LAB TO TRAIN NEW DOCTORS

LSU School of Medicine's Center for Advanced Practice | By Nicole Achs Freeling

Before Hurricane Katrina, the LSU Alumni Association operated on the first floor of the Lions Building with two simulation rooms and one small classroom. The facility was at full capacity for most of the school year. After Katrina, the benefits of the training facility were so missed that the alumni association decided to replicate the facility on a larger scale and open it to multiple departments.

The McDonnel Group won the general contractor award from a group of invited bidders. The project was constructed on the fifth floor of the Lions Building on the university's medical campus in New Orleans. Russell Klien, MD, and Charles Hilton, MD, of the LSU Alumni Association spearheaded the project, with architectural design coordination by Darren Rozas of Rozas Ward Architects.

In November, The McDonnel Group completed the Center for Advanced Practice for the Louisiana State University (LSU) Alumni Association. At 20,000 square feet, the center contains four simulation rooms, a large cadaveric wet lab demonstration classroom, several support offices, and conference rooms.

The McDonnel Group's contract included demolishing the fifth floor interior; installing structural steel supports for the media equipment; furnishing a new air handling unit for fresh air and new heating, ventilation, and air conditioning (HVAC) ductwork; furnishing medical gas equipment and associated rough-in construction; and completing electrical and high-end finishes.

"The most challenging parts of the project were coordinating the above-ceiling rough-in and understanding the owner-provided equipment," said Kirk Laborde, The McDonnel Group's On-site Superintendent for the project. "Due to the existing overall deck heights of the fifth floor, coordination of HVAC ductwork, cable trays, and medical gas piping required installations in extremely limited spaces, partially due to the existing deck heights."

The McDonnel Group Project Manager Andrew Silva said: "Working with the above-site circumstances, the rough-in had to be coordinated precisely with the high-end finishes, requiring several coordination meetings and plan changes. We knew that there could be no reason for not installing the rough-in because it was the critical backbone for the state-of-the-art media equipment."

The newly completed simulation classrooms feature human patient simulators — high-tech training dummies that mimic human functions to help students practice surgical techniques. The facility has video equipment so the aspiring physicians can review their recorded procedures with instructors. These simulation classrooms also feature observation rooms for instructors, who can program the training dummies to simulate emergency room situations. Educators have found that simulation rooms can be much more effective than having students simply observe operating procedures.

Restructuring of the LSU School of Medicine training lab involved extensive rough-in construction above the ceiling height to carry HVAC ductwork, cables, medical gases tubulars, electronic media, and other equipment in the overhead space. The McDonnel Group completed demolition, construction, and medical equipment installation on a tight schedule.

The facility's `new cadaveric wet lab demonstration room is the largest wet lab constructed in the South. The wet lab includes 3,200 pieces of equipment housed in 18 ceiling-mounted booms in the classroom. With this advanced technology, one instructor can teach a class of about 50 students at a time.

With precise coordination, The McDonnel Group successfully met the challenging installation demands for the entire medical equipment infrastructure, while at the same time delivering a quality product within a limited timeframe.