

# Lifelines

from the National Cancer Institute



## **Dr. Jorge Gomez: The Insights of a Cancer Scientist Applying Research to Human Health across Borders**

*By the National Cancer Institute*

*Dr. Jorge Gomez is a senior advisor with the National Cancer Institute's Center for Global Health. He manages the United States–Latin America Cancer Research Network, which is running a cross-border study of risk factors for and characteristics of breast cancer in Latin American women. Dr. Gomez moved to the United States from Mexico in 1982 to pursue a career in translational medicine—helping move discoveries from the laboratory to the clinic as quickly as possible.*

### **What do researchers need to focus on to reduce cancer health disparities among Hispanic Americans?**

Cancer rates in Latinos are lower than in non-Hispanic whites. But Latinos tend to be diagnosed with more-advanced cancer. They also have more complications from treatment and higher rates of cancer death. Moreover, they may be more likely to not follow through with recommended treatments because of cultural issues, including a sense of fatality. So many different issues need to be addressed when dealing with Latino populations with cancer.

And one of the problems is that many of our investigators and health care research institutions do not understand the Hispanic or Latino community here in the United States. They tend to put everyone in this racial/ethnic group into the same basket. But the reality is that we have Latinos and Hispanics who came to the United States 200 years ago and are fully integrated into American society, as well as those who came a year ago, a month ago, yesterday.

We also have subpopulations of Latinos and Hispanics in the United States. Those from Central America are not the same as those from South America, or the Caribbean, or the Mexican border. We need to understand where people are coming from because their nutritional issues, environmental exposures, customs, and cultural issues are all different. And we need to understand culture in order to manage their medical issues appropriately.

### **What drew you to medicine and basic science as a career?**

When I began my career in Mexico, I was interested in trying to help people with health problems, so I enrolled in medical school. Back then, there was a tremendous new field of science under development—immunology. And I became curious about the body's immune response to different agents, such as microorganisms and tumor cells.

After I graduated from medical school in Mexico, I had an opportunity to come to the United States and enroll in a postgraduate program in immunology. While I was doing that work, the field of molecular biology really started to take off, so I jumped into that field as well.

It is fascinating how you can apply your knowledge of biology and medicine to try to solve a particular human health problem. I went into these different areas because I was very interested in applying basic biology to the medical field to help patients with their diseases. That motivation is still there for me—I feel very strongly that this is my calling and what I will continue to do.

### **What would you want a Hispanic student interested in a career in science to know?**

I believe that careers in science are promising. Science continues to evolve—right now. Proteomics, nanotechnology, and other fields are emerging as a result of the vast knowledge we have acquired in biochemistry, molecular biology, and genetics. The application of computers and information technology in medical research is also fantastic.

There are opportunities that we didn't have before—we didn't have this vast knowledge, we didn't have the equipment that we have now. So I think it's an opportune time to be a young scientist. Latinos are now the largest minority population in the United States, and we need to make an impact in science; we need to contribute to the field. Because this is how diversity can be felt in the United States—not just with numbers, but by our contributions as Hispanics or Latinos.

### **Do you have any advice for young Hispanic scientists beginning their careers as independent researchers?**

Don't try to do it alone. Early in our careers, all of us need a mentor who will help us—help us formulate our hypotheses, help us submit our grant applications, and help us see the world in a more mature way. I've had great mentors in my career, and they made a big difference.

### **Do young Hispanic Americans face any barriers in the sciences?**

I came to the United States as a relatively young scientist, and I certainly can say that there were a lot of barriers then. And there are still barriers today. In my view, Hispanics and Latinos are not being recruited—and we're not being promoted—in sufficient numbers. We need to bring more members of minority communities into the scientific

workforce; if anything, it will make it a richer place. Diversity brings different perspectives.

*NCI leads the National Cancer Program and the NIH effort to dramatically reduce the burden of cancer and improve the lives of cancer patients and their families, through research into prevention and cancer biology, the development of new interventions, and the training and mentoring of new researchers. For more information about cancer, please visit the NCI web site at [www.cancer.gov/espanol](http://www.cancer.gov/espanol) or call NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). More articles and videos in the culturally relevant Lifelines series are available at [www.cancer.gov/lifelines](http://www.cancer.gov/lifelines).*