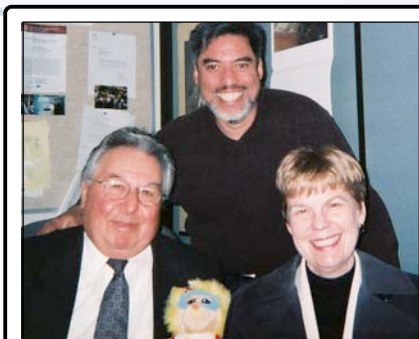


Featured Chemist: Dr. Mario Blanco
Beckman Institute at Caltech, Pasadena, California

After having a very exciting National Chemistry Week, I packed my bags for my next wonderful trip about careers in chemistry! I traveled all the way to Pasadena, California to visit another chemist friend of the American Chemical Society. His name is Dr. Mario Blanco and he works for the Beckman Institute at Caltech. At Caltech, Dr. Blanco also works with the Center for the Science and Engineering of Materials (CSEM) which is sponsored by the National Science Foundation (NSF).



Here I am in Dr. Blanco's office. You can see the white board with all of his notes. Wonder what he would do if I erased all that? I sure don't want to find out!



Dr. Blanco took me to visit some of his friends. In this picture, I am sitting with Dr. Blanco, Joe Casanova (a teacher) and Joe's wife, Kathy. They live in Long Beach, California. Maybe I can go visit them again next time I am in town!

I first asked Dr. Blanco to tell me more about his job. We were in an office, not a laboratory, so I didn't see any lab experiments going on. This time I did not even have to wear safety gloves or goggles to work! All I saw were computers. Dr. Blanco works on the computers to learn how molecules behave, or act, around other molecules. They "speak" using a language called "quantum mechanics". Instead of mixing chemicals in the lab, they let the computers do all the mixing!

It was really fun watching Dr. Blanco and his students work. They even use video game cards to help them work by making the computers "speak" faster! I really liked this part of the job. I guess all the video games I asked to get for my birthday might just help me learn to be a better chemist when I grow up!



Dr. Blanco has a hold of me by my backpack! He must have heard me joking about erasing his white board. Hope I'm not in too much trouble!





One thing that I really enjoyed learning about was how they use this “chemistry with computers” to help discover new medicines for sick children. They also learn how to do things such as help other scientists like biologists find new plants to make new medicines, and help develop new materials to make better toys and safer cars.

Dr. Blanco was interested in science when he was growing up. He liked to read science magazines and loved working with computers the most! His favorite thing about being a scientist is “getting up in the morning thinking what to do next and solving hard problems.”



Dr. Blanco is showing me a protein molecule, the smallest part of a chemical. A protein is a molecule that all living things need to help them grow. Many foods are high in protein. I like milk, peas and beans the best! They are high in protein and help me grow!

Before I left, I learned that Dr. Blanco sometimes visits schoolchildren to talk to them about his work. He told me about a visit he made to a high school where he talked to the students about hybrid cars. The car

company, Honda, even let them bring one of these new cars to show everyone. He told them all about the materials used to make the car and how chemistry is helping to make better and safer cars for the future. I cannot wait to see what types of cars will be designed by the time I get my driver’s license!

Dr. Blanco said he hoped that next year he could tell me more about his work and how the video game cards are helping them work even faster. He also said his sons love to go fishing. Maybe next year I’ll come for another visit and he can tell me all about what he has been doing since I left—just this time on a fishing boat!

If you have any questions about my visit, you can write to me at meg@acs.org.

Personal Profile: Dr. Mario Blanco

What is your favorite food?
Mangos!

What is your favorite color?
Sky blue

What is your favorite movie?
The Man Who Would Be King

When is your birthday?
August 16 (Neil Armstrong and Napoleon were born on this date!)

What is an accomplishment you are proud of?

I am the proud father of two sons; now both in college. I also received a 1st prize in Nanotechnology, 2002.

What is a very interesting project of which you were a part?

I am helping create new nanomachines.

What is your favorite pastime?

Racquetball, travel, theater plays, and reading exciting books.

Can you tell me a little about your family?

My parents were from Guatemala. My grandma is 105 years old! She lives in the countryside, next to a Mayan city that was lost in the jungle for many centuries. I have two brothers. One is a doctor and the other is a professor.

