



**EARTHQUAKE EXHIBIT AND PLANETARIUM SHOW
WILL OPEN ON MAY 26, 2012
AT THE CALIFORNIA ACADEMY OF SCIENCES**

**Quake simulator, live ostriches, interactive games, and more
will unearth the science behind our ever-changing planet**

SAN FRANCISCO (November 17, 2011) — Prepare to be moved! Earthquake, a major new exhibit and a planetarium show, will open at the California Academy of Sciences on May 26, 2012, taking visitors on a kinetic journey toward understanding these super seismic phenomena and how they fit into the larger story of our ever-changing Earth. Occupying the entire west hall of the Academy, the exhibit will feature a number of large-scale installations, including a walk-through model of the Earth, an enclosure for live baby ostriches (yes, there are surprising connections between earthquakes and ostriches!), an earthquake simulator resembling an old Victorian home, and an interactive “obstacle course” designed to teach earthquake preparedness. Concurrently, a new planetarium show will launch audiences on a breathtaking tour through space and time—flying over the San Andreas fault before diving into the planet’s interior, traveling back in time to witness both the 1906 San Francisco earthquake and the break-up of Pangaea 200 million years ago, and much more.

“San Francisco—and California too—are no strangers to the awesome power of earthquakes,” said Dr. Greg Farrington, Executive Director of the Academy. “By showing visitors the science that underlies these natural events, we want to encourage preparedness and help visitors understand how the great movements of the continents have produced the landscape we call home today and the life around us.”

EXHIBIT OVERVIEW

The 8,000-square-foot Earthquake exhibit will be located next to the Rainforest dome and will continue the new Academy’s tradition of light-filled, airy exhibit spaces integrated with live animals and public programs. The exhibit will run for several years.

Walk-through Earth

Entry into the Earthquake exhibit is through a dramatic, 25-foot-diameter model of the Earth. Venturing through an oversized crack in the planet's crust, visitors will find touchable geology specimens and interactive stations explaining the basics of plate tectonics. Activity deep inside the planet drives the motion of tectonic plates on the Earth's surface, resulting in the earthquakes we feel and the continental movements that happen more slowly—over millions of years.

How Land Shapes Life

The break-up of the supercontinent Pangaea roughly 200 million years ago resulted in two large landmasses: Laurasia (present-day northern continents) and Gondwana (present-day southern continents). The second section of the Earthquake exhibit will focus on the diverse life forms that evolved and spread out across Gondwana, showing visitors that the same earth processes that cause destructive earthquakes in the human timescale can also provide constructive conditions for life in the geological timescale.

Large vertical cutouts of today's southern continents will be surrounded by fossils, mounted specimens, and interactive media that will showcase these landmasses and their indigenous life forms: the “rogue” subcontinent of **India**, which slammed into Asia and created the highest mountains in the world (the Himalayas); the oft-overlooked continent of **Antarctica**, which once teemed with life and served as a corridor connecting different parts of Gondwana; **Australia**, an isolated haven for marsupials (mammals with pouches, including koalas, kangaroos, and wombats) and ratites (flightless birds like emus and cassowaries); **South America**, which contains a potpourri of Gondwana plants and animals; and **Africa**, whose wildlife also illustrates the shared legacy of the southern continents. One of the best examples are ostriches—large flightless birds in the ratite lineage whose closest relatives live in South America and Australia. Like many African animals, these birds may never have evolved if Africa hadn't broken off from Gondwana and drifted away. To tell this story, the Academy will be hatching out **live ostrich chicks**, which will be on display in the exhibit until late 2012.

Earthquake Simulator

Following a brief pre-show, visitors will enter an earthquake simulator designed to look like an old Victorian home in San Francisco. Inside, simulated views of the downtown skyline and sounds of the World Series baseball game will transport guests back to 5:04 pm on October 17, 1989—the date and time of the infamous Loma Prieta earthquake. A sudden sustained tremor, followed by a brief aftershock, will give visitors a sense of what this ground-jolting event felt like.

But the experience doesn't end there—the views of downtown will darken and change, and the sounds of the radio will give way to a rooster crow and the clip-clop of a horse-drawn carriage. For a second simulation, guests will travel farther back in time, to 5:12 am on April 18, 1906, the date of the most devastating earthquake in San Francisco's history. About 32 times stronger than Loma Prieta, this event brought the “Paris of America” to its knees, and the ensuing fire destroyed thousands of buildings, including the original Academy home on Market Street.

Earthquake Preparedness

What should you do before, during, and after an earthquake? The final section of the exhibit will address these questions through an interactive preparedness game. Visitors will be able to “shop” for virtual items, such as food, water, and batteries, before ducking under an oversized table during an impromptu earthquake drill. Following the drill, visitors will learn what to do after an earthquake—including turning off the gas meter and checking for leaning or unsafe items. This section will also include a resource station with online links to government agencies and more preparedness advice.

PLANETARIUM SHOW

Following its first two award-winning productions, *Fragile Planet* and *Life: A Cosmic Story*, Morrison Planetarium will premiere an earthquake-themed planetarium show on May 26 in conjunction with the exhibit.

“Our all-digital planetarium has the ability to present complex topics—such as earth processes and the slow march of geological time—within a very visual, immersive environment,” said Ryan Wyatt, Director of Morrison Planetarium and Science Visualization. “The new show harnesses the latest techniques in data-driven visualization to help visitors understand earth processes and think differently about living on our dynamic planet.”

Starting at Point Reyes in Northern California, the show flies south along the San Andreas Fault until it reaches San Francisco. The Golden Gate Bridge fades away as the clock rewinds to 1906. The audience experiences an all-digital recreation of the 7.9-magnitude earthquake, followed by a scientific dissection of the event—including views of the underground fault plane and the propagation of seismic energy waves based on supercomputer simulations. Guests then embark on a high-speed tour of the past 200 million years, witnessing the formation of the Atlantic Ocean, flying over the cradle of humanity in Africa’s Great Rift Valley, and visiting sites of historic earthquakes in India, China, and Japan—including the 9.0-magnitude Tohoku earthquake and tsunami in March 2011. A planetarium presenter will bring audiences even more up-to-date during a live portion showing the latest seismic events happening around the planet—earthquakes big and small occur almost constantly. The show ends with a look at the modern building strategies used by scientists and engineers for a safer and better prepared future.

Scientific advisers and partners on the show include Geo Hazards International, Lawrence Livermore National Laboratories, San Francisco State University, Stanford University, University of California at Berkeley, and the U.S. Geological Survey. The show will play several times daily.

ADDITIONAL PROGRAMS

Visitors will be able to continue their exploration of earthquakes with a 3D experience in the Forum Theater, educational materials for teachers, and an online interactive site. During the summer of 2012, Academy educators will shake things up with daily programs and hands-on demonstrations on the topics of geology, preparedness, and much more. In addition, the Academy will hold an **Earthquake premiere party** on the evening of May 25, 2012, featuring a 1906 period theme. Check www.calacademy.org for tickets and details in the coming months.

The California Academy of Sciences is home to Steinhart Aquarium, Morrison Planetarium, Kimball Natural History Museum, and world-class research and education programs—all under one living roof. Admission to the Academy is: \$29.95 for adults; \$24.95 for youth ages 12 to 17, Seniors ages 65+ and students with valid ID; \$19.95 for children ages 4 to 11; and free for children ages 3 and younger. Admission fees include all exhibits and shows. Hours are 9:30 am - 5:00 pm Monday - Saturday, and 11:00 am - 5:00 pm on Sunday. During peak periods, including some holiday weekends, an admission surcharge and extended hours may apply. Visit www.calacademy.org or call (415) 379-8000 for more.

####