

CHEMICAL HERITAGE FOUNDATION

REBECCA W. HEALD

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Robin Mejia

at

University of California, Berkeley
Berkeley, California

on

17, 18, and 19 October 2005

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

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REBECCA WRIGHT HEALD

1963 Born in Bellefonte, Pennsylvania, in December

Education

1985 B.A., Chemistry, Hamilton College

1993 Ph.D., Cellular and Molecular Physiology, Harvard Medical School

Professional Experience

1985-1987 UMDNJ-Rutgers Medical
Research Assistant, Anatomy and Cell Biology Department

1993-1997 European Molecular Biology Laboratory
Postdoctorate, with Eric Karsenti and Tony Hyman

1997-2003 University of California, Berkeley
Assistant Professor, Department of Molecular & Cell Biology
2003-present Associate Professor, Department of Molecular & Cell Biology

Honors

1990-1992 Ryan Pre-doctoral Fellowship

1993-1996 American Cancer Society Post-doctoral Fellowship

1999-2003 Pew Scholars Award in Biomedical Sciences

2000 Hellman Award

2001-present Editorial Board, *The Journal of Cell Biology*

2003-present Cancer Research Coordinating Committee

2004-present Member, NIH Study Section "Nuclear Dynamics and Transport"

2005 American Society for Cell Biology, Women in Cell Biology
Junior Career Achievement Award

ABSTRACT

Rebecca W. Heald grew up in Greenville, a small college town in western Pennsylvania, where she was the youngest of three daughters. Her father was a chemistry professor at Thiel College in Greenville, and her mother was a chemistry instructor there as well. Heald's father's sabbatical took the family to New Zealand when Heald was four; she learned to read there and still loves to read. When she was in junior high school, her father took another sabbatical; this time the family went to Australia. In high school Heald had a very good teacher of calculus and one of English whom she found inspiring. In general she found her science instruction lacking, even in the advanced after-school class she took. She was editor of and photographer for the yearbook in her high school, which included eighth through twelfth grades. Their parents always expected that all three girls would not only go to college, but would also get advanced degrees. As it happens, all three ended up in science fields, Heald's sisters becoming doctors.

Heald and her family considered a liberal arts education very important, so she attended Hamilton College in Clinton, New York, where she majored in chemistry. The department was too small to provide lab work until her last year, when she did her first research project in Donna Brown's biochemistry lab. For two years she worked as a research associate for Sarah Hitchcock-DeGregori, helping her set up her lab in New Jersey, doing some real analysis, and publishing some papers.

During her time in Brown's lab, Heald heard Bernardo Nadal-Ginard give a talk that influenced her to apply to Harvard University for graduate school. There she worked with Frank McKeon. Here she describes the graduate program at Harvard; McKeon's mentoring style; her work day during graduate school; and the process of writing her thesis. Then she talks about her doctoral work on the dynamics of the nuclear envelope during the cell cycle. She wanted to go to Europe for a different lifestyle and to be farther from her family, so she did her postdoctoral fellowship with Eric Karsenti at the European Molecular Biology Laboratory (EMBL) in Heidelberg Germany, where her research focused on spindle formation. She describes Karsenti's mentoring style and the running of the EMBL.

At that point Heald decided she wanted to be back in the United States, and on the West Coast, at a larger university, preferably a public school and one that was helpful and supportive of its faculty. She accepted a position at the University of California, Berkeley, and set up her lab. Here she discusses general issues of grant writing; women as principal investigators; gender issues in science; publishing; funding in general, as well as funding in Europe compared with funding in the United States; foreign students; and ethics in science. She talks about her role in the lab; her lab management style; her collaborations; and her teaching and administrative responsibilities.

Heald concludes the interview with information about current and planned research on chromosome architecture and mitotic spindle assembly; practical applications of her work; and an explanation of the impact of the Pew Scholars Program in the Biomedical Sciences award on her work. She talks about what she likes most about being a principal investigator and describes a typical work day, finishing with her leisure activities.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Robin Mejia, Interviewer, UCLA Oral History Program; B.A., Biology, University of California, Santa Cruz, 1997

TIME AND SETTING OF INTERVIEW:

Place: Heald's office at the University of California, Berkeley.

Total number of recorded hours: 5

Persons present during interview: Heald and Mejia.

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' 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, Mejia contacted Heald by telephone and email to obtain Heald's curriculum vitae and agree on an interviewing schedule. Mejia also reviewed Heald's web site and published papers and reviewed the documentation from Heald's file at the Pew Scholars Program office in San Francisco, including her proposal application and letters of recommendation.

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.

Heald did not review the transcript. Therefore, some proper names and other information remain unverified.

Carol Squires prepared the table of contents. TechniType Transcription compiled the guide to proper names.

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