

CHEMICAL HERITAGE FOUNDATION

**THOMAS J. O'DELL**

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview  
Conducted by

Andrea R. Maestrejuan

at

UCLA Neuropsychiatric Institute.  
Los Angeles, California

on

14, 15 and 16 July 2003

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

## ACKNOWLEDGEMENT

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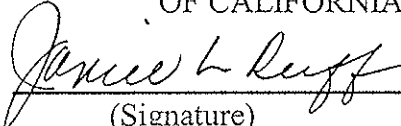
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## Thomas J. O'Dell

1960 Born in Berwick, Pennsylvania, on 20 May

### Education

1983 B.A., Psychology and Natural Science, Indiana University of Pennsylvania  
1988 Ph.D., Neuroscience, University of Texas Graduate School of Biomedical Sciences  
1988-1989 M.D., University of Maryland School of Medicine, Department of Physiology  
1989-1993 Howard Hughes Medical Institute, Center for Neurobiology and Behavior, College of Physicians and Surgeons of Columbia University

### Professional Experience

1988-1989 University of Maryland School of Medicine  
Postdoctoral Fellow, Department of Physiology  
1989-1990 Columbia University  
Postdoctoral Fellow, Center for Neurobiology and Behavior  
1990-1993 Howard Hughes Medical Institute, College of Physicians and Surgeons of Columbia University  
Associate, Center for Neurobiology & Behavior,  
1993-1998 UCLA School of Medicine  
Assistant Professor, Department of Physiology  
1998-2004 David Geffen School of Medicine at UCLA  
Associate Professor, Department of Physiology  
2004-present Professor, Department of Physiology  
2005-present Executive Vice-Chair, Department of Physiology

### Honors

1987 George Sealy Research Award in Neurology  
1987 James E. Beall II Memorial Award in Anatomy and Neuroscience  
1989 National Research Service Award

1994           Klingenstein Fellowship in the Neurosciences  
1996           Pew Scholars Program in the Biomedical Sciences Grant

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## ABSTRACT

**Thomas J. O'Dell** was born and raised in Berwick, Pennsylvania, a small, rural town (at the time, a population of approximately 11,000) on the edge of coalfields in the northeastern part of the state, the second oldest of four siblings. His mother was a homemaker; his father was a banker and, for a time, mayor of Berwick. O'Dell spent much of his youth like any other child; being in a rural area and having grandparents who lived on a farm allowed for a lot of exploration in nature; also, like most other children in the 1960s, he wanted to be an astronaut when he grew up, though by high school he was starting to get more interested in psychology and behavior.

He attended Indiana University of Pennsylvania, located in Indiana, Pennsylvania, intent on being a psychology major, but then adding a natural sciences major as well. He became interested in neuroscience after reading an article on the brain and memory in *Scientific American*, and planned to go to graduate school for his doctoral degree. O'Dell matriculated at the University of Texas Medical Branch in Galveston, Texas, in part because of the financial package they were able to offer and, in part, due to scientists like Harold M. Pinsky, who used *Aplysia* to study the neuronal basis of behavior. He rotated through Ernest S. Barratt's laboratory, studying electrophysiology, but chose to perform his doctoral research on neurotransmitters in retinal neurons in Burgess N. Christensen's laboratory. After completing his degree he went to Bradley E. Alger's laboratory at the University of Maryland to work on calcium channels in hippocampal neurons, and undertook a second postdoctoral study in Eric R. Kandel's laboratory at Columbia University in New York, New York, studying the cellular basis of memory formation and learning—specifically retrograde messengers in long-term potentiation and synaptic plasticity—and collaborating with Seth G.N. Grant, combining molecular biological approaches with physiological approaches to address research questions. At the end of O'Dell's postdoctoral fellowships, he accepted a position at the University of California, Los Angeles, working on beta-adrenergic receptors for norepinephrine and their role in synaptic plasticity and learning and memory.

The interview ends with a discussion of O'Dell's role in the laboratory; his future research into the biochemical, physiological, and behavioral levels of synaptic plasticity and synaptic transmissions involved in learning and memory; the future direction of his field; and educating neuroscientists. O'Dell concludes with his thoughts on the grant-writing process; the role of the Pew Scholars Program in the Biomedical Sciences on his work; balancing family life and career; collaboration and competition in science; the issue of patents; and teaching responsibilities.

## 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, University of California, Los Angeles.

### TIME AND SETTING OF INTERVIEW:

**Place:** O'Dell's office, UCLA Neuropsychiatric Institute.

**Dates, length of sessions:** July 14, 2003; July 15, 2003; and July 16, 2003

**Total number of recorded hours:** 5.0

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

O'Dell 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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