

CHEMICAL HERITAGE FOUNDATION

STEPHEN R.J. SALTON

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Andrea R. Maestrejuan

at

Mount Sinai School of Medicine of the City University of New York
New York, New York

on

4, 5, and 6 November 1996

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

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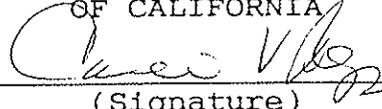
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Fishberg Research Center in Neurobiology
Mount Sinai School of Medicine
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New York, New York 10029

University and Interviewee have executed this Agreement on the date first written above.

INTERVIEWEE

THE REGENTS OF THE UNIVERSITY
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Stephen R.J. Salton
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STEPHEN R.J. SALTON

1955 Born in Cambridge, United Kingdom, on 1 September

Education

1976 B.A., University of Pennsylvania

1983 M.D., Ph.D., New York University

Professional Experience

1986-1988 Mount Sinai School of Medicine, City University of New York
Postdoctoral Fellow

1989-present Assistant Professor

Honors

1976 Magna cum laude, University of Pennsylvania

1977-1983 Medical Scientist Training Program Award

1989-1991 Pfizer Scholar Award

1991-1994 Pew Scholar in the Biomedical Sciences

1994-1999 Irma T. Hirschl Career Scientist Award

Selected Publications

- Salton, S.R.J. et al., 1983. Nerve-growth-factor-inducible large external (NILE) glycoprotein: Studies of a central and peripheral neuronal marker. *Journal of Neuroscience* 3:441-54.
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- D'Arcangelo, G. et al., 1996. Activation of co-dependent transcription factors is required for transcriptional induction of the *vgf* gene by NGF and Ras. *Molecular and Cellular Biology* 16:4621-31.
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ABSTRACT

Stephen R.J. Salton was born in Cambridge, England, and moved to Australia when he was about seven. When he was about ten, his family moved to Cranford, New Jersey, where his father became chairman of the microbiology department at New York University. Salton attended public schools, and he remembers a good chemistry teacher. He had an early interest in biology, partly because he liked it and partly because his perception of science was influenced by his father's career. Although he felt that there were deficiencies in his pre-college science curriculum, he did have a chance to perform research one summer in the Joel Oppenheim and Martin Nachbar labs at New York University.

Salton entered the University of Pennsylvania to major in biology; there he found stimulating introductory biology and biochemistry courses. He had the opportunity to undertake undergraduate lab work at the Wistar Institute with James England and Michael Halpern who taught him the importance of learning to solve problems at the bench. He decided to enter New York University's M.D./Ph.D. program, where he did his Ph.D. research in pharmacology under Michael Shelanski and Lloyd Greene, making antibodies for work on PC12 cell surface glycoprotein response to nerve growth factor α (NGF) treatments. He became enmeshed in the debate over basic science and clinically relevant research and the funding problems raised by that debate.

Though somewhat dissatisfied with medical school coursework, some of that dissatisfaction was mitigated when in his second year he met his future wife, Johanna Baeuerle. Also to his benefit during his schooling, Salton had a good working relationship with Shelanski and Greene who taught him the usefulness of collaborations between labs for meeting funding deadlines and the politics involved in collaborations. He then did a residency and postdoc in the James Roberts lab; balancing professional life and life with his family (Baeuerle and their two children) was sometimes a challenge. Salton had entered the Roberts lab in order to learn molecular biology techniques; he was later able to apply molecular techniques in an attempt to determine the differences between neutrophilic growth factors and non-neutrophilic growth factors. He found exciting the rapid evolution of molecular biology techniques into a widely accessible tool that can decrease the potential tedium involved in large-scale DNA analysis.

The interview concludes with Salton's discussion of some ideas about how to keep a small lab competitive; the political advantages of publishing in *Cell*, *Nature*, or *Science*; and the insular editorial tendency at the top science journals. He discusses funding; professional opportunities for science Ph.D.'s; and sharing lab facilities; he continues with Mount Sinai's process of recruiting faculty to the new Fishberg Research Center for Neurobiology as illustrative of his own transition from postdoc to assistant professor. He ends with his beliefs about the effect of changes in the health care industry on medical school funding, his opinion of the proposed merging of Mount Sinai Medical School and the New York University Graduate School of Arts and Sciences, and regret over a lost opportunity to pursue clinically based research under Ira Goldstein.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Andrea R. Maestrejuan, Interviewer, UCLA Oral History Program; B.A., History, University of California, Irvine, 1988; B.S., Biological Sciences, University of California, Irvine, 1988; C.Phil., History, University of California, Riverside.

TIME AND SETTING OF INTERVIEW:

Place: Salton's office, Mount Sinai School of Medicine of the City University of New York.

Dates, length of sessions: November 4, 1996 (112 minutes); November 5, 1996 (112); November 6, 1996 (117).

Total number of recorded hours: 5.7

Persons present during interview: Salton 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 Salton to obtain written background information (curriculum vitae, copies of published articles, etc.) and to agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in Salton's 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 general background on the recent history of the biological sciences, 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 Salton's childhood in Australia and New Jersey and continuing through his professional training at New York University and the establishment of his own lab at the Mount Sinai School of Medicine of the City University of New York.

Major topics discussed include the medical school curriculum, science funding, the atmosphere of the contemporary research environment, and Salton's work on nerve-growth-factor-inducible large external glycoprotein.

ORIGINAL EDITING:

Gregory M.D. Beyrer, editorial assistant, edited the interview. He 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.

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

Jane Collings, editor, prepared the table of contents and index. Jeffrey Chow, editorial assistant, assembled the biographical summary. Beyrer compiled the interview history.

TABLE OF CONTENTS

Early Years	1
<p>Childhood in England and Australia. Move to the United States. Family Background. High school science courses. Participation in soccer, cricket, and Tennis. Early interests in biology. Growing up in New Jersey. Father's career as a microbiologist and its effect on Salton's childhood perception of science. High school friends. The deficiencies of the pre-college science curriculum.</p>	
College Years, Medical School, and Residency	24
<p>Stimulating introductory biology and biochemistry courses at the University of Pennsylvania. Science professors at Penn. Early laboratory experiences. Undergraduate lab work at the Wistar Institute with James M. England and Michael S. Halpern. The importance of learning problem solving at the bench. Decides to enter New York University's M.D./Ph.D. program in order to prepare for a career in research. High school summer research experience in the Joel D. Oppenheim and Martin S. Nachbar labs at New York University. Funding in the sciences. Conflict between basic science and clinically relevant research. Pursues a Ph.D. in pharmacology under Michael L. Shelanski and Lloyd A. Greene. Making antibodies for work on PC12 cell surface glycoprotein response to nerve growth factor (NGF) treatments. Meets future wife, Johanna Baeuerle. A year in the James L. Roberts lab during residency.</p>	
Postdoctoral and Faculty Years	49
<p>Balancing family and professional life. Enters the Roberts lab in order to learn molecular biology techniques. Pfizer Scholars Award. Applies molecular techniques in attempt to determine the differences between neutrophic growth factors and non-neutrophic growth factors. The interface between clinical practice and basic research at the Mount Sinai School of Medicine of the City University of New York. Work on NGF-inducible large external glycoprotein as a starting point for clinical researchers. Identifying signaling pathways and molecules regulated by growth factors.</p>	
Final Thoughts	67
<p>The peer review system for grants. The cost-effectiveness of shared lab facilities. Pressure to secure funding. Looking for signal transduction pathways unique to the NGF receptor. Studying neuronal differentiation. The new Fishberg Research Center for Neurobiology. The transition from postdoc to assistant professor at Mount Sinai. The effect of changes in the health care industry on medical school funding.</p>	
Index	92

INDEX

A

Addenbrooke's Hospital, 1
Alexandria, Egypt, 2
Allen, Woody, 18
Altrincham, England, 1
Alzheimer's disease, 64, 89
American Medical College Application Service, 38
Arizona, 42
Austin, Dick, 2, 17
Australia/Australian, 1, 2, 3, 4, 6, 7, 9, 13, 14, 15, 27, 32, 34, 54

B

Baeuerle, Johanna (wife), 14, 32, 52, 55, 57
Bananas, 18
Bellevue Hospital Center, 48, 49, 53
Bellevue Psychiatric Hospital, 51
Bergen, Barry, 17
Bergen, Bruce, 17
Berkeley, California, 1
Blender, Morey, 17
Bombay, India, 2
Boston, Massachusetts, 49
Brigham and Women's Hospital, 49
Brooks, Mel, 18

C

Cairo, Egypt, 2
Calcutta, India, 2
Cambridge, England, 1, 4
Canyon de Chelly National Monument, 42
Cape Cod, Massachusetts, 16
Caudy, Michael A., 78
Celanese Plastics, 14
Chalazoonitis, Alcmena, 42
China, 54
Church of England, 4, 32
City University of New York, 40, 57, 63, 82, 88

Cold Spring Harbor Laboratory, 76
Columbia University, 46, 47, 48, 49, 50, 56, 83, 85, 88
Columbia University College of Physicians and Surgeons, 53
Columbia-Presbyterian Medical Center, 48
Cornell University, 38
Cranford, New Jersey, 7, 11
cricket, 9, 10

D

Damsky, Caroline, 27
Delaware Water Gap, 10
DNA, 26, 57, 60, 61, 62
 cDNA, 60
Duke University, 38
Dysautonomia Foundation, 81

E

England, 1, 6, 9, 15
England, James M., 1, 4, 6, 29
Europe, 9, 12, 75
Exxon Corporation, 7

F

Fishberg Research Center for Neurobiology, 85
Forest Hills, Queens, New York, 10
France, 74
funding, 35, 36, 38, 44, 57, 64, 65, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 86, 87, 89

G

Genentech, 68
Germany, 41
Glucksman, Marc J., 85
GnRH. *See* gonadotropin-releasing hormone
Goldstein, Ira., 90
Goldstein, Mr., 7
gonadotropin-releasing hormone, 84

Great Britain, 2, 4, 10, 13, 16, 24
Greene, Lloyd A., 40, 41, 42, 45, 58
Groton, Connecticut, 58

H

Halegoua, Simon, 43
Halpern, Michael S., 29
Harris, Beverly, 55
Harvard University, 38
Hatten, Mary Beth E., 42
Heaslip, Rick, 26
Hudson River, 11
Hungarian, 14

I

Irma T. Hirschl Career Scientist Award, 77,
80

J

Jamaica, 55
Japan, 81
Jin, Wei Dong, 60
Johns Hopkins University, 12, 13, 24

K

Kandel, Eric R., 56
Kelley, Kevin A., 59, 86
Kreibich, Gert, 43
Krolewski, John J., 46

L

Lamm, Mike, 40
lectins, 33
Leonard, Debbie, 58
Lewin, Benjamin, 70
LH. *See* luteinizing hormone
Liem, Ronald K.H., 41, 42, 43
Lincolnshire, England, 4
Lindfield, Australia, 7
Llinas, Rodolfo, 88
Los Angeles, California, 5, 83
Lu, Ponzy, 21
Lundblad, Jim, 57
luteinizing hormone, 57, 83, 84

M

Manchester, England, 1, 15
Marcantonio, Eugene, 46
Margolis, Renée K., 43
Margolis, Richard U., 43
Marriott, Anne (maternal grandmother), 4
Marriott, Charles (maternal grandfather), 3,
4
Marriott, Stuart (maternal uncle), 4
Mason, Carol, 42
McKeon, Hazel (aunt), 6, 7
McKeon, Terry (uncle), 7
McNeill, Thomas H., 44
Medical Scientist Training Program, 38
Mediterranean Sea, 2
MEDLINE, 69
Merck and Company, 79
Morrison, John H., 86
Mount Sinai School of Medicine, 1, 40, 47,
50, 57, 63, 74, 82, 83, 84, 88
MSTP. *See* Medical Science Training
Program

N

Nachbar, Martin S., 33
National Institutes of Health, 64, 72, 73, 75,
77, 78, 79, 80, 85, 87
nerve growth factor, 41, 58, 59, 84
nerve-growth-factor-inducible large external
glycoprotein, 46, 65, 67
neurotrophin, 84
New Delhi, India, 2
New Jersey, 2, 3, 7, 9, 11
New York City, New York, 9, 11, 49, 58,
89
New York Times, 21, 65
New York University, 2, 5, 6, 12, 16, 30,
35, 37, 38, 40, 43, 46, 47, 49, 56, 57, 88,
89, 90
New Zealand, 4, 27
NGF. *See* nerve growth factor
NIH. *See* National Institutes of Health
NILE. *See* nerve-growth-factor-inducible
large external glycoprotein

Nyack, New York, 11, 55
NYU. *See* New York University

O

Oppenheim, Joel D., 33, 34, 37
Oregon, 57

P

Park, Chan Suk, 18, 26
Pasteur, Louis, 19
PC12 cells, 41, 43, 66, 84
Peterborough, England, 4
Pew Charitable Trusts, 78, 79
Pew Scholars Program in the Biomedical Sciences, 14, 44, 58, 65, 71, 74, 77, 78, 79, 85, 90
Pfizer Inc., 57, 58, 79, 80, 81
Pfizer Scholars Award, 57, 84
POMC. *See* pro-opiomelanocortin
Presbyterian Church, 4, 32
pro-opiomelanocortin, 60, 83, 84, 85

R

Rahway River, 11
Rauscher, Frank J., III, 14, 29
Reeves, Christopher, 64
Regeneron Pharmaceuticals, 68
Reichmann, Jonathan, 17
Richter-Landsberg, Christiane, 41
River Trent, 4
RNA, 57, 60
Roberts, James L., 50, 54, 56, 60, 84
Rockefeller University, 38
Rockland County, New York, 2, 11, 55
Rowe, John W., 89
Royal Society, 14
Russia, 54
Rutgers University, 30, 38, 85, 86

S

Sabatini, David D., 43, 89
Salk Institute for Biological Studies, 76
Salton, Alastair Charles Stuart (brother), 3
Salton, Alex (son), 4, 33, 54

Salton, Alexander (paternal grandfather), 3, 32
Salton, Christabel Stell (paternal aunt), 4
Salton, Greg (son), 4, 33, 52
Salton, Joy Marriott (mother), 1, 32
Salton, Milton Robert James (father), 1, 27, 32, 56, 71
San Diego, California, 57, 58
sarcoma (src), 29
 Rous sarcoma virus, 29
Schlick, Romana (grandmother-in-law), 32
Schwartz, James H., 56
Sealfon, Stuart C., 85, 91
Seavey, Tom, 17
Shea Stadium, 9
Shelanski, Michael L., 23, 40, 41, 42, 45, 46, 56, 66, 88
Snyder, Susan E., 88
South America, 9
Southern blot, 38, 61
Sperry hypothesis, 66
Stanford University, 38
Suez Canal, 2
Sydney, Australia, 4, 7, 11

T

Troy, Carol M., 48
Turrumurra, Australia, 7
Tycko, Benjamin, 47

U

U.S. Congress, 73
UCSF. *See* University of California, San Francisco
United States of America, 1, 2, 9, 16
University Hospital, 53
University of California, San Francisco, 90
University of Cambridge, 1, 3
University of Manchester, 1
University of New South Wales, 3
University of Pennsylvania, 2, 12, 13, 17, 18, 21, 24, 26, 29, 37, 75
University of Southern California, 38, 44
University of Sydney, 3
USC. *See* University of Southern California

V

VA. *See* Veterans Administration Hospital
Veterans Administration Hospital, 48, 51,
53

W

Wistar Institute, 14, 29, 41, 74, 75, 76

Y

Yale University, 38
Yankee Stadium, 9

Z

Ziff, Edward B., 58