



Eva Nogales

Lawrence Berkeley National Laboratory

Programs 26-33

1. A WORLD TO DISCOVER

Eva Nogales is a physicist, a biologist, and woman who understands timing! This respected researcher at Lawrence Berkeley National Laboratory in California loves science and has a knack for being at the right place at the right time.

Eva Nogales

My path was to become a physicist and then a biologist. It's a transition that's very common these days, one of the reasons is that biology is becoming more and more mathematical.

Biology opens the door to an immeasurable, dynamic, exciting world that is still to be discovered!

Eva Nogales

In biology we are at the moment where you might say: "I only know that I know nothing." We are beginning to understand how much there is that we still don't know.

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2. FINDING A CURE FOR CANCER

How can we find a cure for cancer? That's surely one of the most difficult questions of our time; but thanks to the dedication of scientists like Eva Nogales, the hope persists that some day we may have an answer!

Eva Nogales

What we are trying to do is to discover what the molecular mechanisms are that make cells grow, divide, what makes their functions normal or that they become sick.

Eva Nogales, biophysicist at the Lawrence Berkeley National Laboratory, is a spirited Spanish woman who has lived immersed in the mysterious micro-world of cells.

Eva Nogales

The more we know, the more we can predict that something is wrong and try to cure it one way or another.

Eva Nogales's discoveries have helped to decipher the function of complicated cellular structures, and they have become the raw material for pharmaceutical laboratories that are looking for more effective drugs against cancer.

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3. NEW MEDICINES: NEW HOPE

Hope is the last thing to die.

That notion ought to sustain humanity in the twenty-first century, as we quest for solutions to the scourge of deadly diseases and suffering they bring.

Eva Nogales is a Spanish scientist who works at the Lawrence Berkeley National Laboratory, leading the way to deciphering unsuspected biological universes.

Eva Nogales

Knowing how cells normally function, we can deduce what medicines are doing and, with a little luck, how they could be modified to do a better job.

The enhancement of our knowledge of cells promises to yield critical information about how to attack an illness at its most primary level.

Eva Nogales

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4. CANCER: FROM PERFECTION TO CHAOS

A cell is a structure that seems perfect. However, it is also a unit that can ail, grow out of control and, ultimately, die.

Eva Nogales

Normally, every cell in our bodies has a specific job, for example, it is part of the skin and it keeps us isolated from the outside, or it's part of the stomach and carries out digestive processes.

Eva Nogales of Lawrence Berkeley National Laboratory knows more than many about the mysteries of cells. The Spanish biophysicist explains what happens to cells when cancer begins to arise.

Eva Nogales

They begin to lose their differentiation, they stop doing the job they were normally doing, they divide in an uncontrollable fashion, and, to top it all off, they spread, and that's what's called metastasis...they spread throughout the whole body.

Nogales is tireless in the search for a cure for this disease that has caused so much suffering to so many.

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5. TURBULINE IS THE KEY

Turbuline, a cellular protein, may be the key to the treatment for cancer. Scientists have researched its atomic structure for more than 20 years; and the research ended successfully, mostly due to the tireless work of Eva Nogales from Spain. Today she is a distinguished scientist at Lawrence Berkeley National Laboratory.

Eva Nogales

I will always remember the day when I finally found the atomic structure for turbuline; it was mid-1997. I remember the moment when I realized that I had finally discovered it. It was an incredible feeling.

So, what did you do?

Eva Nogales

I immediately called my boss and said, "We've got it! At last! We have it!"

What's the discovery experience like?

Eva Nogales

"It's very exciting, but it's even more powerful to share it, to show it to others and to see that it's something important. It's a wonderful sensation."

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6. SUCCESS BEYOND IMAGINATION

Eva Nogales of Lawrence Berkeley National Laboratory is a very successful scientist. Her discoveries in the field of cellular microbiology have been a true contribution in the fight against cancer.

Eva Nogales

I come from a poor family, a hard-working family from Spain; my parents grew up in post-Civil War Spain. They couldn't even go to high school, but they were very obsessed that their children get an education.

Her parents' efforts took Eva beyond what even they themselves might have imagined.

Eva Nogales

My own success has taken me far away from them - that's one thorn in our side. But there have been times when I have won awards in Spain and they have received them in my name. It's one way to give back to them everything they did for me.

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7. YOU DON'T HAVE TO BE A GENIUS

For many people, the world of science is mysterious and unfathomable; you practically have to be equipped with superpowers or almost a genius to gain access. But Eva Nogales, a scientist at the Lawrence Berkeley National Laboratory, insists that heading into the world of science is much easier than it seems.

Eva Nogales

You have to be curious and excited about the work you do.

Nogales assures us that in order to be a good scientist you only have to have a vocation and dedication.

Eva Nogales

You need to enjoy not only the process of discovery, but also the process of searching; because although everyone only talks about us when we discover something, most of the time what we're doing is looking.

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8. A WOMAN IN HISTORY

Eva Nogales, a biophysicist at Lawrence Berkeley National Laboratory is one of the most important scientists of the moment, a woman who has made history with her cancer research and contributed to humanity's scientific development.

Eva Nogales

There was a time when most of the world was waiting to be discovered; people left on a boat and didn't know what they were going to find and there was this sense of discovery. Biology currently is living a moment a little like that.

Participating in humanity's progress is more than satisfying for Nogales, who lends her steadfast support to the women scientists of the future.

Eva Nogales

It's very important that women who have been successful in their careers be an example for other women so that they know that they too can do it; they can be a woman, have an accent, come from the working class, and in the end be successful.

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