



**Product**

Leyard TWA Series  
Leyard CarbonLight CLI Series  
Planar Simplicity Series

**Location**

Portland, OR

**Industry**

Medical Research & Healthcare

**Application**

Presentation System  
Digital Signage  
Collaboration

**Partner**

Delta AV

**Display Technology Supports Cancer Institute's Collaborative Approach**

# OHSU Knight Cancer Research Building

The Knight Cancer Institute, part of Oregon Health and Science University (OHSU) and an international leader in research and cancer treatment, has built a new state-of-the-art building in Portland, Ore. to aid in the fight against cancer. Housing researchers focused on early cancer detection, computational biology and immuno-oncology, the 320,000-square-foot facility was constructed with innovative designs that aim to encourage interaction and a team science approach among specialists from different scientific disciplines. The goal: to transform how cancer research is conducted.



The building incorporates an open floorplan with functional and flexible workspaces that include shared common lab equipment to foster collaboration. As part of this design concept — and to help engage the public about the work taking place in the building — the Knight Cancer Institute also integrated display technology from Leyard and Planar, a Leyard Company, throughout the building.

## LED media wall articulates mission

With expansive walls of windows on the building's ground floor, the design team saw an opportunity to convey the institute's purpose to the surrounding community. Initially, plans called for an artistic design incorporating paint and acrylic, but the plan was scratched when it became clear that too much reflection from incoming light would render signage difficult to read.

“As a result, we began to explore different ways to utilize this incredible space and make sure people could see our message through the windows no matter the conditions outside,” said Dr. Tiffani Howard, program director, research strategy and operations at the OHSU Knight Cancer Institute. “The best way to do that is with an LED display.”

After institute colleagues evaluated display technologies at a local expo, Leyard and Planar were approached to install a Leyard® CarbonLight™ CLI Series LED video wall with a 3.9mm pixel pitch (CLI3.9) that wraps around an exterior-facing corner wall.

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**— Allen Tomlinson,**  
Director of Marketing and  
Strategic Communications,  
OHSU Knight Cancer Institute



The Leyard CarbonLight CLI Series is a line of lightweight and flexible LED video wall displays that are easily adapted to a range of applications and include floor-mounted, corner-beveled and smoothly curved video walls. A patented carbon fiber construction makes the displays uniquely lightweight, thin and strong, while a refined mechanical construction enables fast and flexible installation.

“The video wall allows the institute to tell the story of the science occurring in the building and change our message as the science changes,” said Allen Tomlinson, director of marketing and strategic communications of the OHSU Knight Cancer Institute. “Because, the science will change. And, in 10 years we’ll be telling an entirely different story from the one we’re telling today.”

According to Tomlinson, the video wall is attracting considerable attention from passersby. “People on the street are instantly captured by the color and motion,” he said. “If a trolley goes by, every head will swivel to get a look. People are definitely engaged by the stories we are presenting.”

## Auditorium LED video wall enables sharing and community outreach

In a 200-seat auditorium located on the building’s main floor, a Leyard® TWA Series LED video wall with a 1.2mm pixel pitch (TWA1.2) was installed in a 4x4 configuration to allow researchers to give scientific presentations and share data. The auditorium video wall also provides the Knight Cancer Institute with a tool to engage the public.

With the Leyard TWA Series, advanced calibration provides maximum full color and brightness uniformity, while the highest quality black LEDs produce a crisp, high contrast image — features that are extremely important when the finite details matter.



“On a regular basis, researchers give presentations on their data and what they’re showing is very detailed and technical, so the resolution becomes really important,” Howard said.

With past experiences and using other forms of technology, Howard said presenters often experienced difficulty getting rooms dark enough to show the very subtle variances that need to be emphasized — such as the delicate contrast between different cells. “But the clarity of the auditorium video wall removes that problem in a big way, helping us communicate with each other about what we’re doing and sharing ideas to allow for innovation amongst large groups of people,” she said.

The Leyard TWA Series video wall will also be used throughout the year for the institute’s busy schedule of events, including an international conference and a series of community-facing presentations called Knight School, according to Tomlinson. “We’re also planning on using the video wall as a backdrop for some TED Talk-style presentations that will allow our scientists to inform the community about the work they are doing,” he said.

Prior to choosing Leyard LED technology for the auditorium, the design team initially considered using a rear projection system — an option that they eventually decided against for multiple reasons. “We struggled with the idea of having outdated technology in such a brand-new building,” Howard said. “But there was also a permanence to a rear projection screen. Changing to any other kind of technology was going to be really difficult down the road.

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Operations, OHSU Knight Cancer Institute*



Evaluating the financial impact of updating a rear projection system with new technology in 10 years helped justify the benefit of an LED video wall to begin with. “It allowed us to think about the decision differently,” Howard said.

## Large format 4K LCD video walls drive collaboration

Throughout the building’s meeting spaces, Planar® Simplicity™ Series 4K large format LCD displays were installed to support collaborative work sessions and smaller presentations. Featuring a slim profile, reduced complexity and cutting-edge 4K at 60Hz streaming, the Planar Simplicity Series is an ideal display solution for the institute’s computational scientists who regularly work with digital data.

These researchers often work in tandem and with other colleagues, sharing displays to work on data simultaneously, which creates a need for high-quality displays. “With this type of work, they need to be able to easily read a spreadsheet and that can be very difficult on a screen without high resolution,” Howard said.

Ed Trotter, OHSU senior project manager, design and construction, said both the Planar LCD displays and the Leyard LED video walls were easy to work with and install. “From a technology standpoint and in terms of the design, how it goes together, and how it can be repaired, Leyard and Planar are topnotch,” Trotter said. “They are well-engineered products, especially with future applications in mind. They definitely hit the mark with that.”

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