

UC SANTA BARBARA

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UCSB Chancellor's Community Breakfast to Focus on Post-Quake Radiation

The Fukushima power plant suffered major damage when it was hit by a tsunami following the earthquake off the coast of Japan on March 11. That event brought into sharp focus the danger of radiation associated with nuclear power plant disasters, a concern that UC Santa Barbara physicist Benjamin Monreal has studied in detail.

Monreal, an assistant professor of physics, will speak at a UCSB Chancellor's Community Breakfast on Tuesday, May 3, at 7:30 a.m. in Santa Barbara. His presentation is titled "Fukushima, Chernobyl, and Beyond: Understanding and Reacting to Radiation." The UCSB Affiliates event will be held at El Paseo Restaurant, 813 Anacapa Street #10, Santa Barbara. Tickets are \$20 per person, and payment must be made in advance. For reservations, call (805) 893-2877.

Monreal will explain what radiation is and how scientists determine its risk. He will give a quick overview of basic nuclear physics, describing why some nuclei are radioactive and others are not. He will also describe how radiation causes harm.

The physicist will compare and contrast the accidents that occurred at Chernobyl and Fukushima. "Chernobyl was bad to begin with because of the huge amount of radiation released, but it was made immeasurably worse because they skipped very basic steps that would have protected the public," said Monreal. "Fukushima has

released lots of 'certain types' of radiation -- and I'll discuss the differences -- but has largely avoided harming people. A bit of chemistry will explain why the basic public precautions, such as food monitoring and local evacuation, work as well as they do."

The overall message of Monreal's talk will be that radiation is not inherently scary; rather, concern is proportional to how much radiation an individual absorbs.

"Compared to many other environmental health risks, it is pretty easy to understand and interpret," said Monreal. "Since the public has to deal with natural and manmade radiation, it should have the tools to understand it."

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.