

## **Children's Hospital \*** **San Diego, California**

*\* Personal experience of Tony Ngo*



As a Mechanical Engineer of record on the design team, Tony Ngo provided design of various tenant improvement and expansion projects at Children's Hospital. Highlights of some projects are as follows:

### **Emergency & Orthopedic Expansion Project**

Provided design to reconfigure & expansion for orthopedic and emergency department, bringing it more up-to-date with the present California Mechanical Code resulting in enhanced patient care flow system and improved shorter wait times. The project area is approximately 45,000 sq ft of additional exam rooms and associated support facilities were designed including advanced Information Technologies and Digital X-ray capability. The design challenge is to overcome the higher cooling load demand due to up-to-date technology equipment and code changes since the original building was constructed. With the expansion, the number of exam rooms in Children's emergency care center will nearly triple, from 14 rooms to 38 rooms. The expansion also provides a numbers of negative pressure isolation rooms for tuberculosis and other bacterial diseases patients.



### **Surgery Center Expansion Project**

To enhance the pediatric patient care program, allowing efficient scheduling through the pre-admission program and prompt quality care, the Day Surgery Center expanded from existing four (4) operating rooms to six (6) operating surgery center.

Each new operating room is designed to serve by a dedicated custom air handling unit with pre and final filters, supply and return fans with VFD, heating and cooling coils, and sound attenuator. Each operating room is served by a dedicated constant air volume terminal box with heat recoil and duct-mounted humidifier. HEPA filter is installed to serve critical operating rooms per OSHPD requirement.

### **Consolidated Surgery Center Project**

This project involves the re-configuration of the existing Surgical Services Department and addition of a new two-story, 22,300 sq.ft. building expansion to create a 44,700 sq.ft. Consolidated Surgical Department. The out patient surgery will occupy the eight existing inpatient orthopedics, neurosurgery, maxilla facial, dental, trauma and general surgery. The new surgery department is designed for flexibility for future use with two (2) heart O.R, One (1) neurology O.R, and seven (7) orthopedic/general trauma suites. Additionally, the post anesthesia recovery unit has 43 P.A.C. U. beds, designed to flex acuity.