

CHEMICAL HERITAGE FOUNDATION

DANIEL S. KESSLER

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

University of Pennsylvania
Philadelphia, Pennsylvania

on

13, 16, and 17 June 2003

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



Daniel S. Kessler

ACKNOWLEDGEMENT

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Daniel S. Kessler

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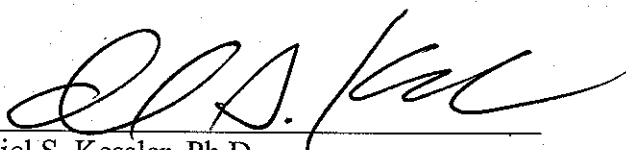
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DANIEL S. KESSLER

1964 Born in Manhasset, New York, in February

Education

1986 B.S., Biology, Cornell University
1990 Ph.D., Molecular Biology, Rockefeller University

Professional Experience

1986-1990 Rockefeller University, Laboratory of Molecular Cell Biology
Doctoral research with Dr. James Darnell

1990-1991 New York University Medical Center, Department of Pathology
Postdoctoral research with Dr. David Levy

1991-1995 Howard Hughes Medical Institute, Harvard University, Department of
Molecular & Cellular Biology
Postdoctoral research with Dr. Douglas Melton

1995-2002 University of Pennsylvania School of Medicine
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2002-present University of Pennsylvania School of Medicine
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Honors

1985-1986 Cornell Tradition Scholar
1986 B.S., magna cum laude with distinction
1986 Phi Kappa Phi Honorary Society
1986-1987 ARCS Fellowship
1990 Society of General Physiologists Scholarship, MBL Embryology Course
1990 ARCS Scholar
1991-1994 Jane Coffin Childs Memorial Fund Postdoctoral Fellowship
1995-1998 University of Pennsylvania-HHMI Scientist Award
1996-1999 American Digestive Health Foundation, AGA and Schering- Plough
Corporation Research Scholar Award

1997-2001
1999

Pew Scholars Program in the Biomedical Sciences Grant
John Morgan Society

Selected Publications

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ABSTRACT

Daniel S. Kessler was raised in Binghamton, New York, the youngest of three siblings. His mother was a public school teacher; his father taught at Binghamton University and was a published poet. Much of Kessler's life was spent within an academic world, with undergraduate and graduate student and faculty stopping by his family's home. The family also traveled when Kessler's father was on sabbatical, at one point providing Kessler with the opportunity to attend school in Hawaii, during which time he was exposed to the wonderment of science and, especially, marine biology. His time in public schools in Binghamton was typical, though being involved with the university allowed him access to outlets for his interest in music.

Kessler matriculated at Cornell University for his undergraduate degree; it was not until he worked in Stanley A. Zahler's bacterial genetics laboratory that he decided to become a scientist. He then went on to Rockefeller University in New York City, New York, for his graduate studies. At Rockefeller, Kessler worked with James Darnell on interferon signaling proteins (the STATs) identifying the activation of STATs in response to interferons, the STAT complex, and its regulation; during this time he also had the opportunity to learn structural biology at Oxford University in Anthony R. Rees's laboratory as part of a summer exchange program and to attend Ronald McKay's summer course in neurobiology at Cold Spring Harbor Laboratory. Following his Ph.D., Kessler decided to pursue postdoctoral research in developmental biology on the regulation of the mesoderm and endoderm germ layers by the transformation growth factor beta signaling molecule, Vgl, with Douglas A. Melton at Harvard University. He then accepted a faculty position at the University of Pennsylvania School of Medicine to work on the control of mesoderm and endoderm germ layer formation, the behavior of nodal signals during different stages of embryogenesis, and the formation of the Spemann organizer.

Throughout his oral history interview Kessler discusses issues like scientific funding; the grant-writing process; the role of the Pew Scholars Program in the Biomedical Sciences award for his work; balancing family and career; his future projects incorporating other model systems into his research strategies for studying endoderm germ layer differentiation and dorsal body axis formation; and the history of science and his research. The interview ends a discussion of what Kessler thinks about being a principal investigator, and concludes with more on his father's career.

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: Kessler's office, Cornell University.

Dates, length of sessions: June 13, 2003; June 16, 2003; and June 17, 2003.

Total number of recorded hours: 6.0

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

Kessler reviewed the transcript. He verified proper names and made minor corrections and additions.

Squires prepared the table of contents. Van Benschoten assembled the interview history. TechniType assembled the guide to proper names.

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