



Diane L. Barber, PhD

Training: Her educational history includes a BS and MS in Physiology from UC Davis in 1975 and 1977, respectively, a PhD in Anatomy from UCLA in 1985, and postdoctoral work at the University of Massachusetts Medical Center in 1985 to 1987

Department and Position: Professor and Vice-Chair, Department of Cell and Tissue Biology

Career Profile: From 1977 to 1980 and before starting her PhD work, she was a full-time lecturer in the Biology Department at UCLA teaching Physiology courses, followed by a position as Assistant Professor in the Department of Surgery at Yale University from 1987 to 1991. Wanting to return to California, her native state, she accepted an FTE position as Assistant Professor in the School of Dentistry. At this time, Dr. Barber was in the Department of Stomatology, which later was divided into separate clinical and basic sciences departments. She was promoted to Associate Professor with tenure in 1995 and to Professor in 2001. She is currently Professor and Vice-Chair in the basic sciences department of Cell and Tissue Biology.

Dr. Barber's research program focuses on understanding how signals at the plasma membrane regulate the actin-based cytoskeleton, cell movement and proliferation. The research emphasis is on basic biology but with a direction toward understanding cell transformation, tumorigenesis, and metastasis. A unique aspect of the research work is the regulation of cytoskeleton dynamics, metastasis, and tumor progression by plasma membrane ion transport proteins controlling intracellular pH homeostasis, and more recently investigating how physiological changes in pH affect protein structure and function. Dr. Barber has been fortunate to have maintained extramural funding throughout her career, starting with an NIH R29 award in 1987 designated for new investigators. The R29 was renewed as an R01 and she was awarded a second NIH R01 before coming to UCSF. Despite cyclic fluctuations in the funding climate, for the past 15 years she has maintained two R01 grants, sometimes juggling three, and a number of smaller awards from the American Heart Association, NASA, and the Sandler Foundation. She participates in scientific societies, including chairing symposia for the American Society for Cell Biology (ASCB), Experimental Biology (EB), and Keystone meetings, and serving as Chair and Vice-chair for Gordon Research conferences.

Dr. Barber has teaching responsibilities, lecturing in anatomy to professional students and in cell biology to students in PhD, MD/PhD, and DDS/PhD programs. She is currently director of BMS260, a cell biology course taught to students in the BMS, OCS, PSPG, and MSTP programs. Dr. Barber was recently appointed to the review committee of the newly created UCSF Resource Allocation Program that provides a streamlined approach to obtaining intramural funding with an emphasis on junior investigator pilot funding. She also currently serves on the Executive Committee for the BMS program and the Steering Committee for the OCS graduate program.

Personal Profile: Juggling the responsibilities and joys of her professional and personal life without surrendering her sanity has been challenging, but manageable with organization and humor. Dr. Barber has two daughters: Claire, age 20 and Lauren, age 17. Until her older daughter was in high school, Dr. Barber maintained a "smaller" lab with 5 to 6 postdocs/graduate students, which allowed her to exist "without too much sleep deprivation". Her lab now has 10 members and Dr. Barber is committed maintaining an expanded research program and to mentoring and facilitating the careers of junior investigators.

