The academic building project completed phase one of the new Palmer College of Chiropractic campus in Port Orange, FL. Two additional building sites, parking for the entire campus, a significant water feature, and a landscaped central campus green have also been planned for the 25-acre site.

The 55,000 sq. ft building serves as the primary teaching classroom and faculty office facility for the campus. In addition to traditional classrooms and offices, the facility also accommodates technique teaching labs, temporary administrative offices, a temporary learning resource center, a computer lab, small group study rooms, and support space.

The architectural expression of this project is based on a response to the environment of Florida and Sarasota-style architecture. The building was designed to maximize day lighting while protecting the interior from the intense heat of the Florida sun. Fritted glass and steel sunscreens are used in lieu of mirror glass to shade direct sunlight, while also allowing daylight in and providing clear views from the interior. In addition to effectively shielding the sun, the glass and steel sunscreens create a dynamic architecture full of detail, light, and shadow.

OWNER
Palmer College of Chiropractic

ARCHITECTS
Herbert Lewis Kruse Blunck Architecture, Des Moines, IA (design)
Farmer Baker Barrios, Orlando, FL (AOR)

STRUCTURAL ENGINEER
Walter P. Moore, Orlando, FL

STRUCTURAL ENGINEERING SOFTWARE
RAM Structural System

FABRICATOR
Schuff Steel Co., Orlando, FL, AISC member (formerly Addison Steel, Inc.)

GENERAL CONTRACTOR
Brasfield & Gorrie, Lake Mary, FL

I.D.E.A.S. AWARDS
Less than $10M

NATIONAL WINNER
ACADEMIC BUILDING,
PALMER COLLEGE OF CHIROPRACTIC
The South Mountain Community College Performing Arts Center project site borders the edge of Phoenix and the South Mountain Preserve, an area where citrus groves and floral nurseries are slowly being replaced by urban development. The design challenge was to integrate the rich textures of the existing conditions with new construction.

The functional programs of the new performing arts center are divided into three major building blocks coupled around the existing art, music, and liberal arts buildings to create an outdoor arts quad. The new 43,000 sq. ft performance center contains a 350-seat theater, 100-seat black box theater, 75-seat dance studio, recording studio, scene and costume shops, a dressing room, make-up room, and green room, as well as faculty offices and two multi-purpose classrooms.

The arts quad is a landscaped space outfitted to house impromptu rehearsals, group meetings, and scheduled performances. The first and most prominent building block, the performance hall, which includes the lobby, house, and stage, sits nearest to the main campus entry. An elevated exterior lobby, constructed of aluminum grate and galvanized purlins, provides a “stage” for audience members before and after performances. The second building block includes the back-of-house functions, while the third block includes the black-box theater, a dance studio, multipurpose classrooms, and administrative offices.

The three building blocks are constructed of sandblasted CMU, except for the “cap” of the performance hall. The cap is steel-framed and clad in overlapping profiled plain steel shapes, left to rust, that peel away to reveal glazing in areas where light locks are not required. The mass transfigures from the stage end, which is completely opaque, to the glass lobby, which is translucent.
The Children's Museum of Pittsburgh's new linking building is explicitly modern in counterpoint to the flanking masonry-clad buildings—a 19th century post office and a mid-20th century planetarium. The addition is comprised of an exposed steel structure veranda for the entryway and lobby, and a wrapped-steel structure lantern for exhibit space.

Young visitors get to experience the contrast between traditional carved space and modern framed space as they explore the museum's "play with real stuff" exhibits. The steel-framed veranda sets up the introduction to the program by expressing the "real stuff" of structure. Acoustic steel decking provides the form for concrete floors and a ceiling surface that keeps noise levels down.

The tube linking the veranda to the post office is clad in satin stainless steel panels that camouflage the fire-rated connection. The design was selected through an NEA-sponsored national design competition. Built for $9.4 million and completed in 2004, the 80,000 sq. ft museum, including remodeled and new space, is slated for a silver LEED rating—the first for a children's museum.

OWNER
Children's Museum of Pittsburgh

ARCHITECT
Konig Elizengenr Architecture, Santa Monica, CA (design)
Perkins Eastman Architects PC, Pittsburgh (AOR)

STRUCTURAL ENGINEER
Ove Arup & Partners, Los Angeles (design)
Atlantic Engineering, Pittsburgh (EOR)

ENGINEERING SOFTWARE
SAP 2000
RAM Structural System
Enercalc
STAAD

ERECTOR
Multi-Phase, Inc., Coraopolis, PA, AISC member

GENERAL CONTRACTOR
Mascaro Construction Company, L.P., Pittsburgh

Located on a seven-acre site, this 20-person office building perched at the top of a 40' deep ravine provides occupants with extraordinary views of the natural surroundings. The 10,000 sq. ft, $3 million building has its design roots firmly planted in the California “Case Study Houses” lineage.

The exposed steel structure is organized on two circulation axes. The glazed entrance occupies the intersection of these axes. The first axis is 275' in length, beginning at the building's entry and extending through all open and private offices, culminating at an employee lounge and deck. A brick wall defines the western edge of this axis and parallels an existing stone wall.

The cross axis ties together the more varied public spaces. The building's glazed lobby introduces visitors to the building's layered and offset structural rhythm. Three meeting spaces are located along this cross axis. One is a conventionally appointed conference room, the second is a multimedia auditorium for educational and training seminars, and the third is a glazed-on-four-sides meeting space that projects over the ravine.

Terraces, cantilevered porches, and deep overhangs visually extend interior space into the forest. A crisp triangle of manicured grass is situated between the office building's two axes to contrast with the natural landscape.

OWNER
The Biondo Group, Milford, PA

ARCHITECT
Bohlin Cywinski Jackson, Wilkes-Barre, PA

STRUCTURAL ENGINEER
E.D. Pons & Associates, Inc., Wilkes-Barre, PA

ENGINEERING SOFTWARE
Digital Canal
RAM Structural System

FABRICATOR AND DETAILER
Standard Iron Works, Scranton, PA, AISC member

DETAILING SOFTWARE
SteelCAD

GENERAL CONTRACTOR
Zitone Construction and Supply Co., Inc., Montague, NJ
all pine trees and a ravine provide the perfect site for a steel- and timber-framed residence. Steel was selected to give the owners design flexibility to create spaces for entertaining, while maintaining an intimate scale for the residence.

The pavilion feel of the house is emphasized by the large, thin-edged steel-framed roof. Overhangs are given additional support by a system of steel struts reaching out like tree limbs at the high corners. Steel angle and cable supported trellises provide sun protection to the glass.

The long axis of the site is oriented east-west along a ravine. Designed in two parts, the house has both a public north side and shaded private south side along the ravine. Steel-framed shoji panels allow the carport to be used as a gathering space off the entry courtyard, or to be used by caterers to set up and open to the pool area during outdoor entertaining.

The stiffness of the steel structure allowed for 10’ by 15’ suspended rolling panels to be used to open and close areas of the first floor, creating alternately intimate and spacious living and entertaining spaces. On the second floor, the private master suite is connected by a steel bridge across the two-story living room to the children’s area, offering privacy and intimacy.