CHEMICAL HERITAGE FOUNDATION

DOUGLAS YEE

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview Conducted by

Andrea R. Maestrejuan

at

University of Texas Health Science Center San Antonio, Texas

on

23, 24, and 25 August 1995

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

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 the Pew Scholars Program in the Biomedical Sciences Advisory Committee members.

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REFORMATTING:

Marnie Berkowitz, Consultant to the Chemical Heritage Foundation. B.A., Classical Languages and Literatures, University of Minnesota; Ford Foundation Fellowship, Classical Languages and Literatures, University of Chicago.

David J. Caruso, Program Manager, Oral History, 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

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about August 23, 1995, and tentatively entitled "Interview with Douglas Yee". 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:	Douglas Yee
	• -		University of Texas Health Science Center
			Department of Medicine/Oncology
			7703 Flovd Curl Drive
			San Antonio, Texas 78284-7884

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

INTERVIEWĘE ture)

Douglas Yee (Typed Name)

University of Texas Health Science Center

7703 Floyd Curl Drive (Address)

San Antonio, TX 78284-7884

9-22-95 Date

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (Signature)

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- 1 27,155-Date

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DOUGLAS YEE

1955	Born in Detroit, Michigan on 2 June
	Education
1977	B.S. University of Michigan
1981	M.D., University of Chicago
	Professional Experience
	North Carolina Memorial Hospital
1981-1982	Intern
1982-1984	Resident
1984-1985	Chief Medical Resident
	National Cancer Institute Medicine Branch
1985-1988	Medical Staff Fellow
	Georgetown University
1988-1989	Instructor
	University of Texas Health Science Center at San Antonio
1989-1993	Assistant Professor
1993-present	Associate Professor
I	

Honors

1977	Phi Beta Kappa
1981	Catherine Dobson Award, Pritzker School of Medicine
1987	Adviser, Michele Susan Kogod Memorial Foundation
1990-1994	Pew Scholar in the Biomedical Sciences

Selected Publications

- Yee, D. et al., 1988. Insulin-like growth factor II mRNA expression in human breast cancer. *Cancer Research*, 48:6691-96.
- Yee, D. et al., 1989. Analysis of IGF-I gene expression in malignancy, evidence for a paracrine role in human breast cancer. *Molecular Endocrinology*, 3:509-17.

- Yee, D. et al., 1989. The insulin-like growth factor binding protein BP-25 is expressed by human breast cancer cells. *Biochemical and Biophysical Research Communications*, 158:38-44.
- Yee, D. et al., 1989. Identification of an alternative type I IGF receptor beta chain mRNA transcript. *Journal of Biological Chemistry*, 264:21439-41.
- Lippman, M.E. and D. Yee, 1990. Introduction. *Journal of National Cancer Institute* Monograph 10:1.
- Yee, D. et al., 1990. IGF-I expression by tumors of neuroectodermal origin with the t(11;22) chromosomal translocation: A potential autocrine growth factor. *Journal of Clinical Investigation*, 86:1806-14.
- Yee, D. et al., 1991. Identification of insulin-like growth factor binding proteins in breast cancer cells. *Breast Cancer Research and Treatment*, 18:3-10.
- Yee, D. et al., 1991. Expression of IGF-I, its binding protein, and its receptor in ovarian cancer. *Cancer Research*, 51:5107-12.
- Yee, D. et al., 1994. Insulin-like growth factor binding protein-1 (IGFBP-1) expression inhibits IGF-1 action in MCF-7 breast cancer cells. *Cell Growth and Differentiation*, 5:73-77.
- Yee, D. et al., 1994. Use of insulin-like growth factor I expression to distinguish between breast and ovarian cancer: Report of a case. *American Journal of the Medical Sciences*, 307:108-11.

Yee, D. et al., 1994. Prognostic significance of insulin-like growth factor binding protein expression

in axillary lymph node-negative breast cancer. *Journal of National Cancer Institute*, 86:1785-88.

Yee, D. et al. Pharmacokinetic profile of recombinant human insulin-like growth factor binding protein-1 in athymic mice. *Biomedical Pharmaeotherapy*. In press.

ABSTRACT

Douglas Yee was born in Detroit, Michigan to parents who had fled China just before World War II. His father was an engineer and his mother a radiologist. His mother comes from a large family, all of whom left China and settled either in Hong Kong or in the United States; they remain close, getting together often for family events and holidays. Yee has one sibling, an older sister who took a PhD in social work at the University of Chicago.

Yee attended a boarding school for high school; he did not evince an early passion for science, but he did like the puzzle of chemistry, especially organic chemistry, when he was in college at the University of Michigan. He ended up majoring in zoology and anthropology. During the summers he worked in Joan Bull's lab at the National Institutes of Health, where he became interested in cancer and human genetics. He entered medical school at the University of Chicago; there he studied Epstein-Barr virus in Elliott Kieff's lab and realized that he wanted to concentrate on lab research rather than clinical practice. He married Janet Smith, with whom he now has two children. His internship and residency followed at North Carolina Memorial Hospital in Chapel Hill, North Carolina; his specialty was internal medicine, his subspecialty oncology. After his residency he accepted a staff fellow position at the National Cancer Institute. He began his research on the role of insulin-like growth factors (IGF) in Marc E. Lippman's lab. From there he went to an instructorship at Georgetown University Medical Center; then to an associate professor there; he continues his work on IGF, publishing many articles and winning a number of grants and awards.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Andrea R. Maestrejuan, Interviewer, UCLA Oral History Program; B.A., History, University of California, Irvine, 1988; B.S., Biological Sciences, University of California, Irvine, 1988; C. Phil., History, University of California, Riverside.

TIME AND SETTING OF INTERVIEW:

Place: Yee's office, University of Texas Health Science Center at San Antonio.

Dates, length of sessions: August 23, 1995 (171 minutes); August 24, 1995 (126); August 25, 1995 (78).

Total number of recorded hours: 6.25

Persons present during interview: Yee and Maestrejuan

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, from 1988 through 1992. In preparing for this interview, Maestrejuan, in consultation with the director of the UCLA Oral History Program and three UCLA faculty Project consultants, developed a topic outline to provide an overall interview framework. Maestrejuan then held a telephone pre interview conversation with Yee to obtain extensive written background information (curriculum vitae, copies of published articles, etc.) and agree on a research and interviewing timetable. Maestrejuan further reviewed the documentation in Yee'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 general background on the recent history of the biological sciences, Maestrejuan consulted such works as: J.D. Watson et al., The Molecular Biology of the Gene. 4th ed. 2 vols. Menlo Park, CA: Benjamin/Cummings, 1987; Lubert Stryer, Biochemistry. 3d ed. New York: W.H. Freeman, 1988; The Journal of the History of Biology; H.F. Judson, The Eighth Day of Creation: Makers of the Revolution in Biology. New York: Simon and Schuster, 1979; and recent issues of Science, Nature, and Cell. The interview is organized chronologically, beginning with Yee's childhood in Detroit and continuing through his education at University of Michigan and University of Chicago, his internship and residency at North Carolina Memorial Hospital, and the establishment of his laboratory at the University of Texas Health Science Center in San Antonio. Major topics discussed include the role of IGF-1 in Epstein-Barr virus, the potential for gene therapy, science funding, and the place of M.D.'s in

basic science research.

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.

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

Steven J. Novak, senior editor, prepared the table of contents and index. London compiled the biographical summary and interview history.

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Early Years Family emigrates from China to the United States. Childhood and education in Detroit, Michigan. Attends Cranbrook School, a private boys boarding school. The experience of living at Cranbrook. Yee's parents and sister. His children and their education. His high school years. **Undergraduate** Years Attends the University of Michigan, majoring in anthropology and zoology while fulfilling premedicine requirements. Studies cancer chemotherapy in the laboratory of Joan M. Bull. Decides to go into cancer research as a career. Yee's scholastic performance improves in college. Medical and Graduate School Years Enters the University of Chicago Pritzker School of Medicine. Preference for working at public hospitals where patients' ability to pay is not an issue. Decides to pursue a straight M.D. degree rather than a combined M.D./Ph.D. Conducts research on Epstein-Barr virus in the Elliott Kieff lab. Decides to concentrate on laboratory research rather than clinical practice. Selects internal medicine as a specialty. Living in Chicago. Marries Janet Smith; balancing family and work. Internship and

residency at North Carolina Memorial Hospital in Chapel Hill, with subspecialty of oncology. Translating basic research discoveries into improved treatment. Joan Bull as mentor and role model Living in Chapel Hill.

Postgraduate Years

Becomes a medical staff fellow at the National Cancer Institute. Relearning laboratory techniques. Conducts research on the role of insulin-like growth factors (IGF-1) in Marc E. Lippman's lab. Competition in the IGF field. Follows Lippman to the Lombardi Cancer Center at Georgetown University Medical Center, where Yee is given an instructorship. Balancing family responsibilities during his tenure in Lippman's lab.

Later Years

Accepts assistant professorship at University of Texas Health Science Center at San Antonio. Setting up a laboratory. The University of Texas Health Science Center's emphasis on research and teaching; Yee's teaching responsibilities and administrative duties. Recruiting and training graduate students and postdocs. Evolution of research toward gene therapy research. Conflict between intellectual property protection and free flow of scientific information. Conflict between need for funding and interests of funding providers. More on translating basic research discoveries into improved treatment. The effect of advocacy groups on science funding.

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