

CHEMICAL HERITAGE FOUNDATION

KUN PING LU

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Karen A. Frenkel

at

Harvard Medical School
Boston, Massachusetts

on

3, 4, and 5 August 2005

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



Kun Ping Lu

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KUN PING LU

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Education

1984 M.D., Fujian Medical College, People's Republic of China
1987 M.Sc., Pharmacology, Suzhou Medical College, People's Republic of China
1991 Ph.D. Candidate, Cell Biology, Baylor College of Medicine
1992 Ph.D., Cell Biology, Duke University

Professional Experience

1993-1996 Salk Institute for Biological Studies, La Jolla, California
Research Associate, Molecular Biology

1996-2001 Harvard Medical School, Boston, Massachusetts
Assistant Professor of Medicine
2001-present Associate Professor of Medicine

1996-present Beth Israel Deaconess Medical Center, Boston, Massachusetts
Research Staff

Honors

1984 Fujian Medical College Honors Graduate
1987-1988 Jiangsu Province Young Scientist Foundation Fellow
1993-1994 National Institutes of Health Fellow
1995-1996 Leukemia Society of America Fellow
1997-1998 Nathan Shock Center on Aging Pilot Project Award, Harvard Medical School
1998-2003 Leukemia and Lymphoma Society of America Scholar
1999-2004 Pew Scholar in Biomedical Sciences
1999 Young Investigator Award, the Society of Chinese Bioscientists in America
1999 Harvard Medical School Nominee for Howard Hughes Medical Institute Investigator
2000-2005 Co-Founder, Chair of Scientific Advisory Board, and member of Board of Directors, Pintex Pharmaceuticals (co-founders include Wally

| | |
|---------------|---|
| | Gilbert; Pintex is sought to Vernalis) |
| 2001 | Nominee for the Biological and Biomedical Science Graduate Program Award for Mentoring, Harvard Medical School |
| 2002 | Harvard University Nominee for the Kirsch Investigator Award |
| 2003 | The Inaugural FEBS Letters' Annual Award for Young Scientists given at the Federation of European Biochemical Societies (FEBS) Special Meeting on Signal Transduction in 2003 |
| 2003 | Featured in the Beth Israel Deaconess Medical Center President's Society Brochure |
| 2004-2008 | Full member, NIA-N (Neuroscience of Aging) Review Committee National Institute on Aging, National Institute of Health |
| 2004 | "2004 Beckman Frontiers of Science Symposium" invited by Dr. Bruce Alberts, the President of the National Academy of Sciences. |
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Selected Publications

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ABSTRACT

Kun Ping Lu was born in Pinghe County, a rural area of Fujian Province in southern China, one of six children. His father had been born into a poor farming family who adopted him out to a wealthy family who had one child of their own and five other adoptees. As a result, his father was able to get a college education and to become a teacher and reporter. Despite his family's poverty and lack of influence, when Lu reached high school age, he was able to take an entrance exam; previously education was permitted only to influential families. The Cultural Revolution had forced teachers from the cities to villages, and Lu found that he had extremely good teachers. These teachers encouraged him to consider college. The high school curriculum was weighted toward chemistry, physics, and mathematics, with very little biology. Lu had never seen or read a book that was not a textbook.

Of a class of about 750, only three passed the college entrance exams. Here Lu describes his seven-hour walk to the city to take the exam; his emotions; his first taste of an apple; his first view of a city. Lu talks about his father, life in the countryside, his desire to study computer science, and a little more about the Chinese educational system. He was accepted into Fujian Medical School, where he worked in Wang Qinchun's lab.

Lu decided to do graduate work after medical internship, for which he had to take a graduate entrance exam. He began a master's program at Suzhou Medical College, working in Dao-Sheng Wang's pharmacology laboratory, where he studied atherosclerosis. There he became interested in cell-growth regulation. He describes his research with Dao-Sheng Wang and Sheng Hao Chao on heavy metal substitution and calcium signaling in mammalian cells.

During graduate school he met a young woman who was in medical school. They were not allowed to become romantically involved, so they were very careful to remain just friends. Eventually the young woman went back to her village to be a doctor, and the two continued to correspond. Forced to remain in China, Lu taught biochemistry for two years. He became friends with a tourist, Bert Goldberg, who agreed to send him a ticket to the United States, but his young woman friend would not be able to leave China unless she and Lu were married, so they married. Still, Lu went alone as he had only one ticket; he sent for her about six months later.

Lu had his first plane ride, his first car ride, and his first view of the United States on his way to work as a technician in Anthony Means's laboratory at Baylor College of Medicine. Eventually he was able to begin a doctoral program at Baylor; then he and the Means laboratory transferred to Duke University. Lu describes here his doctoral work on calcium-calmodulin signaling in *Aspergillus*; the process of writing journal articles in the Means laboratory; and his postdoctoral fellowship in Tony Hunter's laboratory at the Salk Institute for Biological Studies.

From there Lu accepted a position at Harvard School of Medicine. His wife, who had a medical degree, was unable to find a residency, and she had interrupted her postdoctoral work to follow Lu, so she took a job in Lu's lab. There she became instrumental in a number of discoveries. In addition, she had a child, their daughter, who is now twelve. Their daughter provides an entrée into a discussion of cultural and educational differences between China and America.

Lu continues describing his lab; his current research on characterizing the function of peptidyl-prolyl isomerase Pin1 and telomere regulation in cell growth; the practical applications of his research; and the commercialization of his research. Lu talks more about his funding; his

wife's career; how he manages his lab and its personnel; his love of scientific research; and competition and collaboration in science.

Lu's work has led to studying Alzheimer's disease; this leads into a discussion of his future research in stem cells. He expresses his opinions on a variety of subjects important in science: his likes and dislikes about being a principal investigator; his role in the lab; publishing; his travel commitments; gender and ethnicity in science; public policy and the funding of science; patents; and the qualities of good science.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Karen A. Frenkel, Interviewer, UCLA Oral History Program; B.A., Hampshire College, 1978; M.S., Boston University, 1982.

TIME AND SETTING OF INTERVIEW:

Place: Kun Ping Lu's office at Harvard Medical School.

Date: August 3, 4 and 5, 2005.

Total number of recorded hours: 7.

Persons present during interview: Lu and Frenkel.

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, Frenkel held a telephone pre-interview conversation with Lu to obtain written background information (curriculum vitae, website address, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed the documentation in Lu'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.

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.

Lu reviewed the transcript. He verified proper names and made a large number of corrections and additions.

Carol Squires prepared the table of contents. Technitype Transcribing compiled the guide to proper names.

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