

CHEMICAL HERITAGE FOUNDATION

CHARLES E. CONNOR

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

Johns Hopkins University
Baltimore, Maryland

on

19 and 20 April 2004

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



Charles E. Connor

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CHARLES E. CONNOR

1955 Born in Baltimore, Maryland

Education

1978 B.S., Biology, Loyola College of Maryland
1982 M.S., Pharmacology, Vanderbilt University School of Medicine
1989 Ph.D., Neuroscience, Johns Hopkins School of Medicine

Professional Experience

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1996-2003 Johns Hopkins University, Baltimore, Maryland
Assistant Professor
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2003-present Johns Hopkins University School of Medicine, Baltimore, Maryland
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Honors

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Selected Publications

- Brincat, S.L. & Connor, C.E. (2004) Underlying principles of visual shape selectivity in posterior inferotemporal cortex. *Nature Neuroscience* (in press).
- Hinkle, D.A. & Connor, C.E. (2004) Quantitative characterization of disparity tuning in ventral pathway area V4 (submitted).
- Pasupathy, A. & Connor, C.E. (2002) Population coding of shape in area V4. *Nature Neuroscience* 5: 1332-1338.
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- Connor, C.E. (2003) Active vision and visual activation in area V4. *Neuron* 40: 1056-1058.
- Connor, C.E. (2003) Perceptual Learning. *Quarterly Review of Biology* 78: 259-260.
- Connor, C.E. (2002) Reconstructing a 3D world. *Science* 297: 376-377.
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- Connor, C.E. (2001) Visual perception: sunny side up. *Current Biology* 11: R776- R778.
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ABSTRACT

Charles E. Connor was born and raised in Baltimore, Maryland, spending the first few years of his life in Parkville, but then moving with his family to Towson, a suburb nestled in a wooded area through which Connor used to love to run. He grew up with some relatives who had a science background; religion also played an important role in Connor's upbringing (as well as later in life). Throughout his early education, Connor had an inkling that he wanted to be a scientist, despite a bevy of other talents and interests; with his junior high and high school science classes that feeling solidified.

He attended Loyola College in Maryland and, after some time in various labs, chose Vanderbilt University for his master's degree in pharmacology. He attended the University of Maryland to pursue a degree in law, but after finishing law school, he realized that the career was not for him. Connor then entered the neuroscience program at Johns Hopkins University began his work with Kenneth Johnson. In the lab, Connor focused his studies on neural signaling for texture. He stayed at Hopkins for a postdoctoral fellowship with Gian F. Poggi and Michael Steinmetz, and then continued to another postdoc at Washington University in St. Louis with David C. Van Essen. Ultimately, Connor returned to Hopkins for a faculty position in the neuroscience department, where his research has focused on his long-term research goal: an understanding of the neural code for object shape in the brain.

The availability of both funding and of students, topics Connor discusses at length, has shaped—and, he believes, will continue to shape—his research. While there is currently no industrial application for his research, he and some of his students have explored possible future applications, including a visual prosthesis and machine vision. His work in the lab, which historically included managing students, designing and overseeing production of new equipment, and benchwork, has evolved with the lab's growing reputation and Connor's added responsibilities, including teaching, writing grants, and administrative tasks. The interview concludes with Connor's reflections on another task that occupies some of his professional time, writing journal articles, and on the effect these publications have on his lab and his science. He talks about the role of creativity, serendipity, and technology in his research, and broader issues such as the national scientific agenda, ethics, and the public's view of science. Finally, the interview ends with his comments on the Pew Scholars Program in the Biomedical Science and his happiness with being a principal investigator.

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:

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Total number of recorded hours: 6.

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

Connor did not review the transcript. Consequently some names remain unverified.

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

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