CHEMICAL HERITAGE FOUNDATION

CYNTHIA J. BURROWS

Transcript of an Interview
Conducted by

Hilary L. Domush

at

University of Utah,
Salt Lake City, Utah

on

15 and 16 July 2009

(With Subsequent Corrections and Additions)

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CYNTHIA J. BURROWS

1953 Born in St. Paul, Minnesota, on 23 September

Education

1975 B.A., Chemistry, University of Colorado
1982 Ph.D., Chemistry, Cornell University

Professional Experience

Université Louis Pasteur, Strasbourg, France
1981-1983 Postdoctorate, Chemistry, under Jean-Marie Lehn

State University of New York at Stony Brook
1983-1989 Assistant Professor of Chemistry
1989-1992 Associate Professor of Chemistry
1992-1995 Professor of Chemistry

University of Utah, Salt Lake City
1995-2007 Professor of Chemistry
1995-present Member, Huntsman Cancer Institute
2007-present Distinguished Professor of Chemistry

Honors

1971 Regents' Scholarship, University of Colorado
1971 President's Scholarship, University of Colorado
1977 Du Pont Teaching Award, Cornell University
1981-1982 NSF - CNRS Exchange of Scientists Postdoctoral Fellowship
1982-1983 Bourse Chateaubriand French Embassy Fellowship
1988-1989 Lilly Teaching Fellow, SUNY at Stony Brook
1989-1990 Japan Society for the Promotion of Science Research Fellow, Okazaki
1990 Visiting Professor, University of Minnesota
1993 Professeur Invité, Université Louis Pasteur, Strasbourg
1993-1994 National Science Foundation Career Advancement Award
1993-1995 National Science Foundation Creativity Award
2000 American Chemical Society Utah Award
2002 Professeur Invité, Université Louis Pasteur, Strasbourg
2002 Robert W. Parry Teaching Award, University of Utah

2004	Bea Singer Award
2004	Fellow, American Association for the Advancement of Science
2005	Distinguished Scholarly and Creative Research Award, Univ. of Utah
2007	Distinguished Professor, University of Utah
2008	American Chemical Society Cope Scholar Award
2009	Fellow, American Academy of Arts and Sciences
2010	Fellow, American Chemical Society

ABSTRACT

Cynthia J. Burrows was born in St. Paul, Minnesota, one of two children. Her father was an electrical engineer in the aerospace industry, and her mother was a housewife. She liked school and was a good student; she had always known that she did not want to have one of the acceptable women's jobs, viz. teaching, nursing, or secretarial work. When she was in ninth grade the family moved to Boulder, Colorado, where later her high school chemistry class made beer that eventually exploded all over the classroom. That was her first clue that she wanted to be a chemist. She decided to attend the less expensive University of Colorado, but enjoyed moving five miles from home to live in a dorm. Burrows spent her junior year at the University of Edinburgh taking courses from Evelyn A.V. Ebsworth. In her senior year she entered Stanley Cristol's lab, working on Stern-Volmer plots. Next she spent four months as balloon technician on Ascension Island, returning to Cristol's lab for the remainder of the year.

Burrows decided to enter Cornell University's PhD program, where she became intrigued by Barry Carpenter's class and by reaction mechanisms. For her thesis she made five molecules, which, at times, she found a frustrating experience. For a postdoc she went to the lab of Jean-Marie Lehn—who had given the Baker Lectures at Cornell—in Strasbourg, France. She acquired two grants and so was able to stay for two years. While in France she had the *Chemical and Engineering News* job section mailed to her, as there was no internet, to search for positions; she returned to the United States for interviews at several institutions. She received an offer from State University of New York at Stony Brook, but it was for a Scott Anderson; he received her letter. They were both hired, and eventually they married. During their stay at Stony Brook they had triplets, compounding the difficulties of being the first tenure-track woman in the chemistry department. Steven Rokita, her collaborator and friend, was especially helpful during that year. Though Burrows slowed down some at this time—even enduring bed rest—she did not stop; instead, her lab came to her. She was back in the lab shortly after the children's birth, and when they were seven weeks old she ran a National Science Foundation conference.

Needing a bigger house anyway, Burrows and Anderson decided to make a more permanent move. They chose the University of Utah because Stony Brook's new president had a different focus for the school; because of economics; because the two had parents in the West; because they both liked outdoor activities; and because there was a cultural center in Salt Lake City. The only other woman in chemistry there had just left for medical school, so again Burrows was the only woman. One of her early priorities was to set up a maternity leave policy to encourage other women to come to and remain in the department. Nevertheless, she found the situation for women improving.

Burrows discusses at length women in chemistry and the changes she has seen during her career. She talks about child care; the necessity of paternal involvement; the importance of "climate" for women; men's careers; tenure and family planning; support and mentoring from her friends and colleagues in COACh and more informal groups. She describes the couple's pre-children sabbatical in Okazaki, Japan, talking about some of the differences between science there and in the United States and about her friend, Mitzuhiko Shionoya. She talks about being mentored by John Osborn and mentoring her own students; and about how to interest more young women and men in science by teaching more science earlier. She ends by stressing the importance of collaboration, especially hers with Steven Rokita.

INTERVIEWER

Hilary L. Domush completed a B.S. in chemistry at Bates College before earning an M.S. in organic chemistry and an M.A. in the history of science at the University of Wisconsin. As a graduate student, her research focused on 19th-century chemistry in Edinburgh. As program associate for the oral history program, Domush helps manage the program and conducts oral histories for the Women in Chemistry project.

TABLE OF CONTENTS

Early Years 1

Born in St. Paul, Minnesota. Father electrical engineer, mother housewife. Older brother. Liked school; good student. Outdoor activities with father. Move to Boulder, Colorado. Making beer in high-school chemistry class. Dislike of women's three traditional work options.

College and Graduate School 7

Attended University of Colorado. Lived in dorm. Junior year at University of Edinburgh. Evelyn A.V. Ebsworth. Senior year research with Stanley Cristol. Stern-Volmer plots. Few women in chemistry. Four months at Ascension Island. Balloon technician for National Oceanic and Atmospheric Administration. Another year in Cristol's lab. Entered Cornell University's PhD program. Jerry Meinwald. Liked logic of physical organic chemistry. Barry Carpenter and reaction mechanisms. Made five molecules for thesis.

Postdoctoral Years 23

Liked Baker Lectures at Cornell given by Jean-Marie Lehn. Entered his lab in Strasbourg, France. NSF-CNRS grant and Bourses Chateaubriand Scientifiques grant for two-year postdoc. Combination of fields.

First Faculty Position 27

Offer letter mix-up; eventually marries man who got her letter. Chose State University of New York at Stony Brook. First tenure-track woman in chemistry department. Teaching. Giving birth to triplets. Lab management while at home. Steven Rokita her collaborator and friend. Logistics of child care.

Move to Utah 44

Reasons for leaving Stony Brook, choosing University of Utah. Only woman again in chemistry departent. Maternity leave policy. Importance of "climate" for women. Tenure and family planning. Sabbatical in Japan in Eiichi Kimura's lab. Instrumentation in Okazaki for husband. Lab differences between United States and Japan. Language difficulties. Mitzuhiko Shionoya. No women in tenured positions there. Next sabbatical in Europe.

Further Thoughts about Women in Chemistry 59

Involvement in COACh. Sharing tips for teaching, dealing with students and male faculty. John Osborn her mentor in France. Mentoring her students. More science earlier in school. Hormonal influences on success in chemistry. Importance of collaborators, especially Steven Rokita.

Index 71

INDEX

A

Aix-en-Provence, France, 10
Alsace, France, 26
American Chemical Society, 28, 70
  Cope Scholar Award, 70
Anderson, Laurel (daughter), 54
Anderson, Scott L. (husband), 35, 38, 40, 42, 44, 45, 46, 52, 55, 57, 58
Anderson, Todd (son), 44
Apollo-Soyuz Test Project, 17
Armentrout, Peter B., 47
Ascension Island, 16, 17, 18, 19, 28
Atlanta, Georgia, 10
Atlantic Ocean, 16

B

Baird, Barbara A., 31, 32, 44
Baker Lecture Series, 23
Ball Corporation, 4
Barton, Jacqueline K., 51
Beal, Peter A., 48, 70
Beckerle, Mary C., 63
Bell, Thomas W., 34
Bonaparte, Napoleon, 17
Boulder High School, 4, 5, 6
Boulder, Colorado, 4, 5, 6, 8, 16, 17, 22
Bourses Chateaubriand Scientifiques, 25
Bowman-James, Kristin, 60
Bozeman, Montana, 46
Brazil, 17
Brigham Young University, 39
British, 17, 18
Brookhaven National Laboratory, 55
Bunnell, Barbara Estin, 10, 32, 64
Burrows-Rokita Collaboration, 40
Bush, President George W., 45

C

C&E News. *See Chemical & Engineering News*
California Institute of Technology, 32
Cambodia, 15
Cape Canaveral, Florida, 17
Cardiff University, 65
Carpenter, Barry, 19, 20, 31, 65
Centre National de la Recherche Scientifique, 24, 25, 26
Chapman, Orville L., 15, 19
Chemical & Engineering News, 28, 46, 66
Chen, Xiaoying, 40
Claisen rearrangements, 21
Clardy, John, 34
COACh. *See* Committee on the Advancement of Women in Science
collaboration, 70
Colorado, 11, 45, 47
Columbia University, 45
Committee on the Advancement of Women in Chemistry, 59, 62, 63
Conboy, John C., 64
Cornell University, 19, 20, 21, 23, 29, 31, 32, 34, 35, 63
Corsica (region), France, 58
Cristol Lecture in Physical Organic Chemistry, 11
Cristol, Stanley J., 11, 12, 16, 19

D

Darensbourg, Donald J., 32
Darensbourg, Marcetta Y., 32
David, Sheila S., 39, 48, 49, 66, 70
Davis, California, 15
Dietrich, Bernard, 26
DNA, 66, 70

E

E. I. du Pont de Nemours and Company, 16
Ebsworth, Evelyn A.V., 9
Edinburgh, Scotland, 9, 10, 25
Eisenstein, Odile, 24
England, 9
English, 24, 26, 56

Erica, 54
Europe, 11, 30, 31, 58, 65

F

Florida, 18
Fox, Marye Anne, 51
France, 24, 27, 30, 33, 34, 56, 58
French, 10, 17, 24, 25, 26
Friend, Cynthia M., 21, 31

G

Gates, William H., III, 68, 69
gender, 67
Germany, 7
Gladwell, Malcolm, 68
Gordon Research Conference, 48
Grey, Clare P., 39
Grissom, Janet W., 48

H

Hamilton, Andrew D., 28
Hanson, David M., 39
Harvard University, 7, 21, 45, 50, 65
Hegg, Eric, 66
Heisenberg Uncertainty Principle, 67
Hickerson, Robyn P., 44
high performance liquid chromatograph, 12
Hiroshima, Japan, 55, 56
Hoffmann, Roald, 22, 24
Honeywell, 4
Houk, Kendall N., 21
HPLC. *See* high performance liquid chromatograph
Huntsman Cancer Institute, 63

I

Imperiali, Barbara, 33
Indiana, 31
Institute for Molecular Science, 55
Istanbul, Turkey, 58
Italy, 58
Ithaca, New York, 22, 32

J

Japan, 56, 58
Japan Society for the Promotion of Science, 55
Jean, 42
John F. Kennedy Space Center, 17
Journal of Organic Chemistry, 53

K

Kadee, 54
Kenny, Shirley Strum, 45
Kiessling, Laura L., 51
Kimura, Eiichi, 55, 56
Klinman, Judith P., 32
Kotzyba, Florence, 26

L

Lehn, Jean-Marie, 23, 24, 26, 27, 29, 34, 65
London, England, 58
Long Island, New York, 31, 41, 45, 46

M

Madison, Wisconsin, 19, 49
Marburger, John H., III, 45
Marnett, Lawrence J., 68
Massachusetts Institute of Technology, 49
Meinwald, Jerry, 19, 35
Michigan State University, 66
Mid-Atlantic Ridge, 17, 18
Millar, Michelle, 38
Minnesota, 2, 4
minorities, 48, 67
MIT. *See* Massachusetts Institute of Technology
Moab,Utah, 47
Molinero, Valeria, 63
Monsanto Company, 16
Montana State University, 46
Morehouse College, 10
Muller, James G., 39
Myriad Genetics & Laboratories, 64

N

nanopore, 70

NASA. *See* National Aeronautics and Space Administration
National Academy of Sciences, 51
National Aeronautics and Space Administration, 17, 18, 19
National Center for Atmospheric Research, 17
National Institutes of Health, 32, 68
National Oceanic and Atmospheric Administration, 17, 19
National Organic Symposium, 46
National Science Foundation, 24, 25, 41, 56, 66, 68
New York, 45
New York City, New York, 31
Newton, Leslie, 7, 10, 64
NIH. *See* National Institutes of Health
NOAA. *See* National Oceanic and Atmospheric Administration
Nobel Prize, 24
Norway, 67
Notre Dame University, 31, 32
nuclear magnetic resonance, 27, 34

O

Ogata, Phil, 5
Ohio, 45
Okazaki, Japan, 55, 56
Olympic Games, 59
Osborn, John A., 65

P

Paris, France, 24, 25, 58
Parker, Kathlyn A., 60
Poulter, C. Dale, 46
Prague, Czechoslovakia, 58
Prestwich, Glenn D., 34, 47, 69
Princeton University, 28, 45
Provo, Utah, 39, 47

R

Radcliffe College, 7
reaction mechanisms, 19, 23
Richmond, Geraldine L., 60, 69
Rokita, Steven E., 39, 64, 66, 70

S

Salt Lake City, Utah, 45, 47, 48, 59
Sampson, Nicole S., 39
Scotland, 25
Sessler, Jonathan, 57
Shelter Island, New York, 41
Shionoya, Mitzuhiko, 56, 58, 59
Shumaker-Parry, Jennifer S., 63
Sigman, Matthew S., 66
Slade, Rachel M., 64
St. Helena, 17
St. Paul, Minnesota, 1, 4
Stanford University, 7, 35
Stang, Peter J., 46
State University of New York at Stony Brook, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 46, 47, 50, 55, 62, 64, 66, 70
stereochemistry, 67
Stern-Volmer plots, 12
Strasbourg, France, 23, 24, 31, 32, 55, 58, 60, 65
Suffolk County, New York, 46
Switzerland, 58

T

tenure, 38, 44, 45, 48, 49, 50, 51, 52, 57, 65
Texas, 31, 45
Texas A&M University, 31, 32, 69
Tokyo, Japan, 58, 59
Tulane University, 32

U

U.S. Air Force, 18
U.S. Supreme Court, 69
United Kingdom, 7
United States of America, 10, 18, 27, 30, 45, 56, 69
University of California, Berkeley, 32, 49
University of California, Davis, 15, 48
University of California, Los Angeles, 15
University of Cambridge, 7, 28

University of Colorado, 6, 7, 8, 11, 12, 15
University of Edinburgh, 7, 8, 11
University of Kansas, 49
University of Oxford, 7, 28
University of Pittsburgh, 28
University of Rochester, 32
University of Tokyo, 56
University of Utah, 1, 39, 48, 63
University of Wisconsin, 19, 49
Utah, 44, 46, 47

V

Valentine, Joan S., 44, 51
Vanderbilt University, 68
Vietnam, 15

W

Wales, 65
Washington, D.C., 24
White, Henry S., 70
Wildi, Eve, 5, 20
Women in Chemistry, 1, 20, 38
Woodward-Hoffman Rules, 22

Y

Yale University, 28, 45
Yancy, Asa G., Jr., 10