 American Heart Association Established Investigator Award
1998 Member, American Society for Clinical Investigation
1998 Fellow, Infectious Diseases Society of America
1998-2003 Burroughs Wellcome Clinical Scientist Award in Translational Research

Selected Publications

- Fikrig, E. et. al., 1990. Protection of mice against the Lyme disease agent by immunizing with recombinant OspA. *Science* 250:553-56.
- Fikrig, E. et. al., 1995. Vaccination against Lyme disease caused by diverse *Borrelia burgdorferi*. *Journal of Experimental Medicine* 181:215-21.
- Suk, K. et. al., 1995. *Borrelia burgdorferi* genes selectively induced in the infected host. *Proceedings of the National Academy of Science, USA* 92:4269-73.
- Anguita, J. et. al., 1996. Effect of anti-interleukin 12 treatment on murine Lyme borreliosis. *Journal of Clinical Investigation* 97:1028-34.
- De Silva, A. et. al., 1996. *Borrelia burgdorferi* OspA is an arthropod-specific Lyme disease vaccine. *Journal of Experimental Medicine* 183:271-75.
- Das, S. et. al., 1997. Temporal pattern of *B. burgdorferi* P21 expression in ticks and The mammalian host. *Journal of Clinical Investigation* 99:987-95.
- De Silva, A. et. al., 1997. Anthropod- and host-specific gene expression by *Borrelia burgdorferi*. *Journal of Clinical Investigation* 99:377-79.
- Fikrig, E. et. al., 1997. *Borrelia burgdorferi* P35 and P37 proteins, expressed in vivo, elicit protective immunity. *Immunity* 6:531-39.
- Sun, W. et. al., 1997. Immunization against the agent of human granulocytic ehrlichiosis in a murine model. *Journal of Clinical Investigation* 100:3014-18.
- Webster, P. et al., 1998. The agent of human granulocytic ehrlichiosis resides in an endosomal compartment. *Journal of Clinical Investigation* 101:1932-41.
- Banerjee, R. et. al., 2000. Infection by the agent of human granulocytic ehrlichiosis prevents the respiratory burst by down-regulating *gp91^{phox}*. *Journal of Immunology* 164:3946-49.
- Pal, U. et. al., 2000. Attachment of *Borrelia burgdorferi* within ticks mediated by OspA. *Journal of Clinical Investigation* 106:561-69.

ABSTRACT

Erol Fikrig was born in Istanbul, Turkey, to a Turkish physician father and Scots housewife mother. He has one younger brother. The family moved to Queens, New York, when Fikrig was a young child, so he grew up in the United States. He attended public schools until high school, when he was sent to United Nations International School. He liked and did well in school, and played a number of sports as well.

Fikrig was graduated from Cornell University in Ithaca, New York, where he very quickly eschewed anthropology and majored in chemistry. He decided early, influenced by both his father and his college roommate, to go to medical school. He attended Cornell's Weill School of Medicine in New York City. During his third and fourth years he studied in Brazil, where he became interested in vector-borne diseases. Interested in infectious disease and internal medicine, he did his residency at Vanderbilt University. From there he became a fellow at Yale, where he worked in Richard Flavell's laboratory. He was offered an assistant professorship in rheumatology at Yale, eventually becoming an associate professor and then full professor. He and his wife, a physician whom he met at Yale, have two children. Fikrig continues to study Lyme disease and other related diseases.

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; M.A., Theater, San Diego State University.

TIME AND SETTING OF INTERVIEW:

Place: Fikrig's office at Yale University School of Medicine.

Dates, length of sessions: July 17, 2000 (78 minutes); July 18, 2000 (65); July 19, 2000 (69).

Total number of recorded hours: 3.5

Persons present during interview: Fikrig 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 Fikrig 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 Fikrig'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 Fikrig's childhood in Queens, New York, his undergraduate work at Cornell University, his medical studies at Cornell University Medical College, his internship and residency at Vanderbilt University School of Medicine, and the establishment of his own laboratory at Yale University School of Medicine. Major topics discussed include his study of leishmaniasis in Brazil, his thesis on the use of bacteria to degrade oil, and his current research on Lyme disease and Ehrlichiosis.

ORIGINAL EDITING:

Gail Ostergren, editorial assistant, edited the interview. She 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.

Fikrig reviewed the transcript. He verified proper names and made minor corrections and additions.

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

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