

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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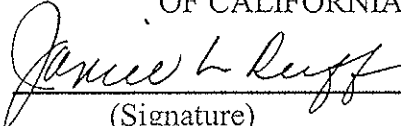
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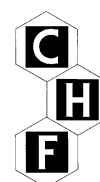
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## Thomas J. O'Dell

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.

## TABLE OF CONTENTS

Early Years	1
Family background. Siblings. Berwick, Pennsylvania. Religion. Parental Expectations. Early schooling. Interest in psychology. Influential teachers. Extracurricular activities in high school.	
College Years and Graduate School	13
Indiana University of Pennsylvania. Psychology and natural sciences major. Becomes interested in neuroscience after reading a <i>Scientific American</i> article about the brain. Decides to attend graduate school. The University of Texas Medical Branch in Galveston. Rotation in Ernest S. Barratt's laboratory doing Electrophysiology. Doctoral research on neurotransmitters in retinal neurons in Burgess N. Christensen's laboratory. The graduate program at University of Texas Medical Branch.	
Postdoctoral and Faculty Years	35
Postdoctoral research in Bradley E. Alger's laboratory at the University of Maryland on calcium channels in hippocampal neurons. Bradley E. Alger's management style. Second postdoctoral fellowship in Eric R. Kandel's laboratory at Columbia University. Work in Kandel's laboratory studying the cellular basis of memory formation and learning. Unexpected experimental results. Collaboration with Seth G. N. Grant. Using molecular genetic approaches to study learning and memory. Work on retrograde messengers in long-term potentiation and synaptic plasticity. Accepts a position at UCLA. Current research on betaadrenergic receptors for norepinephrine and their role in synaptic plasticity and learning and memory.	
Final Thoughts	71
Future research into the biochemical, physiological, and behavioral levels of synaptic plasticity and synaptic transmissions involved in learning and memory. Educating neuroscientists. Setting up his lab. Writing journal articles. Competition in science. His wife and sons. His wife's career. Gender and ethnic issues in science. Grant-writing process. The Pew Scholars Program in the Biomedical Sciences Patents. Teaching responsibilities.	
Index	117

## INDEX

### A

Alger, Bradley E., 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 57, 97, 101, 104, 105, 106  
Alzheimer's disease, 112, 113, 115  
Alzheimer's Disease and Related Disorders Association, Inc., 115  
*Aplysia*, 28, 46, 65, 66, 67  
Asia, 105

### B

Baltimore, Maryland, 40, 52, 53, 101  
Barad, Mark G., 81  
Barratt, Ernest S., 30  
Berwick, Pennsylvania, 1, 2, 3, 4, 5, 7, 8, 11, 14, 17  
Bloomsburg Literary Institute/Bloomsburg University, 15  
Bloomsburg, Pennsylvania, 15, 16  
Brown, Arthur M., 35

### C

California, 25, 57  
California Department of Health Services Alzheimer's Disease Program, 112  
California Institute of Technology, 67  
California University of Pennsylvania, 16  
California, Pennsylvania, 16  
Caltech. *See* California Institute of Technology  
Cambodian, 104  
Catholic [Roman Catholic], 6  
Center for the Neurobiology of Learning and Memory, 84  
Chile, 104  
Christensen, Burgess N., 31, 34, 35, 37, 38, 40, 41, 45, 46, 47, 50, 51, 52, 91  
Christensen, Monique, 34  
Christian/Christianity, 5, 6  
Ciba-Geigy Ltd., 102

Cold Spring Harbor Laboratory, 63, 116  
Cold Spring Harbor Laboratory Press, 75  
Columbia University, 46, 52, 53, 59, 61, 101  
Cub Scouts of America, 120

### D

Dallas, Texas, 35  
Delaware, 16  
depotiation, 74, 76  
DNA, 101, 117  
dopamine, 31, 32  
*Drosophila*, 62, 63, 65

### E

Edinburgh, Scotland, 72, 73  
electrophysiology, 30, 33, 34, 39, 43, 45, 52, 54, 70, 74, 87, 88  
Europe, 105

### F

FIRST. *See* First Independent Research Support and Transition Award  
First Independent Research Support and Transition Award, 106, 107, 108  
Fisher Scientific International, Inc., 4  
Florida, 4  
funding/grants, 28, 48, 80, 93, 94, 106, 107, 108, 109, 110, 112, 113, 115, 118

### G

Galveston, Texas, 27, 29, 30, 35, 37, 38, 39, 45, 46  
Georgetown University, 70  
glutamate, 31, 32, 37, 39, 41, 42, 50, 52, 66, 73, 78  
G-protein, 35, 39, 41  
Grant, Seth G.N., 55, 56, 57, 58, 59, 60, 61, 64, 65, 68, 69, 70, 71, 72, 73, 78, 79, 82, 83, 115  
Great Britain, 105

Grinnell, Alan D., 69

## H

Harvard University, 16, 22  
hippocampus, 42, 44, 45, 46, 49, 50, 54, 55,  
58, 62, 65, 66, 67, 73, 76, 78, 80, 81, 114  
horizontal cells, 21, 37, 39  
Houston, Texas, 29, 35  
Howard Hughes Medical Institute, 106  
Human Genome Project, 110

## I

Indiana University, 16  
Indiana University of Pennsylvania, 16, 17,  
22, 27, 28  
Indiana, Pennsylvania, 17  
isoproterenol, 57

## J

Japanese, 104, 110, 111  
Johnson, Kenneth M., 32, 33

## K

Kandel, Eric R., 45, 46, 50, 51, 52, 53, 54,  
55, 56, 58, 59, 60, 61, 65, 66, 67, 68, 69,  
70, 71, 72, 73, 74, 75, 82, 88, 91, 92, 93,  
94, 95, 96, 97, 101, 102, 104, 106, 108,  
115

## L

Lisman, John E., 57, 76  
long-term depression, 75, 76, 77, 78  
long-term potentiation, 55, 56, 57, 58, 60,  
61, 62, 65, 66, 67, 71, 73, 74, 75, 76, 77,  
78, 79, 80, 83, 84, 87, 88, 96, 114, 115,  
116, 118  
Los Angeles Marathon, 15  
Los Angeles, California, 69, 99, 102, 104,  
120  
Louisville, Kentucky, 29  
LTD. *See* long-term depression  
LTP. *See* long-term potentiation  
Lynch, Gary, 84

## M

MacLaren, Renate, 24, 101, 120  
Madison, Daniel V., 67, 68  
Malenka, Robert C., 75  
March of Dimes Birth Defects Foundation,  
7  
Massachusetts Institute of Technology, 59  
Mexico, 104  
Miller, Dave, 25  
MIT. *See* Massachusetts Institute of  
Technology  
Morad, Martin, 70  
Morris water maze, 65, 84  
Morris, Richard G.M., 64

## N

National Academy of Sciences, 68  
National Institute of Mental Health, 115  
National Institutes of Health, 94, 106, 108,  
110, 112, 113  
neuropharmacology, 32  
neurotransmitters, 31, 32, 39, 53, 73, 80,  
114  
New York City, New York, 2, 11, 52, 69,  
101  
Nicoll, Roger A., 98  
NIH. *See* National Institutes of Health  
NIMH. *See* National Institute of Mental  
Health  
nitric oxide, 67, 116, 118  
NMDA, 73, 78, 79, 80, 96  
Nobel Prize, 72  
norepinephrine, 76, 77, 114  
Novartis AG, 102

## O

O' Dell, Clarence (father), 2, 6, 7, 16, 119  
O'Dell, Cathy (sister), 4  
O'Dell, Michael (son), 5, 24, 101, 120  
O'Dell, Nancy (mother), 2, 19  
O'Dell, Ryan (son), 5, 24, 101, 120  
O'Dell, Susan (sister), 4  
O'Dell, Timothy (brother), 4  
Olympic Games, 99

## P

patch-clamp, 33, 43  
patent, 115, 116, 117, 118  
Pennsylvania, 1, 15, 23  
Pennsylvania State University, 17  
Pennsylvania State System of Higher Education, 15  
Pew Charitable Trusts, 107  
Pew Scholars Program in the Biomedical Sciences, 1, 60, 63, 73, 76, 77, 79, 80, 107, 109, 113, 114, 118  
phencyclidine, 32  
Philadelphia, Pennsylvania, 1, 2, 11, 23, 69, 101  
phorbol esters, 42  
Pinsker, Harold M., 28  
Pittsburgh, Pennsylvania, 16, 23  
PKC. *See* protein kinase  
postsynaptic density protein 95, 79  
Princeton University, 16  
Princeton, New Jersey, 101  
protein kinase  
  protein kinase A, 76, 82  
  protein kinase C, 41, 42, 43  
PSD-95. *See* postsynaptic density protein 95  
Puerto Rico, 104

## Q

Quaker. *See* Religious Society of Friends

## R

Religious Society of Friends, 1  
retina, 21, 31, 37, 42  
retinal neurons, 31, 37, 53  
Rocky Mountains, 63

## S

Schuman, Erin M., 67, 68  
Scotland, 57  
Scranton, Pennsylvania, 1, 11  
Sierra Nevada Mountains, 25  
Silva, Alcino J., 59, 63, 64, 65, 71  
Snell, Lawrence D., 33  
Society for Neuroscience, 35, 40

South America, 104  
Spanish [language], 104  
Stanford University, 69  
synaptic plasticity, 46, 55, 56, 58, 61, 62, 66, 71, 73, 77, 78, 79, 80, 98, 113, 114

## T

T-cell, 59  
Texas, 28, 35, 39, 69  
Tonegawa, Susumu, 59  
Tully, Tim, 63, 115, 116  
tyrosine kinase, 56, 58, 60, 61, 66

## U

U.S. Department of Defense, 84  
U.S. Department of the Navy, 84  
U.S. Food and Drug Administration, 102  
UCI. *See* University of California, Irvine  
UCLA. *See* University of California, Los Angeles  
United States of America, 68, 93, 94, 105, 110  
University of California, 16  
University of California, Irvine, 84  
University of California, Los Angeles, 1, 27, 57, 60, 64, 69, 70, 76, 91, 92, 112, 118, 120  
  Center on Aging, 114  
University of Delaware, 16  
University of Edinburgh, 57, 64  
University of Kentucky, 29  
University of Maryland, 40  
University of Pennsylvania, 16, 101, 102  
University of Texas Medical Branch, 27, 28, 30, 35, 38, 46  
UTMB. *See* University of Texas Medical Branch

## W

Washington, D.C., 70  
Wilkes-Barre, Pennsylvania, 1  
Willis, William D., Jr., 35  
Winter Conference on the Neurobiology of Learning and Memory, 63



Wise Potato Chip Company/Wise Foods,  
Inc., 8, 19  
Wistar Institute, 101  
Wong, Robert K.S., 46, 51  
Wright, Ernest M., 107

**Y**  
Yale University, 16

**B**  
 $\beta$ -adrenergic, 114