Purpose: To create a physical environment where imaging medical physicists can be educated in a real-work, clinical and research setting in close collaboration with professionals such as physicians, biomedical engineers, and other medical personnel.

Methods: A single building structure has been designed where medical physics students can be immersed in a collaborative clinical and research educational environment.

Results: A Clinical Translational Research Center has been constructed on the top four floors over a new Global Vascular Institute (GVI) which is connected to the main university hospital complex and adjacent to radiation therapy facilities. The research and educational component including offices, labs, and conference rooms for the Medical Physics Program is on the top floor and dedicated research imaging suites (fluoroscopic interventional systems, CT, PET/CT, and MRI) along with complete animal facilities and additional research labs for cardiac and vascular investigators are on the two top floors. An atrium and numerous meeting spaces are in place to encourage informal communication among students and science and clinical investigators. The clinical GVI, which occupies the lower four floors, has a full upper floor containing 15 vascular imaging suites for cardiac, neuro, and peripheral vascular imaging and interventions while the floors below have short-term hotel-like patient and family rooms favoring ambulatory patients having minimally invasive procedures. Medical physics didactic education is designed to take place in modern meeting rooms; however, because of the close proximity to research labs and clinical suites, students are expected to get a unique perspective on how research is done and how it is translated into clinical practice.

Conclusions: A new physical structure has been built which enables medical physics education to be an integral part of a highly collaborative clinical translational research environment.

Funding Support, Disclosures, and Conflict of Interest:

Research funds provided by NIH grants and equipment grants from Toshiba Medical Systems Corp.