

CHEMICAL HERITAGE FOUNDATION

WILLIAM C. SHA

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Andrea R. Maestrejuan

at

University of California, Berkeley
Berkeley, California

on

4, 5, and 6 August 2003

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

ACKNOWLEDGEMENT

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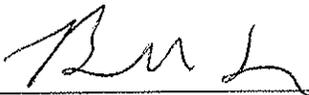
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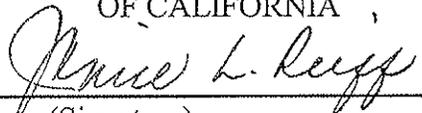
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(Signature)


(Signature)

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(Typed Name)

Janice L. Reiff
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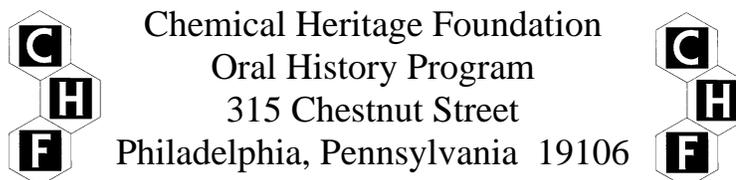
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WILLIAM C. SHA

1962 Born in New York City, New York

Education

B.S., Chemistry, University of Chicago
M.D./Ph.D., Washington University in St. Louis

Professional Experience

Argonne National Laboratory
Research

Rockefeller University
Postdoctoral work

Massachusetts Institute of Technology
Postdoctoral Work

University of California, Berkeley

1997-2001 Pew Scholars Program in the Biomedical Sciences Grant

Selected Publications

- Identification of gene function by cyclical packaging rescue of retroviral cDNA libraries. [D. Bhattacharya, E.C. Logue, S. Bakkour, J. DeGregori, and W.C. Sha, *Proceedings Natl. Acad. Sciences*, in press]
- Regulation of immunoglobulin class switch recombination by NF-kB: retroviral expression of Re1B in activated B cells inhibits class switching to IgG1, but not to IgE. [D. Bhattacharya, D.U. Lee, and W.C. Sha, *International Immunology*, in press]
- The right place at the right time: novel B7 family members regulate effector T cell responses. [L. Liang and W.C. Sha (2002) *Curr. Opinion Immunology* 14, 384-390]
- Enhancement of CD8+ T-cell responses by ICOS/B7h costimulation. [J.J. Wallin, L. Liang, A. Bakardjiev, and W.C. Sha (2001) *Journal of Immunology* 167, 132-139]
- B7h, a novel costimulatory homologue of B7.1 and B7.2, is induced by TNFa. [M.M. Swallow, J.J. Wallin, and W.C. Sha (1999) *Immunity* 11, 423-432]
- Regulation of immune responses by NF-kB/Rel transcription factors. [W.C. Sha (1998) *Journal of Experimental Medicine* 187, 143-146]

ABSTRACT

William C. Sha was born in New York City but moved as a young child to Chicago, Illinois, where his father, and then his mother, worked at the Argonne National Laboratory. Sha's father received a doctoral degree in nuclear engineering and his mother deferred graduate education in order to raise the family's children (Sha has two older sisters). He attended public schools and received an education that he considered quite typical, though he did have the opportunity during high school to work and publish with Ejup N. Ganic before he became President of Bosnia and Herzegovina.

Sha matriculated at the University of Chicago, where he majored in chemistry and worked with Stephen Lee in Jeremy K. Burdett's laboratory. While in college, he worked at Argonne National Laboratory with Ely M. Gelbard, a formative experience that helped convince him to enter an MD/PhD program. Sha joined the MD/PhD program at Washington University in St. Louis, Missouri, where he completed his doctorate of philosophy in immunology with Dennis Y. Loh before accepting a postdoctoral fellowship with David Baltimore at Rockefeller University and the Massachusetts Institute of Technology. While in Baltimore's lab Sha worked on NF-kappaB transcription factors (during the interview he also provided his perspective on the Imanishi-Kari affair). At the end of his postdoctoral research Sha accepted a position at the University of California, Berkeley, conducting immunology research on the role of costimulatory molecules in regulating the immune response and on B- and T lymphocyte cell interactions.

In his oral history interview Sha discusses topics such as his family history, the impact of his dual degrees on his research projects, writing journal articles, patents, the role of government in science, broader issues related to the conduct of science, and the ways in which the Pew Scholars Program in the Biomedical Sciences played a part in his scientific career.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Andrea R. Maestrejuan, Interviewer, UCLA Oral History Program. B.S., Biological Sciences, University of California, Irvine; M.A., History, University of California, Riverside; C. Phil., History, UCLA.

TIME AND SETTING OF INTERVIEW:

Place: Sha's office, University of California, Berkeley.

Dates, length of sessions: August 4, 2003; August 5, 2003; and August 6, 2003.

Total number of recorded hours: 5.0

Persons present during interview: Sha and Maestrejuan.

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, Maestrejuan held a telephone preinterview conversation with Sha to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed documentation in Sha's file at the Pew Scholars Program office in San Francisco, including Sha'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.

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

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

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