Strengthening the fight against pandemics

Hailing from the world’s second most populated country, microbiologist Alina Deshpande understands how our highly mobile and connected world may be susceptible to pandemics.

Always fascinated by infectious diseases, Deshpande leads a global disease surveillance project at the Lab, a multi-million dollar effort that explores the most critical aspects of international disease awareness. She is dedicated to strengthening the world’s fight against infectious diseases by providing new tools for early detection and mitigation of disease outbreaks.

A researcher at Los Alamos, Deshpande left India with her husband to become a student at the Lab and pursue a doctorate in biomedicine.
Her graduate research focused on cervical cancer genetics. She received a post-doctoral fellowship in 2004 to pursue research on host-pathogen interactions, studying cholera and anthrax.

New tools aid in early detection

Deshpande and Lab colleagues recently returned from Chicago, where they led a biosurveillance panel to address essential science for public health.

According to the panel experts, it is essential that nations are able to quickly detect and characterize a biological threat affecting human, animal or agricultural health. Detection and characterization enables lives to be saved and offers improved outcomes in various scenarios such as the purposeful release of a biothreat agent, an emerging infectious disease outbreak, pandemic, environmental disaster, or food-borne illness.

Persistence is key to success

Deshpande’s great grandmother inspired her by leaving her country to obtain a doctorate, a significant achievement for an Indian woman at the time.

Later at Los Alamos, Deshpande learned leadership skills from chemist Kristin Omberg.

Deshpande’s advice? "You can be successful in anything your heart desires, but you must be persistent, focused and not impulsive."

Dance does more than a heart good

Deshpande and her husband share a love of knowledge and travel, and they also teach aerobics.

A passionate dancer, she directs and choreographs benefit North Indian dance (Kathak) shows every year, donating proceeds to her native country’s orphanages, schools for mentally challenged, science labs for the underprivileged, hospice care and cancer wards.