Fisher Translational Research Center, University of Pennsylvania Health System

Philadelphia, Pennsylvania

Owner
University of Pennsylvania Health System and Penn Medicine

Client/Architect
Rafael Viñoly Architects PC

Completion Date
July 2010

Construction Cost
$260 Million

Total Area
530,000 sf

Number of Stoires
Research Tower – 14 stories
Therapy Center – 4 stories

This research tower is collaboration between the University of Pennsylvania's Health Systems and School of Medicine. The tower is 115 feet wide x 400 feet long x 260 feet tall above Level 1. The tower sits atop a four-story tall Roberts Proton Therapy Center. The lower five floors of the tower act as a westward extension of Perelman Center for Advanced Medicine (CAM). The upper eight floors of the tower are used by the school of medicine and are designed for two vivarium floors and five laboratory research floors each with 22 principal investigators. The two programs are separated by a 33-feet high mechanical plant.

The clinical floors match the 17 feet floor to floor height of CAM and have 30 feet x 30 feet column grid. The two vivarium floors are 22 feet tall and have a service walkway at interstitial level. Vivarium floors have animal holding facility with cage wash area and require 18-inch deep trench drains for most of the floor plate. The five laboratory floors are 16 feet tall and have 30 feet x 42 feet bays that are designed to meet industry standard vibration criteria. The 42 feet wide lab and vivarium bays get transfered to lower 30 feet wide clinical bays through series of 15 feet deep floor trusses.

Level 1 is designed as a common lobby and seminar spaces. An auditorium at Level 1 requires transferring columns by means of plate girders and trusses to create a 50 feet x 50 feet column free area. The columns along the west side are transferred at level 2 to create 40foot spans compatible with emergency removal of wider gantry equipment housed in the proton treatment center.