

CHEMICAL HERITAGE FOUNDATION

KUO-FEN LEE

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

Salk Institute for Biological Studies
La Jolla, California

on

26 and 27 April 2004

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

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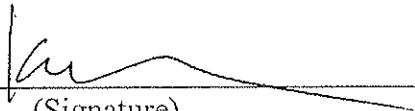
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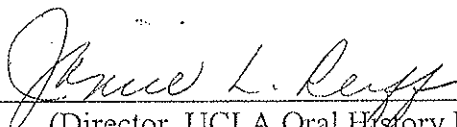
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KUO-FEN LEE

1959 Born in Kaohsiung, Taiwan, on 12 August

Education

Plant Pathology, National Taiwan University, Taiwan
M.S., Cancer Enzymology and Cell Differentiation, National Yang-Ming
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Selected Publications

- Goulding, M. et al., 1991. *PAX-3*, a novel murine DNA binding protein expressed during early neurogenesis. *European Molecular Biology Organization* 10:1135-47.
- Chelepakis, G. et al., 1991. The molecular basis of the undulated *PAX-1* mutation. *Cell* 66:873-84.
- Goulding, M. et al, 1993. Signals from the notochord and floor plate regulate the region-specific expression of two *PAX* genes in the developing spinal cord. *Development* 117:1001-17.
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- Daston, G. et al., 1996. *PAX-3* is necessary for migration but not differentiation of limb muscle precursors in the mouse. *Development* 122:1017-27.
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- factors. *Current Opinions in Neurology* 6:10-17.
- Bang, A.G. et al., 1997. Induction of *PAX-3* in the neural plate requires an early signal from posterior mesoderm. *Development* 124:2075-85.
- Maroto, M. et al., 1997. Ectopic *PAX-3* activates *MyoD* and *Myf-5* expression in both embryonic mesoderm and in neural tissue. *Cell* 89:139-48.
- Burrill, J. et al., 1997. *PAX-2* is expressed in multiple spinal cord interneurons, including a population of *En1* + interneurons that require *PAX-6* for their correct specification. *Development* 124:4493-503.

ABSTRACT

Kuo-Fen Lee was raised in Kaohsiung, Taiwan where he (the youngest) and his four siblings helped his single mother run a restaurant. Lee had what he considers a normal childhood; in terms of parental expectations, all Lee's mother wanted was for her sons to attend university. Lee and his brothers all tutored other students throughout their childhood and so doing well on the national exams was not a great challenge for Lee.

He attended the National Taiwan University and developed an interest in molecular biology after taking a virology course and working in plant virology. Lee then pursued a master's degree in molecular biology from National Yang-Ming Medical College where he researched cell-surface glycoprotein antigens in hepatoma. Wanting to continue his education, he decided to pursue his doctoral degree at the Baylor College of Medicine in Houston, Texas, which served as his first introduction to the experience of American culture. While at Baylor, he chose to research gene regulation using transgenic technology and steroid hormone peptides in Jeffrey M. Rosen's lab. Lee then moved to a postdoctoral position at the Whitehead Institute for Biological Research at the Massachusetts Institute of Technology in Cambridge, Massachusetts. He worked on crafting a genetic knockout mouse to study neural crest cell migration during development in the Rudolf Jaenisch lab and, while there, he published in *Cell*, *Science*, and *Nature*. After meeting Story C. Landis and Wylie Vale and attending a Gordon Research Conference on hormone action, Lee accepted a position at the Salk Institute for Biological Studies in La Jolla, California, focusing his research on neurobiological development, synapse function, and glial cell function.

The interview concludes with a discussion of Lee's interest in comparing the histories of Chinese and Western science, his professional and academic duties, and his family.

UCLA INTERVIEW HISTORY

INTERVIEWER:

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

TIME AND SETTING OF INTERVIEW:

Place: Lee's office, Salk Institute for Biological Studies.

Dates, length of sessions: August 26, 2004 and August 27, 2004.

Total number of recorded hours: 5.5

Persons present during interview: Lee 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 Lee to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. He also reviewed documentation in Lee's file at the Pew Scholars Program office in San Francisco, including Lee'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.

Lee did not review the transcript. Consequently, some proper names and other information remain unverified.

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

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