

CHEMICAL HERITAGE FOUNDATION

DAVID RON

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Andrea R. Maestrejuan

at

New York University Medical Center
New York, New York

on

7, 8 and 9 December 1998

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

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about December 7, 1998, and tentatively entitled "Interview with David Ron". This Agreement relates to any and all materials originating from the interviews, namely the tape recordings of the interviews and a written manuscript prepared from the tapes, hereinafter collectively called "the Work."

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If to Interviewee: David Ron
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University and Interviewee have executed this Agreement on the date first written above.

INTERVIEWEE

D Ron
(Signature)

David Ron
(Typed Name)

The Skirball Institute

New York University Medical Center
(Address)

550 First Avenue

New York, New York 10016

Date Dec 7, 1998

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

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Dale E. Treleven
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Date 1/27/99

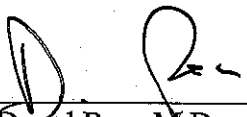
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DAVID RON

1955 Born in Ein-Carmel, Israel on 29 September

Education

M.D., Technion-Israel Institute of Technology

Professional Experience

1987-1991	Massachusetts General Hospital, Boston, Massachusetts Endocrine Fellow, Department of Medicine
1988-1992	Howard Hughes Medical Institute Research Associate
1984-1987	Mount Sinai Medical Center, New York City, New York Residency, Internal Medicine
1992-1996	New York University Medical Center Assistant Professor, Department of Medicine and Department of Cell Biology
1996-present	Associate Professor

Honors

1993-1997	Pew Scholar in the Biomedical Sciences
1996	Stephen Birnbaum Scholar of the Leukemia Society of America
1998	American Society of Clinical Investigation Membership

Selected Publications

- Ron, D. et al., 1990. An inducible 50-kilodalton NFB-like protein and a constitutive protein both bind the acute-phase response element of the angiotensinogen gene. *Molecular Cellular Biology* 10:1023-32.
- Ron, D. et al., 1990. The permissive role of glucocorticoids on IL-1 stimulation of angiotensinogen gene transcription is mediated by an interaction between inducible enhancers. *Molecular Cellular Biology* 10:4389-95.
- Ron, D. et al., 1991. Angiotensinogen gene inducible enhancer binding protein 1 (AGIE-BP1), a

- member of a new family of large nuclear proteins that recognize nuclear factor kappa-B binding sites through a zinc finger motif. *Molecular Cellular Biology* 11:2887-95.
- Ron, D. and J.F. Habener, 1992. CHOP, a novel developmentally regulated nuclear protein that dimerizes with transcription factors C/EBP and LAP and functions as a dominant negative inhibitor of gene transcription. *Genes and Development* 6:439-53.
- Crozat, A. Y. et al. , 1993. Fusion of CHOP to novel RNA-binding protein in human myxoid liposarcoma with t (12;16) (q13 ; p11) . *Nature* 363:640-44.
- Zinzner, H. et al, 1994. A novel effector domain from the RNA-binding proteins TLS or EWS is required for oncogenic transformation by CHOP. *Genes and Development* 8:2513-26.
- Wang, X. Z . et al. , 1996. Signals from the stressed endoplasmic reticulum induce C/EBP homologous protein (CHOP/GADD153) . *Molecular Cellular Biology* 16:4273-80.
- Wang, X.Z. and D. Ron, 1996. Stress-induced phosphorylation and activation of the transcription factor CHOP (GADD153) by p38 MAP-kinase. *Science* 272:1347-49.
- Zinzner, H. et al., 1998. CHOP is implicated in programmed cell death in response to impaired function of the endoplasmic reticulum. *Genes and Development* 12: 982-95.
- Wang, X. Z . et al . , 1998. Identification of novel stress-induced genes downstream of CHOP. *European Molecular Biology Organization Journal* 17:3619-30.

ABSTRACT

David Ron was born in Ein Carmel, a kibbutz near Haifa, Israel. The kibbutz provided room and board for the family while Ron's parents were studying at the Technion-Israel Institute of Technology, his mother chemistry and his father physics. While Ron was still a young child, his parents joined the faculty at the Technion, and the family moved to Haifa, where David mostly grew up. When he was about six his parents took postdocs, and the family, now including David and two sisters, moved to Princeton University. After two years there they spent a year at University of California, San Diego, and then went back to the Technion. When David was in junior high school the family again spent a year in the United States, this time at the University of California, Los Angeles. David chose the mathematics-chemistry-physics track in high school, the most difficult. School was intended to be "a grind"; learning was not an end in itself, simply a means. Family dinner discussions centered on politics; David says there was not much "fun stuff" in his household. He liked to read, especially history; he was not much interested in sports. The family was strongly atheistic, despite the extreme Orthodoxy and Zionism that brought many of his ancestors to Israel from mostly Eastern Europe, so David was not even Bar Mitzvah.

After finishing high school at seventeen, David entered medical school. He had to make an arrangement with the army to do his compulsory service after college; this meant promising summer boot camps and five years of service after graduation. He spent part of his third summer working in Avraham Hershko's lab, where he learned about protein degradation. The experience discouraged him from bench science; and he spent the following summers at Hammersmith Hospital in London, where he did rotations in endocrinology, neurology, and hematology. He returned to the Technion for a year, after which he went into the army for five years. He was a medic assigned to the Golan Heights during a war with Lebanon; soldiers there suffered crash injuries, and Ron published a paper on forced bicarbonate infusion as a treatment for renal failure. He then did his residency in internal medicine at Mount Sinai Medical Center in New York City and decided he wanted to do bench science as well. He chose endocrinology because it afforded him more time for the bench. He accepted a fellowship at Massachusetts General Hospital, working in Joel Habener's lab. There Ron became interested in possible genetic regulation of responses to stresses on the endoplasmic reticulum. He has discovered that *CHOP* (*CIEBP* homologous protein), which can be a marker of endoplasmic reticulum stresses, is induced in some disease states, like Crohn's disease. He is trying to discover where that information leads him.

Ron accepted an assistant professorship at the Skirball Institute for Biomolecular Medicine at New York University, where he continues his research into *CHOP* and the *IRE-1beta* gene. He has won a number of awards, including the Pew Scholars in the Biomedical Sciences award and an award from the Leukemia Society of America. He and his wife, who is also a scientist and who works at the Population Center, have found a way to balance their professional lives with their life at home with their son.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Andrea R. Maestrejuan, Interviewer, UCLA Oral History Program; B.S., Biological Sciences, University of California, Irvine, 1986; B.A., History, University of California, Irvine, 1986; M.A., History, University of California, Riverside, 1991; C.Phil., History, University of California, Riverside.

TIME AND SETTING OF INTERVIEW:

Place: Ron's office, New York University Medical Center.

Dates, length of sessions: December 7, 1998 (113 minutes); December 8, 1998 (106); December 9, 1998 (108).

Total number of recorded hours: 5.45

Persons present during interview: Ron 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 Ron to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in his file at the Pew Scholars Program office in San Francisco, including his proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members. For technical background, Maestrejuan consulted J.D. Watson et al., *Molecular Biology of the Gene*. 4th ed. Menlo Park, CA: Benjamin/Cummings, 1987 and Bruce Alberts et al., *Molecular Biology of the Cell*. 3rd ed. New York: Garland, 1994.

The interview is organized chronologically, beginning with Ron's childhood in Haifa, Israel, and continuing through his undergraduate and graduate work at the Technion-Israel Institute of Technology, his residencies at Mount Sinai Hospital and Massachusetts General Hospital, and the establishment of his own lab at New York University Medical Center. Major topics discussed include growing up in Israel; Ron's research on the endoplasmic reticulum, *CHOP*, and the *IRE-1* beta gene; and his strengths and weaknesses as a scientist.

ORIGINAL EDITING:

Ji Young Kwon, editorial assistant, 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.

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

William Van Benschoten, editor, prepared the table of contents and index. Kwon assembled the biographical summary and interview history.

TABLE OF CONTENTS

Early Years	1
Born in Ein Carmel, kibbutz near Haifa, Israel. Grew up mostly in Haifa. Parents professors at Technion-Israel Institute of Technology. Two younger sisters who also have PhD's in science. Parents' postdocs at Princeton University, University of California, San Diego, and University of California, Los Angeles. Disruption of his education. Politics at the dinner table.	
College Years	12
Entering medical school from high school. Postponing compulsory army service. Summer training as medic. Avraham Hershko's lab. Hammersmith Hospital in London, England. Interest in endocrinology. Rambam Hospital.	
Army Years	47
Five-year commitment. Deployed to Golan Heights. War in Lebanon. Studying crash injuries. Article about forced bicarbonate infusion to treat renal failure. First marriage.	
Postgraduate Years	53
Residency in internal medicine at Mount Sinai Medical Center in New York City. Divorce. All clinical work. Learned a lot about clinical practice and management. Decides to be scientist as well.	
Second Residency	62
Accepts residency in endocrinology at Massachusetts General Hospital in Boston, Massachusetts. Works in Joel Habener's lab. Discovers <i>CHOP</i> and <i>IRE-1</i> . Marries French Roman Catholic woman, also a PhD scientist. One son.	
Faculty Years	67
Assistant professorship at Skirball Institute for Biomolecular Medicine at New York University. Wife's work at Population Center. Balancing family and professional life. Lab makeup and management. Gender issues in science. Pew Scholars in the Biomedical Sciences award. Continuing work on endoplasmic reticulum.	
Index	93

INDEX

A

Akimadov, Alexander, 81, 82, 83
Alexandria, Egypt, 25
American, 2, 3, 6, 7, 9, 19, 24, 25, 29, 30,
35, 36, 52, 76
Arab, 18, 23, 24, 25
Arabic [language], 8, 25
Argentina, 91
Ashley, Terry F., 82, 83
Aspen, Colorado, 48
Axel, Richard, 72, 90
axonal transport, 75

B

Baltimore, David, 57, 58
Bar Mitzvah, 29
Baylor University, 64
Bebchuk, Lucien, 41
Beckwith, John B., 2
Ben-Gurion, David, 19, 33
Bernbohmer, Lutz, 64
Beth Israel-Brigham-Massachusetts General
Hospital, 53
Better, Ori, 53
Bezek, Diklah (ex-wife), 63
bicarbonate infusion, 50
Biden, Senator Joseph R., Jr., 26
Blair, Anthony R., 35
Bloom, Stephen R., 43
Boston, Massachusetts, 53, 64, 65, 79
Bradley, Allan, 90
Brand, Ludwig, 76, 77
Brandeis University, 59
Brandt, Herbert E.K.F., 35
Brazil, 91
BRCA-1, 77
Brigham and Women's Hospital, 53
Brooklyn, New York, 8
Brown, Michael S., 60, 61
Bulgaria, 15
Burke, Paul R., 53

Burroughs Wellcome Fund, 87

Burstein, Simon, 11

C

California, 21
California Institute of Technology, 57
Callaghan, Leonard J., 44
Caltech. *See* California Institute of
Technology
carboxypeptidase B, 79, 84
Catterall, James F., 65
Catterall, William A., 65
Chin, William W., 57
CHOP, 74, 79, 80, 84, 87
Clinton, President William J., 35
Coleman, Douglas, 55, 56
Columbia University, 85
Cornell University, 5, 6, 32, 53, 54
CPB. *See* carboxypeptidase B
Crohn's disease, 60, 76, 78, 79, 88
Crozat, Anne Y. (wife), 19, 30, 54, 63
crystallography, 14
cybergenetics, 79

D

db, 56
DNA, 54, 76, 81, 82, 83

E

economics, 22, 25, 37, 38, 41, 91
Ein-Carmel [Kibbutz], 1
electrophoresis, 54
Elledge, Stephen J., 58, 59
Ellis Island, 21
Emerson Junior High School, 6, 35
Encyclopaedia Britannica, 27
endocrinology, 43, 53, 57, 84
endoplasmic reticulum, 60, 73, 75, 76, 78,
82, 83, 84, 87
England, 23, 44, 51, 52
ER. *See* endoplasmic reticulum

EWS, 80

F

Fornace, Albert J., 79
Friedman, Jeffrey M., 55, 56

G

GADD153, 79
Galton, D.A.G., 43, 53, 61
Golan Heights, 46, 47, 49
Goldman, John A., 44, 45, 61
Goldreich, Dana Ron (sister), 6
Goldreich, Oded (brother-in-law), 6
Goldstein, Joseph L., 60, 61
Gow, Alexander, 73
GRP-78, 76

H

Habener, Joel F., 54, 56, 57, 61, 71, 84
Haifa, Israel, 1, 2, 4, 5, 6, 16, 42, 49
Hammersmith Hospital, 43, 45
Hannibal, 28
Hanukkah, 29
Harrison, Tinsley R., 14
Harvard Law School, 41
Harvard Medical School, 4, 70
Hebrew, 2, 16
Hebrew University of Jerusalem, 4, 20, 40
hematology, 43, 45
Hershko, Avraham, 41, 42, 43
Hitler Adolph, 19
Hoffa, James, 26
Holbrook, Nikki J., 79
Howard Hughes Medical Institute, 54, 71, 87, 88, 89

I

IDF. *See* Israel Defense Forces
Inflammatory Bowel Disease Foundation, 88
IRE, 73, 75, 76, 89
IRE-1 beta, 75, 76
Israel, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26,

29, 30, 32, 33, 34, 36, 39, 40, 41, 44, 45, 46, 48, 51, 63

Israel Defense Forces, 6, 47
Israel Valley, 18
Ithaca, New York, 32

J

Jackson Laboratory, 55
Jamison, Lawrence, 55, 57, 58
Jerusalem, Israel, 4, 6
Jewish/Judaism, 15, 16, 17, 18, 21, 23, 24, 29, 30, 77
Ashkenazi, 16, 77
Orthodox, 16, 18, 19, 29
Sephardic, 15
Johns Hopkins University, 70, 77
Joplin, G.F., 43
Jordan River, 46
Jube, Mae, 57, 58

K

Karin, Michael, 81
kibbutz, 1, 21, 37
Kim, Peter S., 86
Kleckner, Nancy E., 84
kulak, 16
Kuroda, Masahiko, 80

L

La Jolla, California, 2, 3, 16
Lebanon, 47, 48, 49, 50
Lenin, Vladimir Ilyich, 31
leptin, 55
Leukemia Society of America, 87, 88
Levi, Izaak, 15
liposarcomas, 79
Lithuania, 16
Littman, Daniel R., 68, 90
London, England, 43, 44, 45, 54
Los Angeles, California, 33
Lyon, France, 64

M

MacKinnon, Roderick, 13

Marx, Karl, 9
Massachusetts General Hospital, 43, 54, 55,
57, 64
Massachusetts Institute of Technology, 6,
10, 57
Maxwell's equations, 13, 14
McBride, O. Wesley, 79
Medical Research Council, 44
Mediterranean Sea, 15
MGH. *See* Massachusetts General Hospital
Middle East, 23, 25, 27, 44
MIT. *See* Massachusetts Institute of
Technology
Mitelman, Felix, 79
molecular biology, 54
Morocco, 21
Mount Everest, 28
Mount Sinai Medical Center, 39, 48, 51, 52,
53, 63, 73
MRC. *See* Medical Research Council

N

Nable, Gary J., 58
National Academy of Sciences, 2
National Cancer Institute, 79
National Health Service, 51
National Institutes of Health, 71, 77, 79, 87,
88
NCI. *See* National Cancer Institute
New Left, 34, 35
New York City, New York, 4, 13, 33, 53,
54, 64, 65
New York University, 69
Newton, Sir Isaac, 10
NHS. *See* National Health Service
NIH. *See* National Institutes of Health
Nobel Prize, 3, 37, 64
norodnikism, 16
NYU. *See* New York University

O

ob, 55, 56
October War [Yom Kippur War of 1973],
40
Old Left, 34, 35

oligodendrocytes, 73
Onn, Ruth Ron (sister), 2, 5, 68
Onn, Samuel (brother-in-law), 5, 68

P

Palace, Christopher, 43
Palestine, 16, 18, 19
Pardee, Arthur B., 64
Paris, France, 18
Pelzer Smeets Bacher Loco dystrophy, 73
pericentromeric, 76
Persian Gulf War, 47
Pew Charitable Trusts, 88
Pew Scholars in the Biomedical Sciences,
13, 38, 58, 63, 68, 71, 75, 80, 86, 88
Plasma Physics Laboratory, 2
Poland, 16
Population Council, 64, 65
Princeton University, 2, 33
Princeton, New Jersey, 2
Principles of Internal Medicine, 14
PRK, 73

R

Rabin, Yitzhak, 44
Rambam Hospital, 45
Rannana, Israel, 16, 17
Reichstein, Tadeus, 42
Reserve Officers Training Corps, 12, 40, 47,
48, 49
Revolution., 15
RNA, 59, 80, 82, 83
Rockefeller University, 13, 53, 55
Romania, 17, 18, 20
Ron, Amiran (father), 1
Ron, Arza Cahnovitch (mother), 1
Ron, Thomas B. (son), 22, 30, 65
ROTC. *See* Reserve Officers Training
Corps
Royal Postgraduate Medical School, 43

S

Samuels, Herbert H., 81
San Diego, California, 23

San Francisco, California, 33, 50
Scripps Research Institute, 3
Searle Scholars Program, 81
Sears and Zymansky's University Physics,
10
Shigella, 70
Six Day War, 23
Skirball Institute of Biomolecular Medicine,
89
Skirball Institute of Biomolecular Medicine,
65
Skolnik, Edward A., 24
Skorecki, Carl, 53
Smith, E.C. Gordon, 45, 53, 61
Sofia, Bulgaria, 15
Sok, John, 81
Solid State Institute, 4
Spanish (language), 15
Stalin, Joseph, 19
Stanford University, 3, 4, 32, 53, 55
Stephen Birnbaum Leukemia Society of
America Scholar, 87
Streuli, Michel, 24
Stuyvesant High School, 8
Switzerland, 24

T

Taipei Taiwan, 25
Tanzi, Rudolph E., 38
Technion-Israel Institute of Technology, 1,
2, 3, 4, 5, 6, 11, 16, 20, 32, 39, 40, 41, 42,
53, 54, 85
Tel Aviv, Israel, 4, 5, 6, 17, 18, 33
Tel-Aviv University, 40
Thatcher, Prime Minister Margaret H., 44
TLS, 79, 80, 81, 82, 83, 84, 87
Tobacco Foundation, 64
Todman, Mr., 35
Toronto, Ontario, Canada, 53
Tufts University, 4

U

ubiquitin, 41
UCLA. *See* University of California, Los
Angeles
Ukraine, 16
United States of America, 2, 5, 6, 10, 11,
21, 24, 25, 26, 28, 32, 33, 34, 45, 47, 51,
63
University of California, Berkeley, 10, 20,
59
University of California, Los Angeles, 6, 33
University of California, San Diego, 2, 33
University of Chicago, 4
University of Pittsburgh, 63
University of Washington, 65
Urey, Harold Clayton, 3

V

Vallejo, Mario, 84
Varshavsky, Alexander, 42

W

Wang, Xiaozhong, 74
War of Independence (Israeli), 19, 23
Washington, D.C., 88
Weizmann Institute of Science, 4, 6, 19
Wilson, Edward O., 92
World War I, 15, 18
World War II, 23, 35

Y

Yale University, 82
Yemen, 21
Yiddish, 30
yiddishe mama, 8
Yom Kippur War [October War], 40
Yugoslavia, 23

Z

Zionism/Zionist, 16, 18
Zychlinsky, Arturo, 70