CHEMICAL HERITAGE FOUNDATION

WILLIAM S. TALBOT

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

Stanford University
Palo Alto, California

on

10, 11, and 12 January 2005

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

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REFORMATTING:

Kim Phan, Program Intern, Oral History, Chemical Heritage Foundation. B.A. expected 2011, Anthropology, Cornell University.

David J. Caruso, Program Manager, Oral History, Chemical Heritage Foundation. B.A., History of Science, Medicine, and Technology, Johns Hopkins University; PhD., Science and Technology Studies, Cornell University.

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× _____
(Signature)

William S. Talbot
(Typed Name)

Department of Developmental Biology, Stanford University School of Medicine
Beckman Center, B300, 279 Campus Drive, Stanford, California 94305
(Address)

650.725.7664
(Phone Number)

Talbot@cmgm.stanford.edu
(E-mail Address)

× January 10, 2005
(Date)

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_____
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Chemical Heritage Foundation
Center for Oral History
315 Chestnut Street
Philadelphia, Pennsylvania 19106

WILLIAM S. TALBOT

1966 Born in Portsmouth, Virginia, on 2 December

Education

1987 B.S., Microbiology, University of Florida
1993 Ph.D., Biochemistry, Stanford University

Professional Experience

University of Oregon
1993-1996 Postdoctorate, laboratory of Charles B. Kimmel, Institute of Neuroscience

New York University School of Medicine
1996-1999 Assistant Professor, Department of Cell Biology and Developmental Genetics Program, Skirball Institute of Biomolecular Medicine

Stanford University, School of Medicine
1999-2002 Assistant Professor, Department of Developmental Biology
2002-2006 Associate Professor, Department of Developmental Biology
2006-present Professor, Department of Developmental Biology

Honors

1987 B.S. with High Honors, University of Florida
1987-1990 National Science Foundation Graduate Fellowship
1990-1993 National Institutes of Health Training Grant, Department of Biochemistry, Stanford University
1993-1996 Jane Coffin Childs Memorial Fund Postdoctoral Fellowship
1997 NYU Whitehead Fellowship for Junior Faculty
1998-2002 Pew Scholars Award in the Biomedical Sciences
2002-2004 Rita Allen Foundation Scholars Award

Selected Publications

McConnell, T.J., W.S. Talbot, R.A. McIndoe, and E.K. Wakeland. 1988. The origin

of MHC class II gene polymorphism within the genus *Mus. Nature* 332: 65 1-654.
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Woods, I.G. and Talbot, W.S. 2005. The *you* Gene Encodes an EGF-CUB Protein Essential for Hedgehog Signaling in Zebrafish. *PLoS Biol.* 3(3):e66
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Pietsch J, Delalande JM, Jakaitis B, Stensby JD, Dohle S, Talbot WS, Raible DW, Shepherd IT. 2006 lessen encodes a zebrafish trap 100 required for enteric nervous system development. *Development* 133: 395-406.
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Franzini-Armstrong C, Dominguez C, Arana N, Jacobs J, Nix N, Fetcho JR, Talbot WS. A genetic screen identifies genes essential for development of myelinated axons in zebrafish. 2006. *Developmental Biology* 298: 118-131.

ABSTRACT

William S. Talbot grew up in Gainesville, Florida, enjoying nature, playing outside, and playing sports (for a time, an offensive guard and a nose tackle in football). His father was an oral surgeon who did a stint in the U.S. Navy; his mother received a master's degree in education and, later in life, worked in property management. Although he did not appreciate it at the time, growing up in a university town provided Talbot with what he considered a great education and access to several influential teachers. In an advanced biology course Talbot had the opportunity to develop his own science fair project, which brought him into the lab of Edward Wakeland to work on the nature and extent of variation in wild mouse populations.

Talbot decided to continue working with Wakeland as an undergraduate at the University of Florida, Gainesville, where he also broadened his intellectual horizons through studies in classes on the history of science. After completing his degree at Gainesville, he moved on to graduate studies at Stanford University in Palo Alto, California, working with David S. Hogness in developmental genetics on the hormonal control of metamorphosis in *Drosophila*, and then on to a postdoctoral position with Charles B. Kimmel at the University of Oregon mapping the zebrafish genome and characterizing mutations. From Oregon he returned to the east coast, accepting a position at the Skirball Institute at New York University, where he researched the genes involved in early tissue development of zebrafish and began collaborating with Alexander F. Schier. Soon after, though, Talbot decided to return to Stanford, working in vertebrate developmental biology, that is, at the genes involved in axis formation, tissue differentiation, and myelin formation.

At the end of the interview, Talbot discusses patents; his reasons for becoming a principal investigator; collaboration and competition in science; setting the national scientific agenda; the privatization of scientific research; and his transition to studying myelin formation.

UCLA INTERVIEW HISTORY

INTERVIEWER:

William Van Benschoten, Interviewer, UCLA Oral History Program; B.A., History, University of California, Riverside, 1990; M.A., History, University of California, Riverside, 1991; C.Phil., History, University of California, Los Angeles, 1995.

TIME AND SETTING OF INTERVIEW:

Place: Talbot's office at Stanford University.

Dates of sessions: January 10-12, 2005.

Total number of recorded hours: 4.0

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

Talbot reviewed the transcript. He verified proper names and made minor corrections and additions. Material with an asterisk has been added by the interviewee.

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

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