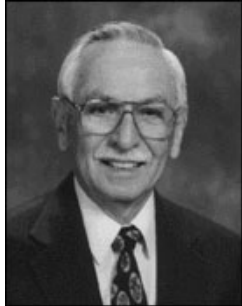




Dr. Eugene Cota-Robles – Microbiologist

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I was born in 1926, in Nogales, Arizona, six years after the end of the Mexican Revolution. Both of my parents were elementary school teachers in Pueblo Nuevo, Sonora, a mining village in northern Mexico. My father was very politically active in the revolution by supporting education and the eradication of poverty. He was also a very devout Catholic. However, the revolution was very anti-religious and this created an inner conflict for him. My parents actually left Mexico twice before I was born, and eventually they left for good, settling our family of eleven children, first in Nogales, and then Tucson, Arizona.

Since my parents were from Mexico, my background was heavily influenced by Mexican culture. Even though Tucson was a largely Mexican-American city, I only remember having one Latino teacher in all of my twelve years of school. When I was in the second grade my teacher changed my name from “Eugenio” to “Eugene” because she said it was easier to pronounce. On the whole, however, I remember my teachers being very supportive. Once my fifth-grade teacher told me that she was going to start calling me “Senator Cota-Robles.” I saw this as a manifestation of her high expectations for me.

My education was interrupted by World War II when I joined the Navy and went to the South Pacific. In addition to fighting for our country, serving in the U.S. military took me, as a seventeen year old, to places like New York City, San Francisco, Honolulu, Ulithi, and Hiro-Wan, Japan. Secondly, the GI Bill entitled World War II veterans to full financial support for four years of college. I was thus able to return to Tucson and attend The University of Arizona (www.arizona.edu).

I was on track to become a dentist, like my mother had always wanted, even though I didn’t have any of the skills that a dentist needs. However, pre-dental students have to complete science courses, and it was in my sophomore year in a bacteriology class that my life and the course of my education were changed forever.

One person who particularly influenced me was a friend named Charles Murphy. He was a graduate teaching assistant in my class, as well as being a World War II veteran. He was the reason I went to graduate school. After getting my B.S., I ended up being employed by Gerber Baby Foods in Oakland, California as a quality control bacteriologist. My job quickly became routine and somewhat boring. Murphy was in graduate school at the University of California, Berkeley (www.berkeley.edu). When he found out that University of California, Davis (UC Davis) (www.ucdavis.edu) was starting a graduate studies program in the sciences, he decided to transfer there and urged me to apply.

As with my undergraduate education, I was extremely fortunate to have a close community of friends and colleagues at UC Davis. Our senior professor and academic advisor, Dr. Jerry Marr was also our good friend. He was the type of professor, that after our experiments in the laboratory were concluded, would take us to his home and bake us an apple pie at midnight!

Our work focused on a study of the internal organization of a particular bacterium, *Azotobacter agilis*, a nitrogen-fixing bacterium. We were attempting to isolate and pinpoint the sites where biologically useful chemical energy was created in the cell. One of the reasons I was particularly interested in *Azotobacter* was because this bacterium is able to fix atmospheric nitrogen into amino acids, a rare and biologically

very important reaction. The team I worked with was among the first to establish that the enzymes responsible for energy metabolism were localized in the bacterial cell membrane.

After graduate school I studied further as a U.S. Public Health Service Postdoctoral Fellow in Stockholm, Sweden and later I became a professor of Microbiology at the University of California, Riverside (www.ucr.edu) . I continued to work in the area of microbial cell structure, including the study of the replication of viruses within bacterial cells at Pennsylvania State University and the University of California, Santa Cruz.

I am now a Professor Emeritus, which means that I have retired from my position at the university. Currently I am promoting rigorous college preparation for minority students, particularly Latinos. My advice to students is to do the best in your studies, make many friends, and always, always read. Reading, friends, and personal success will all help expand your horizons and make it more likely that you will have a fulfilling life.