CHEMICAL HERITAGE FOUNDATION

YOLANDA SANCHEZ

The Pew Scholars Program in the Biomedical Sciences

Transcript of Interviews
Conducted by

David J. Caruso

at

Dartmouth College
Hanover, New Hampshire

on

29 and 31 July 2008

(With Subsequent Corrections and Additions)

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YOLANDA SANCHEZ

1962 Born in El Paso, Texas on 16 September

Education

1987 BS, Biology, University of Texas, El Paso
1996 PhD, Biology, University of Texas, Houston

Professional Experience

Baylor College of Medicine
1994-1998 Postdoctorate, Biochemistry

University of Texas M. D. Anderson Cancer Center
1997-2000 Postdoctorate, Laboratory Medicine

University of Cincinnati, College of Medicine
1998-2004 Assistant Professor
2004-2006 Associate Professor with Tenure

Dartmouth College Medical School
2006-present Associate Professor

Honors

1985 NIH/NIGMS MARC Scholarship and Grant Recipient
1987 Summa Cum Laude Graduate at the University of Texas, El Paso
1987 University Honors, University of Texas, El Paso Honors Program
1987 Biology Department Honors with Senior Honors, University of Texas, El Paso
1988 NIH/NIGMS Minority Access to Research Careers (MARC) Predoctoral Fellowship Recipient
1988 Young Investigator Travel Grant Recipient, "Gene Regulation and Oncogenes" Conference, American Association for Cancer Research
1995-1997 NIH/NIGMS NRSA Postdoctoral Fellowship Recipient
2001 Career Development Award, Department of Defense Breast Cancer Program
2001 Pew Scholar in the Biomedical Sciences

ABSTRACT

Yolanda Sanchez was born in El Paso, Texas, but grew up in Ciudad Juárez, Mexico. She was one of five children whose father was an architect, now a teacher, and a housewife. Sanchez spent a year in New Zealand, improving her English and beginning to establish her independence. Her interest in science began in high school, where she did well in math and chemistry, loved biology, and did some research on *Achyla recurva*. Her parents valued education, but their daughters (who were told they could not marry until they had finished a degree) were allowed to go to college only locally, so Sanchez chose University of Texas at El Paso (UTEP) and was awarded a Minority Access to Research Careers (MARC) grant. She worked on tumor suppressor genes and became interested in cell cycle and DNA repair. She chose Ann Killary's lab at the University of Texas at San Antonio (UTSA), moving with Killary's lab to the University of Texas at Houston, where she worked on microcell-mediated chromosome transfer. She married another scientist during this time and stayed in the lab for another year while waiting for her husband to finish his degree. For a postdoc Sanchez went to Stephen Elledge's lab at Baylor University to work on the cell cycle in yeast. She published three papers there, including a *Science* paper on Rad53 kinase, and found Chk1 in yeast and humans.

Sanchez and her husband, Craig Tomlinson, accepted positions at the University of Cincinnati. She received a good startup package and found congenial colleagues as well as the possibility of collaborators. She was able to bring with her what she had worked on in Elledge's lab, but she still found the transition to being PI difficult in some ways, especially because of the intrusion of politics into her lab management and into publishing. In her lab she emphasized teamwork and toughness.

Next Sanchez moved to an associate professorship at Dartmouth College, where her husband became head of the genomics core. She spends less time in the lab but hopes to be able to spend more time there in the future. She believes that basic science is crucial for medicine and that National Institutes of Health allocates funding inappropriately against basic science.

Sanchez discusses her Pew Scholars application topic (DNA damage and repair) and scholarship, the money it afforded her, potential and realized collaborations, and the Pew meetings. Her lab receives annual income from a patent; she talks about that patent and patents in general; she believes that patents help protect innovation. Sanchez compares her experience of religion in science in both Mexico and the United States. She describes her experiences with education of laymen, including the politics often involved in that education. She discusses balancing home life with work life and, although her husband is very supportive, she advocates for government-mandated and government-provided child care. Sanchez concludes her interview with a call for ethics classes and a greater emphasis on ethics in the practice of science.

INTERVIEWER

David J. Caruso earned a BA in the history of science, medicine, and technology from Johns Hopkins University in 2001 and a PhD in science and technology studies from Cornell University in 2008. Caruso is the director of the Chemical Heritage Foundation's (CHF) Center for Oral History, president of Oral History in the Mid-Atlantic Region, and the book review editor for the *Oral History Review*. In addition to overseeing all oral history research at CHF, he also holds an annual training institute that focuses on conducting interviews with scientists and engineers, he consults on various oral history projects, like at the San Diego Technology Archives, and is adjunct faculty at the University of Pennsylvania, teaching courses on the history of military medicine and technology and on oral history. His current research interests are the discipline formation of biomedical science in 20th-century America and the organizational structures that have contributed to such formation.

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