Dr. Lucile Jones
Full Biography

Dr. Lucile (Lucy) Jones is a nationally- and globally- recognized authority on natural hazards and disaster risk reduction. In her 33 years with the U.S. Geological Survey (USGS), Dr. Jones has made outstanding research contributions and provided significant scientific leadership. Her research into earthquake occurrence probability and the short-term probability of foreshock and aftershock sequences is now the source of earthquake advisories issued by the State of California. Her skill in communicating with reporters and connecting with the public has made her one of the most recognizable employees of the USGS.

Dr. Jones is a fourth generation Southern Californian, born in Santa Monica in 1955 and raised in west Los Angeles. Her father, Donald Jones, was an aerospace engineer with TRW Corporation (now Northrup Grumman) and her mother, Patricia Jones, was a homemaker and spiritual director with the Episcopal Church. After one year at Westchester High School, she graduated as salutatorian from Taipei American School in Taipei, Taiwan in 1971. She attended Brown University in Providence, RI, pursuing a double concentration in Physics and Chinese Language and Literature. Switching from physics to geophysics in her senior year, she received a Bachelor of Arts Magna Cum Laude in Chinese in 1976.

She then completed her education with a Ph.D. in Geophysics from the Massachusetts Institute of Technology in Cambridge, MA in 1981. While at MIT, she received a National Science Foundation Graduate Student Fellowship. In 1979, she was chosen to be in the first American scientist to go to China after normalization of relations as a Fulbright Fellow. She spent a total of 12 months between 1979 and 1983 conducting research on Chinese earthquakes with colleagues at the State Seismological Bureau in Beijing. Her thesis, The Mechanics of Faulting, combined studies of foreshocks, globally and in China, with laboratory investigations of the characteristics of faults.

After 2 years as a Lamont Fellow post-doctoral researcher at Columbia University, Dr. Jones took a position as a researcher with the U.S. Geological Survey, stationed at the Seismological Laboratory of the California Institute of Technology in 1983. She has stayed in Pasadena throughout her career with the USGS serving a variety of roles. In the first 15 years, she worked as a researcher in seismology, developing methodologies for assessing the short-term changes in the earthquake hazard during earthquake crises that have been used repeatedly in California to advise the government and the public and worked with and supervised the operations of the Southern California Seismic Network. For 8 years, she served as the Scientist-in-charge of the Pasadena office of the USGS. She helped create the California Integrated Seismic Network, uniting the seismic monitoring of the USGS, Caltech, UC Berkeley and the California Geological Survey, and began the Urban Earth Initiative to bring together multidisciplinary teams of scientists conducting research in Southern California.

In 2007, Jones proposed and was asked to lead the Multi Hazards Demonstration Project, to demonstrate how hazards science can improve the Southern California community's resiliency to natural hazards, by directing new and existing research towards the community's needs, improving monitoring technology, producing innovative products, and enhancing dissemination of the results. The natural hazards investigated included earthquakes, floods, wildfires, landslides, tsunamis, and coastal erosion. Dr. Jones created and implemented a new systematic approach to risk assessment research through scenario development. She built strong partnerships with engineers, social scientists, geographers, biologists, public health doctors, emergency managers, and public officials, integrating their expertise into state-of-the-art investigations to develop a comprehensive depiction of the probable consequences of catastrophic natural disasters – a southern San Andreas Fault earthquake (ShakeOut), a California statewide winter storm (ARkStorm), and an Alaskan tsunami (the SAFRR Tsunami Scenario). These depictions of potential disasters are being used at all levels of government and the private sector to reduce risk.

The ShakeOut scenario has changed the culture of preparedness and the way decision makers use scientific data about earthquake risk. Based on her work, several southern California utilities are moving forward with risk reduction projects, and FEMA used the scenario as the basis for their catastrophe modeling for the region. In addition, Dr. Jones developed a public education campaign and earthquake drill in conjunction with the ShakeOut scenario. Started in

California in 2008, the ShakeOut drill has grown to over 21.2 million participants in 50 states, 5 territories, and the District of Columbia in 2015.

In 2014, Dr. Jones served as the Science Advisor for Seismic Safety to Mayor Eric Garcetti and the City of Los Angeles. Her consensus approach involved assembling task forces to develop solutions informed by the best available science and engineering and convening stakeholders in the State's utilities to address vulnerabilities. Results included a comprehensive program to strengthen the water infrastructure in the City. Mayor Garcetti released his report, Resilience by Design, in December 2014 in which he expressed his deepest gratitude to "renowned seismologist" Jones for "studying our vulnerabilities, convening stakeholders and experts from academia, industry, business, government and our communities, and developing this action plan."

In her last appointment as the USGS Science Advisor for Risk Reduction, Dr. Jones broadly represents the USGS on matters of disaster risk reduction. Dr. Jones led the development of the USGS's first-ever natural hazards science strategy, engaging scientists and stakeholders to craft a visionary document. She leads the SAFRR Project (Science Application for Risk Reduction) that innovates the application of hazard science for the safety, security, and economic well-being of the nation. SAFRR helps communities reduce their natural hazard threats by directing new and existing scientific research toward addressing gaps in vulnerability, producing innovative products, and connecting experts with users of their science.

Dr. Jones has served on multiple committees of the National Academy of Sciences addressing hazard issues. She has chaired the California Seismic Safety Commission and served for 12 years on the California Earthquake Prediction Evaluation Council (CEPEC). She has served on blue-ribbon commissions impaneled by state and local governments to address major infrastructure projects and other high-profile endeavors. Her work has been recognized with the Samuel J. Heyman Service to America Medal, the Department of the Interior's Meritorious Service Award, the Alquist Award from the California Earthquake Safety Foundation, the William Rodgers Award from the Brown University Alumni Association, and the Shoemaker Award for Lifetime Achievements in Science Communication from the USGS.