

CHEMICAL HERITAGE FOUNDATION

**JAMES C.A. BARDWELL**

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview  
Conducted by

William Van Benschoten

at

University of Michigan, Ann Arbor  
Ann Arbor, Michigan

on

5 and 6 April 2004

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

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**REFORMATTING:**

Kim Phan, Program Intern, Oral History, Chemical Heritage Foundation. B.A. expected 2011, Anthropology, Cornell University.

David J. Caruso, Program Manager, Oral History, Chemical Heritage Foundation. B.A., History of Science, Medicine, and Technology, Johns Hopkins University; PhD., Science and Technology Studies, Cornell University.

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X James Bardwell  
(Signature)

James Bardwell  
(Typed Name)

Department of Biology, University of Michigan  
4003 Natural Sciences, 830 No. University Drive  
Ann Arbor, MI 48109-1048  
(Address)

734.764.8028 jbardwell@umich.edu  
(Phone Number) (E-mail Address)

X 4/5/03  
(Date)

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## **JAMES C. A. BARDWELL**

Born in Saskatoon, Saskatchewan, Canada

### Education

1981 B.Sc., University of Saskatchewan  
1987 Ph.D., University of Wisconsin, Madison

### Professional Experience

1987-1989 National Cancer Institute, Frederick, Maryland  
Fogarty Fellow

1989-1993 Harvard Medical School, Boston, Massachusetts  
Helen Hay Whitney Fellow

1993-1995 University of Regensburg, Regensburg, Germany  
Visiting Professor and Alexander von Humboldt Fellow,  
Institute of Biophysics and Physical Biochemistry

1996-2001 University of Michigan, Ann Arbor, Ann Arbor, Michigan  
Assistant Professor, Department of Biology  
2001-2006 Associate Professor, Department of Molecular,  
Cellular and Developmental Biology  
2005-present Investigator, Howard Hughes Medical Institute  
2006-present Professor, Department of Molecular, Cellular and  
Developmental Biology University of Michigan

## ABSTRACT

**James C. A. Bardwell** was born and raised in Saskatoon, Canada. He was influenced early on by his family and by his religion, and knew that he had the interest and drive to go into science. Bardwell entered the University of Saskatchewan and was introduced to research and laboratory work by Louis P. Visentin at the Canadian National Research Council, where he focused his work on recombinant DNA.

Bardwell's interest in the outdoors led him to take two trips between his undergraduate and graduate work to Papua, New Guinea and the Northwest Territories, Canada. He continued to travel throughout his graduate career at the University of Wisconsin, Madison and his postdoctorates at the National Cancer Institute and Harvard Medical School. While at Wisconsin, Bardwell worked in Elizabeth Craig's laboratory on heat-shock proteins, which remain an interest of his to this day. His postdoctoral work included research in genetics on protein disulfide isomerase. After his postdoctoral research and several publications, Bardwell travelled to Germany for a guest professorship, where he gained experience in running a small lab.

He left Germany for a position at the University of Michigan, where he has continued his research on protein folding, and where he has had to juggle between family and career—specifically the two-body problem. Bardwell's roles as principal investigator and as an associate chair of his department have required him to take on many responsibilities, including administrative work and recruitment. These duties are in addition to his more "everyday" duties, which include publishing, grant writing, overall laboratory management, and his time at home. He begins to conclude the interview by reflecting on the wider scope of national scientific policy, public awareness of science, and scientific funding, and how these broader themes have influenced his own work and that of his peers. Drawing from his own experience with recruiting, his graduate work with Craig, and his interactions with his wife and peer Ursula Jakob, Bardwell also discussed in detail the state of women in science—in the United States, in Germany, and in his own lab. The interview ends with a discussion of the Pew Scholars Program in the Biomedical Sciences, which united Bardwell's love for travel and open discussions of scientific research.

## UCLA INTERVIEW HISTORY

### INTERVIEWER:

William Van Benschoten, Interviewer, UCLA Oral History Program; B.A., History, University of California, Riverside, 1990; M.A., History, University of California, Riverside, 1991; C.Phil., History, University of California, Los Angeles, 1995.

### TIME AND SETTING OF INTERVIEW:

**Place:** Bardwell's office at the University of Michigan.

**Dates of sessions:** April 5, 2004; April 6, 2004.

**Total number of recorded hours:** 6.0

**Persons present during interview:** Bardwell and Van Benschoten.

### 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, Van Benschoten held a telephone preinterview conversation with Bardwell to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. He also reviewed documentation in Bardwell's file at the Pew Scholars Program office in San Francisco, including Bardwell'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.

Bardwell reviewed the transcript. He verified proper names and deleted some material.

Carol Squires prepared the table of contents and TechniType Transcripts compiled the index.



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