CHEMICAL HERITAGE FOUNDATION

SEUNG K. KIM

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by
Robin Mejia

at
Stanford University
Palo Alto, California

on
9, 16, and 17 March 2006

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[Signature]

Seung K. Kim M.D., Ph.D.
Typed Name

Beckman Center B300, 279 Campus Drive
Stanford University School of Medicine
Typed Address

650-723-6230
Typed Phone Number

seungkim@cmgm.stanford.edu
Typed E-mail Address

3/9/06
Typed Date

Signed on behalf of the Regents of the University of California:

Teresa Barnett
Head, UCLA Oral History Program

(Typed Name)

(310) 206-2454
Typed Phone Number

tharnett@library.ucla.edu
Typed E-mail Address

3/27/06
Typed Date
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SEUNG K. KIM

1963 Born in Seoul, Republic of Korea, on 5 September

Education
1985 A.B. magna cum laude, Biochemical Sciences, Harvard College
1992 M.D./Ph.D., Biochemistry, Stanford University

Professional Experience

Brigham and Women’s Hospital
1992-1994 Residency, Department of Medicine

Harvard Medical School and Dana-Farber Cancer Institute
1994-1998 Fellowship, Department of Medicine

Harvard University and Howard Hughes Medical Institute
1995-1998 Postdoctorate, with Dr. Douglas Melton

Stanford University
1998-present Assistant Professor, Departments of Developmental Biology and Medicine (Oncology Division)

StemCells, Inc., Palo Alto, California
2002-2005 Scientific Advisor and consultant

Honors
1981-1985 John Harvard Scholarship and Harvard College Scholarship
1984-1985 Josephine de Karman Fellowship in Humanities, Harvard College
1985 L.J. Henderson Prize for Honors Thesis in Biochemical Sciences, Harvard College
1985 Thomas T. Hoopes Prize for Honors Thesis in Biochemical Sciences, Harvard College
1987-1992 Medical Scientist Training Program, Stanford University
1999-2000 Citation of excellence from the Committee on Courses and Clerkships, Stanford University Medical School, for instruction in Surgery 21 9A
1999-2000 Howard Hughes Medical Institute, Stanford University School of Medicine Junior Faculty Award
1999-2001 Donald E. and Delia B. Baxter Foundation Award
1999-2001  SmithKline Beecham Junior Faculty Award
1999-2003  Pew Charitable Trusts Biomedical Research Scholar
1999-2003  American Diabetes Association Career Development Award
1999-2003  Richard Ellison Foundation Scholar in Aging Award (declined)
2000-2001  Citation of excellence from the Committee on Courses and Clerkships, Stanford University Medical School, for instruction in Developmental Biology 206
2001-2002  Citation of excellence from the Committee on Courses and Clerkships, Stanford University Medical School, for instruction in Developmental Biology 206
2002  A.L. Chapman Keynote Lecturer, University of Kansas School of Medicine, Student Research Forum
2002  The Henry J. Kaiser Family Foundation Award for Excellence in Preclinical Teaching Stanford University Medical School
2002  Guest Professor, University of Ulm School of Medicine, Ulm, Germany
2002-2003  Citation of excellence from the Committee on Courses and Clerkships, Stanford University Medical School, for instruction in Developmental Biology 206
2002-2004  Verto Institute Research Award
2002-2005  Juvenile Diabetes Research Foundation International Research Award
2002-2005  Stanford University School of Medicine Program in Molecular and Genetic Medicine Interdisciplinary Translational Research Award
2002-2006  Program Project Grant, Larry L. Hillblom Foundation Research Network
2003-2004  Stanford Cancer Council Award
2003-2006  Riva Foundation Research Award
2004  Living and Giving Award, Juvenile Diabetes Research Foundation, Northern California Chapter
2004  Randall-Dewey Family Endowment, Stanford University School of Medicine
2004-2007  Juvenile Diabetes Research Foundation, Program Project Grant
2004-2007  Giles W. and Elise G. Mead Foundation, Research Award
2005-2007  The Stephen and Caroline Kaufer Fund for Neuroendocrine Tumor Research
2005-2007  Stanford University Technology Incentive Research Award
2005-2008  Snyder Foundation Research Award

Selected Publications


ABSTRACT

Seung K. Kim was born in Seoul, South Korea, the oldest of three boys. His father had escaped North Korea at the beginning of the Korean Conflict, and he eventually became a doctor. His mother was from a large family in Seoul; she was a pharmacist, owning her own pharmacy. When Kim was about two his father took a job in a hospital in Johnson City, New York; he then accepted a position at the University of Pennsylvania. The family arrived when Kim was about three. They were intending to return to South Korea when Kim’s father finished his radiology training, but visa uncertainty due to the Vietnam War caused them to decide to stay here. Kim began school in a Roman Catholic school in Philadelphia, but the family moved back to Johnson City when Kim was in second grade. They spent two years there before moving to Vestal, a suburb of Binghamton. Kim was, he says, obsessed with baseball, playing and reading about it. He also began to go fishing with his father, who had liked to fish in Korea. Fishing also provided Kim with an experiment for his seventh-grade science class. His teacher for that class was influential, by taking Kim seriously and by encouraging him. Mr. Jason, the science teacher, even told Kim’s father that he thought Kim could go to Harvard, which was, as Kim says, “the Everest” of colleges in his father’s mind.

A friend who went to Phillips Exeter Academy told Kim about the school at Thanksgiving, and Kim spent the rest of the school year persuading his parents to send him there and then having to go through the application process. He was accepted and began three of his happiest years when he was a sophomore. He had finally found an academic atmosphere that suited and challenged him, and he loved it. He especially loved math and his math teachers, but he also began to discover experimentation, one summer designing for himself a chemistry experiment to work on when he began school in the fall. He talks here about a number of his teachers who were excellent and whom he still remembers by name.

He entered Harvard University, which he found large, anonymous, and somewhat disappointing after Exeter, until he had a biochemistry class taught by Mark Ptashne, Tom Maniatis, and Douglas Melton. Here Kim talks about his college laboratory experience with Richard Goldstein; the process of writing; and his summer tour-guide job in Paris, a job that showed him how much he liked to lecture. He describes his tutelage under James Rheinwald at the Dana-Farber Cancer Institute; his exposure to the literature and history of his field of research; and his decision to pursue a career in medicine.

Kim applied to medical school and became discouraged by the interview process. Urged by Goldstein, he accepted a late interview invitation from Stanford University, where he met Stanley Cohen. He found California beautiful and decided to attend Stanford. There he entered the M.D./Ph.D. program and worked in Dale Kaiser’s biochemistry laboratory studying cell signaling during development. He discusses his experiences in the M.D./Ph.D. program at Stanford; his interest in oncology; and his residency at Brigham and Women’s Hospital. On his first day as an intern he met the woman who became his wife. He accepted a fellowship at the Dana-Farber Cancer Institute; and then he did a postdoc on pancreas development in Douglas Melton’s lab. He goes into great detail about his wife’s career, also in medicine. Next he talks about his collaboration with Matthias Hebrok and his research on pancreas development.

He accepted a position at Stanford University in developmental biology and set up his lab. He explains his laboratory management style and his role in the laboratory and goes on to talk about his administrative duties; the personnel make-up of his lab; and how he sets the
research agenda of his laboratory. He continues with a discussion of his current research using three model systems to study pancreas development and function and insulin production; the practical applications of his research; the issue of patents; balancing family and career; the percentage of women and minorities as graduate students and principal investigators; and the process of writing journal articles. Kim concludes his interview with lessons he has learned; his reasons for becoming a principal investigator; and the qualities of a good scientist.
INTERVIEWER:

Robin Mejia, Interviewer, UCLA Oral History Program; B.A., Biology, University of California, Santa Cruz, 1997.

TIME AND SETTING OF INTERVIEW:

Place: Seung Kim’s office at Stanford University.

Date: March 9, 16, 17, 2006.

Total number of recorded hours: 6.

Persons present during interview: Mejia and Kim.

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’ 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, Mejia corresponded with Kim by email and talked by phone to obtain background material, including Kim’s CV, and to schedule the interview. Mejia also obtained and read copies of Kim’s published articles, reviewed his descriptions of his work on website, and reviewed background information on the institutions at which he has worked and the countries in which he has lived.

ORIGINAL EDITING

Carol Squires edited the interview. She edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Kim reviewed the transcript. He verified proper names and made a number of corrections and additions.
# TABLE OF CONTENTS

Childhood, High School, and College  
1  
- Family background.  
- Parents.  
- Move from Korea to the United States.  
- Childhood interests and experiences.  
- Early schooling.  
- Baseball.  
- Influential junior high school teacher.  
- Attends high school at Phillips Exeter Academy.  
- High school experiences.  
- Attends Harvard University.  
- Defining moment in a course taught by Mark Ptashne, Tom Maniatis, and Douglas A. Melton.  
- College laboratory experience with Richard Goldstein.  
- Process of writing.  
- Summer job in Paris.  
- Tutelage under James Rheinwald at the Dana-Farber Cancer Institute.  
- Exposure to the literature and history of his field of research.  
- Decision to pursue a career in medicine.

Medical and Graduate School, Residency, and Postdoctoral Work  
30  
- Applies to medical school.  
- Meets Stanley N. Cohen.  
- First impressions of California.  
- Decision to attend Stanford University.  
- Impact of attending Harvard University on professional life.  
- Enters the M.D./Ph.D. program.  
- Works in Dale Kaiser’s biochemistry laboratory studying cell signaling during development.  
- Experiences in the M.D./Ph.D. program.  
- Interest in oncology.  
- Residency at Brigham and Women’s Hospital.  
- Meets wife.  
- Fellowship at the Dana-Farber Cancer Institute.  
- Wife’s career.  
- Postdoctoral fellowship on pancreas development in Douglas Melton’s laboratory.

Finishing Postdoctoral Research and Starting a Laboratory  
47  
- Collaboration with Matthias Hebrok.  
- More on research on pancreas development.  
- Accepts a position at Stanford University in developmental biology.  
- More on wife’s career.  
- Setting up lab.  
- Laboratory management style.  
- Role in the laboratory.

The Life of a Scientist  
68  
- Administrative duties.  
- The personnel make-up of lab.  
- Setting the research agenda of his laboratory.  
- Current research using three model systems to study pancreas development and function and insulin production.  
- Practical applications of research.  
- Patents.  
- Balancing family and career.  
- Percentage of women and minorities as graduate students and principal investigators.  
- Writing journal articles.  
- Lessons learned.  
- Reasons for becoming a principal investigator.  
- Qualities of a good scientist.

Index  
79
INDEX

A

Albany Medical College, 34
Albany, New York, 34
Armed Forces Radio, 3
Arnold, Benedict, 10
Arrowsmith, 26
Atlanta, Georgia, 49, 56

B

bacteriophage, 26, 27, 28, 31, 38, 52
Baldwin, Robert L., 38
Barsh, Greg, 39, 72
baseball, 12, 13, 20
Little League, 12, 13
Bauer, Douglas, 34, 37, 52
Binghamton, New York, 12
Boston City Hospital, 32
Boston University Medical Center, 32
Boston, Massachusetts, 17, 32, 35, 36, 45, 47, 51, 52, 55, 56, 68
Boy Scouts of America, 16
Boyer, Herbert, 35
Brigham and Women's Hospital, 44, 45, 46, 48, 49
Brookline, Massachusetts, 26, 32
Busch-Reisinger Museum, 54

C

Calendar, Richard, 23, 26, 29, 30, 31, 39
California, 55
California Institute of Regenerative Medicine, 66
Cambridge, Massachusetts, 26, 51, 55
Canada, 72
Cathedral of Our Lady of Chartres, 25
CERM. See California Institute of Regenerative Medicine (CIRM)
Chamberlain, Richard H., 5
Chang, Annie C., 35
Charles Wilson Memorial Hospital, 5, 8, 12,

33
Children's Hospital of Philadelphia, 8
Chile, 27
China Sea, 2
Clayton, David, 39
Cohen, Stanley N., 35, 38
Cold Spring Harbor Laboratory, 31, 37
collaboration, 53, 68
Columbia University, 74
Cooperstown, New York, 19
Cornell University, 14, 57
Corning Glass, 33
Corning Hospital, 33
Corning, New York, 33
Crabtree, Gerald R., 68

D

Dana-Farber Cancer Institute, 29, 46, 47, 48, 51, 53, 68, 69
Delbrück, Max, 26, 31
diabetes, 20, 21, 29, 33, 44, 51, 54, 58, 68, 69
DNA, 22, 26, 27, 30, 37, 59
Drosophila, 58, 59, 62, 65, 66

E

Emory Eggleston Children's Hospital, 49
Endicott-Johnson Corporation, 5
ethnicity
Asian, 8, 11, 12
Europe, 4

F

Farmer, Paul, 46
Fields, Bernard N., 26
Frommer, Judy, 25
Fuller, Minx, 59

G

Gamelan, Michael, 44
gender, 73
Germany, 52
Glader, Bertil, 44
Glick, Benjamin, 41
Goldstein, Richard, 23, 24, 26, 27, 28, 30, 31, 32, 33, 35, 37, 38, 41, 62
Grady Clinic, 49
grants/funding, 37, 39, 45, 54, 59, 60, 66, 67, 76
Green, Barbara (mother-in-law), 7, 49
H
Haeju, North Korea, 1
Hales, Jill, 15
Harvard Medical School, 23, 26, 49
Harvard University, 14, 16, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 36, 37, 41, 45, 47, 48, 49, 51, 52, 54, 56, 57, 58, 74
Hebrok, Matthias, 52, 54
Hershey, Alfred D., 26, 31
Hook, Ken, 15, 16, 42
Hook, Richard, 15, 16
Howard Hughes Medical Institute, 55
Hwang, Kyung-sa (maternal aunt), 2, 3, 24, 52
I
Île de la Cité, 25
Iowa, 20
Irvine, Kenneth D., 59, 66
Irving, John, 18, 20, 24
Ithaca, New York, 14
J
Jason, Ernst, 13, 14, 15, 17, 19, 34
Jessell, Thomas M., 74
Johnson City, New York, 5, 8, 10, 11, 12, 33
Joslin Diabetes Center, 68
K
Kaiser, Dale, 30, 38, 39, 40, 42, 43, 53, 58, 62, 70
Kennedy, Donald, 14
Kim, Bong Moon (maternal grandfather), 1
Kim, Byung Duk (paternal grandfather), 1
Kim, Cheng (brother), 12
Kim, Cheung (brother), 5
Kim, Chung (mother), 1, 9, 21, 24, 33, 44, 76
Kim, Ella Soohee (daughter), 2, 23, 70, 76
Kim, Grace Elena Suseung (daughter), 2, 10, 23, 45, 55, 57, 70, 71, 76
Kim, In Kook (brother), 7, 12
Kim, Jim, 46
Kim, Nancy Plauth (wife), 8, 45, 46, 49, 53, 54, 56, 57, 70, 71, 76
Kim, Samuel Suseung (son), 2, 23
Kim, San (father), 1, 9, 21, 29, 33, 42, 44, 76
Kim, Stuart, 55
Kleckner, Nancy, 30, 31, 38
Kolter, Roberto, 26
Korea, 1, 2, 3, 4, 5, 34, 71, 77
North Korea, 1, 78
South Korea, 1
Korean War, 1
Kornberg, Arthur, 38, 59, 66
Kornberg, Tom, 59
Krasnow, Mark A., 59
L
Lagos, Rosalba, 27, 28, 52
Lamarckism, 4
Leung, Lawrence L.K., 44
Lim, Sang Oon (paternal grandmother), 1
Lincoln Elementary School, 10, 13
Link, Michael, 44
Long Island, New York, 31
Luria, Salvador E., 26, 31
M
Malhotra, Vivek, 41
Maniatis, Tom, 22, 41
Massachusetts General Hospital, 45
Maxwell Finland Laboratories, 32
Mayer, Robert, 47, 48
McClintock, Barbara, 30
Medical Scientist Training Program, 38, 39, 63, 64, 72, 77
Mekalanos, John, 26
Melton, Douglas A., 22, 41, 48, 49, 51, 53, 54, 55, 57, 62, 74
Menlo Park, California, 56, 57
Meselson, Matthew, 30, 31
Meyerson, Matthew, 68
Miller, Chris, 35
Miller, Sue, 34
Mississippi River, 34
Myxobacteria, 38

National Institutes of Health, 38, 60, 66, 67
Netherlands, 25
New Hampshire, 15, 16
New York, 8, 10, 35
New York Yankees, 12
New Yorker, The, 18
NIH. See National Institutes of Health
Nixon, President Richard M., 7
Notre Dame Cathedral, 25
Nusse, Roel, 59, 66, 67, 73

Pak, Chung Sook (maternal grandmother), 2
Palo Alto Veterans Administration Hospital, 49, 56
Palo Alto, California, 8, 24, 43
pancreas, 48, 50, 51, 53, 58, 60, 65, 68, 69
Paris, France, 24, 25, 29
Parris, Richard L., 20, 21, 22
Pasadena, California, 35
patent, 69
Pew Scholars Program in the Biomedical Sciences, 1, 24, 42, 51, 57, 60, 63, 66, 68, 72, 78
Philadelphia, Pennsylvania, 5, 8, 10, 14, 34
Phillips Exeter Academy, 15, 16, 17, 18, 20, 21, 22, 24, 31, 40, 42, 72, 73
plasmid pACYC184, 35
PNAS, 37
Princeton University, 20, 21
Ptashne, Mark, 22, 41
Puerto Vallarta, Mexico, 72

R
religion, 8, 9, 10
(Roman) Catholic, 8, 10, 22
Revolutionary War, 10
Rheinwald, James, 29, 31, 37, 45, 74
Rocky and Bullwinkle Show, 6
Rulifson, Eric, 66

S
San Diego, California, 72
Schrier, Stanley, 44
Scott, Matthew, 55, 57, 59
Seabrooke, Ted, 20, 42
Second Vatican Council, 10
Segraves, William, 59
Seoul National University, 4
Seoul, South Korea, 1, 5
Shapiro, Rob, 24
Sister Mary Ellen, 8, 12
South Korea, 2, 3
St. Francis de Sales School, 8, 10
Stahl, Franklin, 31
Stamford, Connecticut, 37
Stanford University, 1, 14, 19, 23, 24, 27, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 51, 52, 55, 56, 57, 58, 59, 60, 61, 63, 64, 66, 67, 68, 69, 71, 72, 76
stem cells, 65, 66, 67, 77
Stent, Gunther S., 23, 29, 30, 31, 39
Syracuse, New York, 17

tenure, 32, 41, 72, 73

U
U.S. Congress, 48
UCSF. See University of California, San Francisco
Uganda, 22
Uniroyal Tire Company, 33
United Kingdom, 24, 69
United Nations, 4
United Nations Command (Korea), 3, 4
United States of America, 4, 5, 7, 10
University of California, Berkeley, 26, 27, 35, 36, 60
University of California, San Francisco, 34, 54, 56, 59, 67
University of Pennsylvania, 5, 6, 8, 66
University of Tokyo, 1

V
Vestal, New York, 11, 12, 14, 18
Veterans Administration Hospital, 8
Vietnam War, 7

W
Walnut Street Children’s Center, 8

Watson, James D., 31
Watson, Mrs., 13
Weyde, Rolf, 4
Wnt protein, 67
Wolf, Marshall, 45
World War II, 5, 11

Y
Yellow Sea, 2, 78

Z
Zon, Leonard, 64