



# CASE STUDY



## UCSD Center for Novel Therapeutics

La Jolla, California

Engineered glazing systems are the mainstay of the SCGMA members, but as the curtain wall industry has evolved, so has the scope of work for these firms. In this SCGMA Case Study we look at the enhanced scope of work on the UCSD Center for Novel Therapeutics, which lead to the design and installation of rainscreen glass panel systems, terracotta baguette assemblies, integrated sunshades and photovoltaics.

### Project Team



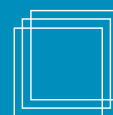
#### Architect:

*Perkins & Will  
Ryan Bussard, Kay Kornovich,  
Peter Busby*



#### General Contractor:

*McCarthy Construction  
San Diego Office*



#### SCGMA Glazier:

*Architectural Glass & Aluminum*

## Delivery

From Design-Development, the McCarthy / Perkins & Will team chose Design-Assist as a delivery method for the façade systems. After receiving pricing and interviewing exterior wall contractors, Architectural Glass & Aluminum (AGA) was selected to provide the curtain walls, window walls and storefronts.

## Collaborative Space

Designed by Perkins & Will Architects, the UCSD Center for Novel Therapeutics project is a 137,000 square foot facility designed to accelerate cancer research to clinical trials, and then to market. Developed by BioMed Realty Trust, the \$92 million project is located in the UC San Diego Research Park, walking distance of the region's only National Cancer Institute-designated cancer center, the Moore's Cancer Center.

The exterior façade integrates shading, two of which are attached directly to the curtain wall framing. On the east side of the building, Perkins & Will designed vertical fins attached directly to the mullions, projecting out 24" from the face of the building. The fins are comprised of ½" clear laminated glass with a translucent interlayer. On the south side of the building, the project integrates horizontal sunshades spaced at 24" on center, also projecting out 24" from the face of the building. The sunshades are comprised of 1/4" perforated aluminum plate attached with aluminum outriggers to the vertical mullions.







On the west side of the building, the design includes curtain walls on an outside terrace, shaded by horizontal terracotta baguettes system at varying spacing. The baguettes are installed in a two-story spanning painted steel frame, with the baguettes secured by internal stainless-steel rods and clips.



A three-story atrium is a notable feature of the building, covered by a skylight that integrates photovoltaic glass panels. AGA provided a four-sided structurally glazed “cassette” skylight system that conceals the fire sprinklers and the required wiring for placement of the photovoltaic inverters. The custom photovoltaic panel cells provide partial shading while allowing light to penetrate the interior space.



Inside and outside the atrium, Perkins & Will added meeting “pods” to encourage collaboration. The projecting pods are clad in a green accent glass clad rainscreen panel system on both vertical and horizontal surfaces. The glass panels were a series of complex shapes backed by concrete board, with a ‘Z’ girt clip attachment to furring channels.

## Unique Façade Challenges

The vertical glazing systems, skylight, vertical and horizontal sunshades were designed and manufactured by AGA. “With the acceptance of designing and installing the new scope of work, came the risk of dealing with unknown suppliers” said Taylor Christianson, AGA’s Project Executive. “In the case of UCSD CNT, the challenges came from working with a new custom glass photovoltaic fabricator and the rainscreen glass panel fabricator. Both companies were European sources that were either unfamiliar with the exact applications and in some cases were not prepared for the size of the scope. This caused AGA to spend a substantial amount of extra time in managing their processes and verifying their manufacturing in great detail”.

## Lessons Learned

Well aside from staying with known sources, I think we gained useful knowledge in the use of custom photovoltaic panels, inverters and ways to conceal wiring” said Taylor Christianson. “UCSD CNT was also one of the first projects that we were able to use parallel opening vents with low voltage automatic operators tied to the building systems”.

## Awards and Recognition

- Malone Grand Orchid  
San Diego Architectural Foundation, Orchids and Onions, 2020
- Best Projects Award of Merit  
Higher Education & Research Category, ENR California Region, 2019

**SCGMA represents a large variety of glazing firms with decades of experience and special talents for finding solutions on the most complex projects. Contact SCGMA to see how our members could provide assistance on your project.**