

CHEMICAL HERITAGE FOUNDATION

LILI YAMASAKI

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

Columbia University
New York City, New York

on

8 and 9 January 2004

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 Pew Biomedical Scholar Advisory Committee members.

This oral history was completed under the auspices of the Oral History Project, University of California, Los Angeles (Copyright © 2006, The Regents of the University of California) and is made possible through the generosity of



**From the original collection at the Center for
Oral History Research, UCLA Library, UCLA.**

The following oral history, originally processed at the UCLA Center for Oral History Research, has been reformatted by the Chemical Heritage Foundation. The process involved reformatting the front matter, adding a new abstract, replacing the table of contents, and replacing the index. The paragraph spacing and font of the body of the transcript were altered to conform to the standards of the Oral History Program at the Chemical Heritage Foundation. The text of the oral history remains unaltered; any inadvertent spelling or factual errors in the original manuscript have not been modified. The reformatted version and digital copies of the interview recordings are housed at the Othmer Library, Chemical Heritage Foundation. The original version and research materials remain at the Darling Library, University of California, Los Angeles and at the Bancroft Library, University of California, Berkeley.

REFORMATTING:

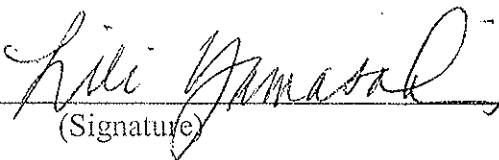
Kim Phan, Program Intern, Oral History, Chemical Heritage Foundation. B.A. expected 2011, Anthropology, Cornell University.

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.

I, Lili Yamasaki, do hereby give to the Regents of the University of California the series of interviews the UCLA Oral History Program recorded with me beginning on or about January 5, 2004, to be used for any research, educational, or other purpose that the University may deem appropriate. I give these as an unrestricted gift and I transfer to the Regents of the University of California all rights, including the copyright. I understand that I may still use the information in the recordings myself without seeking permission from the University.

I have read the UCLA Oral History Program Use Policy, which outlines the current and likely future uses of interviews donated to the Oral History Program's collection.

Unless otherwise specified below, I place no restrictions on access to and use of the interviews.

x 
(Signature)

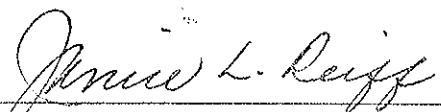
Lili Yamasaki
(Typed Name)

Department of Cellular Biological Sciences, Columbia University
1102 A Fairchild, Mail Code 2428, 1212 Amsterdam Avenue
New York, NY 10027
(Address)

212.854.4384 (Phone Number) ly63@columbia.edu (E-mail Address)

x 1-8-04
(Date)

The Regents of the University of California hereby acknowledge this deed of gift


(Director, UCLA Oral History Program)

1/26/04
(Date)

This interview has been designated as **Free Access**.

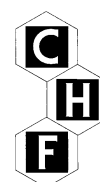
One may view, quote from, cite, or reproduce the oral history with the permission of CHF.

Please note: Users citing this interview for purposes of publication are obliged under the terms of the Chemical Heritage Foundation Oral History Program to credit CHF using the format below:

Lili Yamasaki, interview by William Van Benschoten at Columbia University, New York City, New York, 8-9 January 2004 (Philadelphia: Chemical Heritage Foundation, Oral History Transcript # 0606).



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



The Chemical Heritage Foundation (CHF) serves the community of the chemical and molecular sciences, and the wider public, by treasuring the past, educating the present, and inspiring the future. CHF maintains a world-class collection of materials that document the history and heritage of the chemical and molecular sciences, technologies, and industries; encourages research in CHF collections; and carries out a program of outreach and interpretation in order to advance an understanding of the role of the chemical and molecular sciences, technologies, and industries in shaping society.

LILI YAMASAKI

1960 Born in Royal Lake, Michigan

Education

1982 B.S., University of Michigan

1992 Ph.D., University of Texas Health Science Center

Professional Experience

1997 Massachusetts General Hospital
Postdoctorate

Columbia University

Selected Publications

M. Kohn, R. Bronson, E. Harlow, N. Dyson, and L. Yamasaki. "Dp1 is required for extra-embryonic development" *Development* 130(7): 1295-1305, 2003.

Yamasaki, L. (1999) Balancing proliferation and apoptosis in vivo: the Goldilocks theory of E2F/DP action. *Biochem. Biophys. Acta* 1423 :M9-M15.

McCaffrey, J., Yamasaki, L., Dyson, N.J., Harlow, E., and Griep, A.E. (1999) Disruption of retinoblastoma protein family function by human papillomavirus type 16 E7 oncoprotein inhibits lens development in part through *E2F-1*. *Mol. Cell. Biol.* 19:6458- 646 8.

Tsai KY, Y Hu, KF Macleod, D Crowley, L. Yamasaki and T. Jacks. *Molecular Cell* 2: 293-304, (1998) "Mutation of E2f-1 suppresses apoptosis and inappropriate S phase entry and extends survival of Rb-deficient mouse embryos."

Pan H, C Yin, NJ Dyson, E Harlow, L. Yamasaki and T Van Dyke. *Molecular Cell* 2: 283-232, (1998) "Key roles for E2F-1 in signaling p53-dependent apoptosis and in cell division within developing tumors."

Yamasaki, L., R. Bronson N.J. Dyson and E. Harlow, and T. Jacks. (1998) Loss of E2F1 reduces tumorigenesis and extends lifespan in Rb(+/-) mice. *Nature Genetics*, 18:360- 364.

Yamasaki, L., T. Jacks, R. Bronson, E. Goillot, E. Harlow and N.J. Dyson. (1996) Tumor induction and tissue atrophy in mice lacking E2F-1. *Cell* 85: 537-548, 1996.

Yamasaki, L. "Chapter: Growth Regulation by the E2F and DP transcription factor families" in *Cell Cycle Control*, Ed. M. Pagano, Springer-Verlag (1998), pp. 199-227.

ABSTRACT

Lili Yamasaki grew up outside of Detroit, Michigan, the second youngest of six siblings. Yamasaki's father was a physician and her mother a nurse, until she began raising her children. Yamasaki had an early interest in art and in writing, which she believes leads to creativity in science. She excelled in school, developing a proficiency in and curiosity about science, though she had a very well-rounded education and several influential teachers.

Like all of her siblings, Yamasaki entered the University of Michigan to pursue her undergraduate degree, committed to her early interest in chemistry but still diversifying her education with classes in the humanities. During summers she worked or interned in various labs focused on chemistry—at the Michael Reese Hospital and Medical Center in Chicago, with Donald Huppi at Michigan, and at Gelman Instrument Company. While working at the University of Michigan for a year after graduation, for personal and professional reasons Yamasaki decided to apply to positions on the west coast, ultimately doing enzymology research in the department of psychiatry at Stanford University with Donna L. Wong and Roland D. Ciaranello. Wanting to return school to obtain a doctoral degree, she applied to a number of graduate programs, ultimately accepting an offer from the University of Texas Health Science Center, where she worked in Robert E. Lanford's laboratory on receptor specificity in nuclear transport. From there she moved on to postdoctoral research on retinoblastoma tumor suppressor protein in mice at Massachusetts General Hospital, with Edward Harlow, Nicolas Dyson, and Tyler Jacks as her mentors. Yamasaki took a position at Columbia University at the end of her postdoctoral research looking at the regulation of growth and development by suppressors and activators.

Throughout the interview she comments upon her role in the laboratory over time, her and her mentors' process of writing journal articles as well as laboratory management styles; and her daughter and balancing family and career. The interview ends with a discussion of patents; the privatization of research; gender issues in science; and the Pew Scholars Program in the Biomedical Sciences grant.

UCLA INTERVIEW HISTORY

INTERVIEWER:

William Van Benschoten, Interviewer, UCLA Oral History Program; B.A., History, University of California, Riverside, 1990; M.A., History, University of California, Riverside, 1991; C.Phil., History, University of California, Los Angeles, 1995.

TIME AND SETTING OF INTERVIEW:

Place: Yamasaki's office at Columbia University.

Dates of sessions: January 8 and 9, 2004

Total number of recorded hours: 5

Persons present during interview: Yamasaki and Van Benschoten.

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, Van Benschoten held a telephone preinterview conversation with Yamasaki to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. He also reviewed documentation in Yamasaki's file at the Pew Scholars Program office in San Francisco, including Yamasaki's proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members.

ORIGINAL EDITING:

Carol Squires 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.

Yamasaki did not review the transcript, some names therefore remain unverified.

Carol Squires prepared the table of contents and TechniType Transcripts compiled the guide to proper names.

TABLE OF CONTENTS

Childhood and College Years	1
Family background. Growing up in Bloomfield Hills, Michigan. Parents. Siblings. Childhood interests and experiences. Interest in reading. Early schooling. Creativity in science. Reasons for pursuing biology rather than chemistry. Junior high and high school experiences. Influential teachers. Qualities of a good teacher. Enters the chemistry program at the University of Michigan. Reasons for studying chemistry. Parental expectations. Religion. College experiences.	
Post-undergraduate Research and Graduate School	37
More on college experiences. Works as a research assistant for Donna L. Wong at Stanford University. Attends graduate school at University of Texas Health Science Center. Works in Robert E. Lanford's laboratory. Lanford's laboratory management style. Research on receptor specificity in nuclear transport.	
Postdoctoral Work and Columbia University	54
Postdoctoral research on retinoblastoma tumor suppressor protein in mice at Massachusetts General Hospital. Edward Harlow, Nicolas Dyson, and Tyler Jacks. Accepts position at Columbia University. Meets and marries husband. Setting up laboratory. Current research on the regulation of growth and development by suppressors and activators. Practical applications of research. Teaching responsibilities. Travel commitments. Administrative duties. Funding history. Writing journal articles. Laboratory management style. Duties to professional community. Balancing family and career. A typical workday. Professional goals. Tenure at Columbia University. Patents. Privatization of research.	
Thoughts about Science and the Scientific Life	85
Source of ideas. Competition in science. Role of the scientist in educating the public about science. Collaboration in science. Gender. Improving diversity in science. Pew Scholars Program in the Biomedical Sciences. Reasons for becoming a principal investigator.	
Index	106

INDEX

A

acquired immunodeficiency syndrome, 50
African American, 5, 101
AIDS. *See* acquired immunodeficiency syndrome
Albert Einstein College of Medicine, 62, 63
American Society for Cell Biology, 55
Amgen, Inc., 84
Angel Island, California, 6
Angier, Natalie, 91
Ann Arbor, Michigan, 14, 40
apoptosis, 59
Armand J. Guarino Award for Academic Excellence, 52
Asia/Asian, 3, 5

B

Battle of Pearl Harbor, 2
Bloomfield Hills, Michigan, 5, 21
Boston, Massachusetts, 50, 54, 55, 56, 60, 83
Bronson, Rod, 60, 95
Bronx, New York, 62
Brown University, 30
Brown, Michael S., 47, 51
Bullwinkle and Rocky, 17

C

California, 5, 43, 46, 48
Chalfie, Martin, 72, 92
Chicago, Illinois, 40
China/Chinese, 5, 26, 101
Churchill, Sir Winston, 95
Ciaranello, Roland D., 43, 46
Cold Spring Harbor Laboratory, 68
collaboration, 79, 95, 96
Collins, Francis S., 90
Columbia University, 1, 4, 30, 36, 42, 62, 63, 71, 72, 78, 82, 83, 84, 91
competition, 26, 36, 50, 52, 58, 60, 84, 88,

89, 95

Criniti, Victoria, 64, 75
Cumberland Hospital, 6

D

Dallas, Texas, 47, 48, 51, 52
Dana-Farber Cancer Institute, 58
Detroit, Michigan, 1, 5, 10, 11
DNA, 50, 51, 54, 55, 64
DP-1, 57, 58, 64
Dylan, Bob, 28, 90, 91
Dyson, Nicholas, 55, 57, 60, 74, 75

E

E1A, 51, 54
E2F, 56, 57, 58, 59, 61, 63, 64
E2F-1, 58, 64
ethnicity, 38

F

Field, Seth J., 58
Filipino, 5
Flower Hospital, 4
Fractured Fairy Tales, 17, 18

G

Gelman Instrument Company, 40
gender, 97, 98
Genentech, Inc., 84
Goldberg, Jonathan, 72
Goldstein, Joseph L., 47, 48, 51
Gone with the Wind, 19
grants/funding, 69, 70, 71, 79
Great Books, 37
Greenberg, Michael, 58

H

Harlow, Edward, 55
Hawaii, 4
history of science, 86
Houston, Texas, 13, 48

HPV E7, 54
 Human Genome Project, 65, 66
 Huppi, Donald, 36, 40, 42

I

Indianapolis, Indiana, 13
 Institutional Animal Care and Use
 Committee, 69
 Italy/Italian, 35, 97

J

Jacks, Tyler, 57, 60
 Japan/Japanese, 2, 3, 5, 6, 15, 101

K

Kalderon, Daniel, 50
 Karolinska Institutet, 93
 Katy, Texas, 13
 Kohn, Matthew, 75
 Korean, 5
 Kubo, Kami (maternal grandfather), 6
 Kubo, Marie Atalovic (maternal
 grandmother), 6

L

Lanford, Robert E., 48, 49, 50, 51, 54, 74,
 75, 83
 Las Vegas, Nevada, 20
 Latinos, 101
 Lee, Wen-Hwa, 56
 Leung, Sandra, 63, 65, 75
 Long Island University, 76
 Long Island, New York, 10
 Los Angeles, California, 2
 Luzan, Monica, 64, 76

M

Maine, 13
 Manzanar (War Relocation Center
 internment camp), 4
 Massachusetts General Hospital, 54, 60
 Massachusetts Institute of Technology, 57,
 60, 61
 Merck, Inc., 40

Michael Reese Hospital, 40
 Michigan, 3, 9, 11, 34, 43
 minorities, 101, 102
 MIT. *See* Massachusetts Institute of
 Technology
 Mount Sinai Medical Center, 62
 Mouse Genome Project, 65, 66

N

National Center for Biotechnology
 Information, 86
 National Institutes of Health, 69, 75
 New Guinea, 44
 New Hampshire, 13
 New York City, New York, 1, 3, 4, 6, 10,
 11, 34, 38, 62
 New York Medical College, 4
New York Times, 83, 91
 New York University, 62
 NIH. *See* National Institutes of Health
 N-methyltransferase, 45
 Nobel Prize, 47, 92, 93
 North Dakota, 4
 nuclear transport, 48, 50

P

p53, 59, 64
 Pagano, Isabella Sofia (daughter), 10, 33, 68
 Pagano, Michele (husband), 35, 62, 79, 83,
 96
 Parke-Davis Laboratories, 14, 40
 patents, 83, 84, 85
 pathogenesis, 51, 52, 53, 54
 Peterson, Mr., 27
 Pew Charitable Trusts, 91, 92
 Pew Scholars Program in the Biomedical
 Sciences, 25, 43, 57, 69, 70, 85, 102
 Pfizer, 14
 publish/publication, 52, 73, 79, 80, 88, 93,
 101
 Puerto Rico, 76

R

religion

(Roman) Catholic, 11, 34, 35
retinoblastoma, 54, 56, 58, 59, 61, 63, 64,
65, 66
RNA, 88
Royal Lake, Michigan, 1

S

San Antonio, Texas, 47, 56
San Diego, California, 56
Schwartz, Jessica S., 44, 45, 46
Science Research Associates,
Inc./SRA/McGraw-Hill publishers, 19
Seattle, Washington, 2, 3
serendipity, 86
simian virus 40, 50
Slovakia, 6
Slovakian, 2
Smith, Alan E., 50
South Dakota, 4
Southwest Foundation for Biomedical
Research, 48
Spain, 97
Stanford Medical School, 46
Stanford University, 43, 44, 45, 46, 47
stinky dinkeys, 10
SV40. *See* simian virus 40
SV40 T antigen, 50, 51, 54

T

tenure, 71, 78, 82, 91, 96
Texas, 48, 55
Travis, Mr., 27

U

UCSF. *See* University of California, San
Francisco
United Kingdom, 50
United States of America, 2, 3, 9, 26, 51,
94, 99
University of California, Los Angeles, 87
University of California, San Francisco, 43,

47, 62
University of Michigan, 14, 30, 36, 39, 41,
43, 44, 46, 47, 62
University of Texas Health Science Center,
47, 52
University of Texas, San Antonio, 47, 48,
50, 54
University of Washington, 8

V

Venter, J. Craig, 90
virology, 49, 50, 51, 52, 54, 55

W

Warner Lambert, 14
Wloga, Elzbieta, 44, 76
Wong, Donna L., 43, 45
World Trade Center, 2
World War II, 2, 3, 5

X

Xenopus, 51

Y

Yale University, 30
Yamasaki, Amy (sister), 12, 14, 15, 34
Yamasaki, Hana (paternal grandmother), 2,
5, 33
Yamasaki, John Tsunejiro (paternal
grandfather), 2, 3
Yamasaki, Keiko (sister), 12, 13, 26, 30, 36,
48
Yamasaki, Ken (brother), 12
Yamasaki, Ken (father), 2, 13, 26, 30, 32,
51, 56
Yamasaki, Marie Josephine Kubo (mother),
2, 5, 6, 30, 51, 56
Yamasaki, Mariko (sister), 12, 13, 36
Yamasaki, Mimi (sister), 12, 14, 36
Yamasaki, Minoru (paternal uncle), 2