## New construction in the heart of Chinatown? How Chinese Hospital accomplished the impossible

It took a village-literally-to complete what's been called "the most logistically challenging ground-up hospital ever built." Not only did Chinese Hospital's new Patient Tower get built, it got built on budget, on time, and with no recordable injuries. Most importantly, during the \$180 million construction project, the nearby markets continued to receive deliveries three times a day, the elementary school and church continued to hold classes and services, and the bustling residential, retail, and tourist hub that we know as Chinatown barely skipped a beat. Typically, a hospital construction project of this size would have a large staging area for equipment and materials. In Chinatown, construction crews had the space of four parking stalls. The new hospital sits adjacent to the existing Chinese Hospital annex, with residential units to the left, an elementary school in the back, and meat and produce markets directly across the street. Space was tight, to put it mildly. Construction also could not interrupt Jackson Street, a main thoroughfare for local deliveries and shopping. While the construction team solved these logistical challenges, a team of architects, engineers, and interior and signage designers worked toward Chinese Hospital's multifold vision: to create a structurally sound building that meets seismic regulations and can accommodate the latest healthcare technology. The interior and exterior also had to honor and reflect Chinese culture while facilitating a healing environment.

"It's definitely not a sterile environment," says Michele Malone, Director of Facilities for Chinese Hospital. "It feels very open for such a compact footprint."design for the community Mei Mei Chan, principal of MEI Architects, the architect of record for the project, says that, architecturally, their goal was to provide an "efficient, contemporary hospital for the community. At the same time, we wanted to embrace the Chinese community with this simple, elegant building." The project includes comprehensive long term care and skilled nursing programs which are not typical in most community based hospitals. Operational flow was also important to allow staff to maximize time for patient care. The exterior is simple in style and structure; yet look closely and you'll see Chinese medallions embedded into concrete panels. Cultural elements are etched into sandblasted glass panel windows. Mural-sized black and white photos of Chinese Hospital's original 1925 building and founders rise vertically along one wall, a nod to its legacy in the community. One of the hospital's most striking features-a colorful dragon made of red, yellow, blue, and green gem-like tiles-occupies another wall. The dragon is the end result of a capital campaign where donors could purchase tiles to help raise money for the new hospital. "When we unveiled him at the Grand Opening, on April 18, the building came alive," says Malone. "We plan to build a phoenix and a pearl next to him because so many people came forward to buy tiles."Conscious construction From sky-blue ceilings to amber-hued floors, Chinese Hospital celebrates its community in every detail. Using all union labor, DPR Construction followed this vision from day one. "The City of San Francisco was initially very concerned about how our work would affect the residents, merchants, and tourism," says Project Superintendent Jerry McKinley. "We worked with the city to illustrate that we would appreciate Chinatown and what it is." The fresh fish, meat, and produce markets across from

the hospital receive deliveries up to three times a day. Missed deliveries could put these small shops out of business.

DPR made sure to have minimal trucks on site, coordinated via an electronic scheduling system, and kept the delivery lane open. "Some of the contractors even helped [vendors] push produce where it needed to go," says Malone. "It was a true community effort." When DPR had to close a section of sidewalk, Chinese Hospital and the Chinatown Community Development Center worked together to hire Cantonesespeaking ambassadors. The ambassadors kept residents up to date on the construction process and helped them cross the street safely. The ambassadors stayed on the job for three years. "With any project, we have to be aware of our surroundings," says McKinley. "But for this project, we were especially concerned about the store owners, the school, and the residents all in this tight space." The Chinatown community's resilience showed in its patience for such a lengthy construction project. During four years of building and many more in planning and preconstruction, the City of San Francisco received no complaints.Designing a healing environment

Interior design principal Kai-Yee Woo and her team at Kai-Yee Woo & Associates chose textures, colors, shapes, and images that reflect the heritage of Chinese Hospital's patients, families, and staff. Woo based paint color schemes on Chinese semiprecious stones and celadon color porcelain. Chinese wallcoverings that feature the Prunus flower, a symbol of beauty and toughness, grace patient rooms. The windows open to spectacular views of the Bay Bridge, Coit Tower, and beyond.

The meditation room features a wallcovering of a carp fish pond. "The carp is a symbol of longevity," says Woo. "It represents the positive force of nature." The pond contains eight carp-eight is a symbol of prosperity. Woo also employed curves into the nurses' station and a large yellow circle on the surgery room floor. Both have a purpose. "The circle represents harmony and unity," says Woo. "The yellow circle symbolizes success and completeness." Room, department, and exterior signs, as well as donor plagues and lightboxes, all hint at Chinese symbolism. ImageGroup USA, which designed the dragon and interior signage and created themes for each of the hospital's six floors, expanded on Woo's interior design and the hospital's overreaching vision of honoring the Chinese community. "We made sure to stay sensitive to Chinese culture and present beautiful designs as a thank you to the donors to the various departments," says ImageGroup design consultant Rebecca Redmon. The trees and bamboo on the emergency room floor represent strength and longevity during harsh times. Butterflies and dragonflies on the second floor represent happiness, rebirth, and purity. The pagodas on the fifth floor honor the original hospital's pagoda fundraiser, launched to make up for the losses the hospital incurred for treating patients for free. Even the room and wayfinding signs have meaning. "There was a lot of emotion when the original building had to be torn down," says Redmon. "We chose simple features that picked up on the architecture of the existing building to create signs with a slight remembrance of the original hospital." After many years of hard work, and through design and staff changes, endless permit approvals, and logistical puzzles, the new Chinese Hospital opened its doors to a huge crowd of supporters. When the dragon's eyes glowed in the evening sky, the Chinese community welcomed an advanced acute care hospital designed just for them but that welcomes all. "To see the elderly community members that have a history with the hospital over the past 70 years find their names on a dragon tile as a shrine to their beliefs...that emotion was incredible," says Mary McGrain, ImageGroup's on-site project manager. "It was like a big hug." Nearly everyone on the construction and design teams became immersed in the community while working at full capacity to meet all

goals. "A lot of people didn't think we'd get it done in time," says Malone. "But we never lost time. We kept moving forward and turned challenges into opportunities. That was our philosophy, and it takes a dedicated team to accomplish that."Chinese Hospital celebrates grand opening of new patient tower