

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

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

ACKNOWLEDGEMENT

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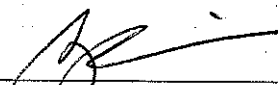
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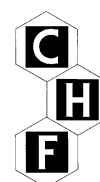
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SEUNG K. KIM

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

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

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

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

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

2002-2005 StemCells, Inc., Palo Alto, California
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

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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.

UCLA INTERVIEW HISTORY

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.

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