OVERVIEW: Ronald Reagan UCLA Medical Center, designed by world-renowned architect I.M. Pei and his son, C.C. Pei, has taken hospital design to a whole new level; it will deliver world-class medical treatment using cutting-edge technology in a compassionate, patient-focused environment. With 520 large, sunny, private patient rooms featuring terrific views and daybeds for family members, wireless Internet access for patients and guests, multiple outdoor play areas for children and more, the new building maximizes personal attention and holistic healing. This is one of the first total replacement hospital projects to be built in accordance with the latest California seismic safety requirements as a result of the 1994 Northridge earthquake.

The one million-plus square foot, 10-story structure (eight above ground) is situated on four acres at the southwest corner of Westwood Plaza and Charles E. Young Drive South. The hospital encompasses the operations of Ronald Reagan UCLA Medical Center, Stewart and Lynda Resnick Neuropsychiatric Hospital at UCLA and Mattel Children’s Hospital UCLA. Four hospital entrances efficiently serve distinct patient populations: pediatric patients enter the Mattel Children’s Hospital through a less intimidating entrance off Gayley Avenue, trauma patients arrive via Charles E. Young Drive South or the heliport, psychiatric patients enter through a south entrance linked to UCLA Medical Plaza, and all other patients enter off Westwood Plaza. The lobbies are interconnected by a wide corridor to allow people to easily navigate around the facility.

ADDRESS: 757 Westwood Plaza
Los Angeles, CA 90095

AREA: 1,050,000 square feet

CAPACITY: 520 inpatient beds and 61 beds for short-term hospitalization

ARCHITECTS: Design Consultant: I.M. Pei
Design Architects: Pei Partnership Architects – C.C. Pei, Partner-in-Charge; Ralph Heisel, Lead Designer
Executive Architects: Perkins+Will, Inc. – Gabrielle A. Bullock, AIA, Managing Principal; Eric Aukee, AIA, Project Principal; Jean Mah, AIA, Planning Principal
Consulting Architects: RBB Architects – Art Border, AIA, Principal; Olive Schroder, AIA, Project Manager
Zakian Woo Architects – Michael Zakian, Principal; Gene Woo, Principal
Pickett Designs – Christine Pickett Hardin, Principal, Design Director

DESIGN: Acclaimed architect I.M. Pei spent hours at the top of an adjacent parking structure studying and experiencing the site before creating the design that maximizes natural light and reduces the impact of the size of the facility. The breakthrough design creates the illusion of several smaller hospitals instead of a single overwhelming structure. Executive architect Perkins+Will headed the entire design, with Pei Partnership Architects designing the exterior envelope and public spaces. Marble, stainless steel and glass arranged in gracefully curving forms come together to create a remarkably humanizing environment rich in light.

The first three floors form a massive base that unifies the design. Above, architects incorporated four towers to break up the building’s mass while creating a unique image for the hospital. Three quarter-rounded towers house patient rooms and individual nursing pods. A triangular tower houses Intensive
Care Units. The towers are staggered so windows do not look directly in on each other, allowing light to spill in from all sides and open up views. Welcoming features such as carpeting, fountains, terraces and activity areas combine to create a people-friendly setting that promotes healing and rest.

Highlights include:
- Exterior walls wrapped in 18,000 panels of striking Italian travertine
- Monumental butterfly canopies mark two major entrances – the main entrance facing Westwood Boulevard and Mattel’s Children’s Hospital UCLA, facing Gayley Avenue and the Westwood residential community
- Diamond-shaped windows, distinctive of I.M. Pei’s use of geometric shape, anchor each side of the first floor lobby
- Dramatic floor-to-ceiling glass in the executive offices on the south side “nose” of the building
- Large, private patient rooms, each with a visitor’s nook so families can spend time in the room comfortably without crowding the patient or interfering with care.

Los Angeles firm RBB Architects designed the ancillary spaces, consisting of laboratories, pharmacy, material management, on-call suites and kitchen spaces, along with the main floor area which houses administration, noninvasive imaging and the ER.

BUILDING MATERIALS: Ronald Reagan UCLA Medical Center is, literally, a pillar of strength. Designed to withstand and remain functional following a greater than 8 magnitude earthquake, it is one of the first buildings in the state to meet the latest seismic code. A 26,000-ton structural web of steel, uniquely sized and shaped beams weighing 20 to 25 tons each provide the framework. An individual beam measures 20-feet long by four-feet deep and the steel columns encasing these beams measure two-feet square and weigh more than 900 pounds per foot. The hospital incorporates more than 80,000 square feet of window glass. More than three million pounds of travertine marble, imported from Tivoli, Italy, make up the outer wall panels designed to move as much as three feet during a large quake.

HOSPITAL LAYOUT: Emerging from a planning process involving more than 500 physicians, nurses, patients and designers, the hospital is beautiful and stylish while ensuring the best in form and function. To adapt to the changing needs of healthcare over the next century, the design team emphasized openness and flexibility, creating a technologically smart building with the capacity to be upgraded on an ongoing basis. Space was saved by clustering related activities on a single floor or by stacking them in vertical cores to concentrate services.

The emergency facilities are grouped on the first floor, with room-sized elevators to rapidly transport patients from two rooftop helipads. The ground floor features a comfortable indoor/outdoor waiting area for friends and family members. On the second floor, surgeons operate in the largest complex of integrated operating rooms built to date, using the most advanced surgical concepts with full audiovisual integration systems. Twenty three state-of-the-art operating suites and other interventional rooms feature modular construction, allowing them to expand and reconfigure as medical technology evolves. Mechanical services are concentrated on the third floor.

Outdoor terraces located on the fourth floor (Resnick Neuropsychiatric Hospital) and fifth floor (Mattel Children's Hospital) give patients immediate access to open air and ocean and mountain views to encourage therapeutic interaction in a beautiful environment.

The top five floors of the building feature three quarter-round towers filled with patient rooms and two triangular wings centrally connected in an M-shaped configuration for Intensive Care Units.

Ronald Reagan UCLA Medical Center is the only hospital in the world with a comprehensive neuroimaging unit immediately adjacent to, and integrated into, a neurosurgical ICU. On the sixth floor, the Singleton Clinical Neuroimaging Research Center (CNRC) is equipped with state-of-the art brain -more-
imaging devices (PET/CT scanner, and 3Tesla MRI scanner) to provide the highest level of care for patients with brain injury, stroke, hemorrhage from aneurysm rupture, brain tumors and epilepsy. The Center will also allow for unprecedented noninvasive neuroimaging research into the nature of neurological disorders.

INTENSIVE CARE UNITS: The 154 intensive care beds are designed to support four-sided access to the patient with state-of-the-art medical equipment. The bed sits in the middle of the room with an overhead rotational power column that swings 360 degrees, allowing the patient to be turned toward the window. The power column also delivers electricity, essential gases and other items needed for intensive care. ICU areas feature comfortable sleeper chairs to create a more hospitable environment for family members.

PATIENT ROOMS: Clustered in pods of 26 around the perimeter of the building, large, private patient rooms benefit from an abundance of natural light and a sense of plentiful space with views through windows that overlook gardens, green spaces and gathering places. Features such as residential style furniture and a “visitor’s nook” window seat with a daybed for family members help assure the best possible home-like feeling. The new hospital offers on-demand hotel-style meal service for patients, boasting a variety of flavorful and healthy entrees. Patients will receive menu choices appropriate for their diet and have access to “room service” throughout the day. Massage therapy services also are available to patients.

Private patient rooms are large enough to allow unrestricted three-sided access to the patient at all times. Each room is equipped with outlets and connections necessary to ramp up or dial down care as needed, even for critically ill patients. This “universal room” design allows staff to deliver a variety of care in the room rather than transporting the patient to an alternate care setting. Each patient room also offers the option of negatively or positively pressurized air flow, which helps prevent the spread of disease from infectious patients and protects immuno-suppressed patients.

TOTAL PROJECT CONSTRUCTION COST: Approximately $829 million

FUNDING: The Federal Emergency Management Agency provided $432 million in earthquake relief toward the project and the State of California provided $44 million. Private donors contributed nearly $300 million, including a $150 million gift pledged in Ronald Reagan’s honor by a group of prominent civic and cultural leaders. The balance of funding came from hospital financing and bonds.