

# Blazing a Trail: NEC's Displays Bring Data to Life in University's New "Idea Incubator" Space

## Facility:

- University of Washington

## Vertical:

- Education

## Location:

- Seattle

## Challenges:

- Create a new campus space for data visualization of health sciences research and multidisciplinary collaboration

## Solution:

- 2x3 video wall using NEC X555UNV displays

## Result:

- An immersive presentation space that gives researchers and clinicians a collaborative area for data visualization projects, 3-D imaging and presentations

## Date:

- November 2016

Higher education facilities have long been leaders in discipline-based research and development that changes the course of history and furthers scientific progress, and to continue this tradition, universities are always on the lookout for innovative new ways to learn, teach, research and collaborate.

So when a Seattle university's Health Sciences Library decided to add a new space on campus to enhance research data analysis and allow multidisciplinary collaboration, administrators wanted something more than just another conference room.

## The Challenge

The Health Sciences Library at the University of Washington seeks to advance the healthcare fields through scholarship, research, education and access to information resources. It supports not just university faculty, researchers and students, but also a variety of other health professionals, libraries and researchers.

In light of this mission, the library formed a partnership with the Institute of Translational Health Sciences, the University of Washington Medicine Research Information Technology, and the National Network of Libraries of Medicine - Pacific Northwest Region in the summer of 2015.

The partnership wanted to create and fund a space on campus that would accelerate health research and innovation by supporting researchers and investigators in the University of Washington community and allow a multifaceted approach to research.

"Transforming learning spaces and medical libraries for the researchers and investigators working in a university in 2025 is going to require bona-fide [interactive] spaces ... that have been tested for proof of concept, [as well as] not remaining constrained, even trapped, by the need to stay close to our traditional approaches in research universities," said Tania Bardyn, associate dean and director of the Health Sciences Library.

With this goal in mind, the partnership began exploring what this space might look like.

## The Requirements

There were two main requirements for the collaboration space.

First was the location. The campus is large, with researchers located on both the north and south sides, so the space had to be centrally located.

The Health Sciences Library was a good fit location-wise, and had another attractive feature: a larger budget than some of the other departments on campus, according to Emily Patridge, assistant director of clinical research and data services at the University of Washington.





"The researchers don't have a lot of space – some of them are lucky to even have their own desks – so this was an opportunity to come to a shared location, use equipment their departments might not be able to fund, and do multidisciplinary collaboration," she said.

This meant the space required the latest technology, and the Institute of Translational Health Sciences specifically requested using digital signage to support the researchers.

"We realized we didn't want just another conference room or another space to teach," Patridge said. "We wanted [the space] to have a unique signature, so we could provide something new on campus that a lot of people aren't offering."

Bardyn added that the space also needed to streamline faculty investigative experiences.

"[Before], the investigative experience of a faculty member at the University of Washington required that they visit multiple websites and contact multiple departments, including the Health Sciences Library, to obtain support for new research," Bardyn said. "ITHS and the Health Sciences Library were used to handling routine interactions, each with their separate expertise, but in the digital age, services for researchers have morphed considerably."

## The Solution

To design the Translational Research and Information Lab (TRAIL) space and install the digital signage, the Health Sciences Library engaged CompView, an AV integration firm providing complete design/build solutions and technology products. CompView had previously worked with the university's school of medicine, which referred the integrator to the Health Sciences Library.

"[The library] wanted it to be a high-impact space – a multipurpose collaboration and [data] visualization room that people from various departments could use," said Laurie Simon, sales account executive for CompView.

The chosen space was originally a staff office area that would be redesigned. During initial redesign planning, the library conferred with CompView on the technology that would best suit its needs, as well as add something distinctive to the campus.

"We talked about options like projectors, or a single large display, but it was really important to the library to have the flexibility to send video and data from multiple sources to individual displays or to a whole display [setup]," said Dean Roberts, systems integration manager for CompView.

After conferring with CompView, the library settled on a 2x3 video wall comprising 55-inch displays, which would help health sciences clinical researchers analyze and visualize data, and give researchers the ability to send six different sources from various devices to any or all of the displays.

"When you're collecting large data sets [to] have as many subjects and data sets as possible, as a lot of health science researchers do, it's helpful to have multiple screens to visualize and look at the data," said Sally Pine, special project librarian for the Health Sciences Library at the University of Washington. "Spreadsheets only go so far, and having large-capacity screens to do analysis, or produce charts, graphs or 3-D models is very helpful."

Bardyn added that the changing needs of researchers in the digital age – including research data management, survey creation support, librarian consultations, data visualization space, bibliometrics, team science and more – made a video wall the best solution.

"[TRAIL] leadership recognized the need to merge services and workflows and create spaces that housed ... fully immersive visual environments for joint groups or teams of investigators to view data," she said.

After the library chose a video wall, CompView helped project admins select a manufacturer that would supply displays for the wall, and recommended NEC Display Solutions.

"NEC offers a solid video wall solution," said Roberts. "It's a good, known product that compares well with anything on the market, price-wise."

With the video wall solution in place, CompView got to work retrofitting the space.

## The Installation

The room has both internal windows that face into the library and windows to the outdoors, which meant that the room had some ambient light. The lighting in the room was one reason CompView steered the library away from a projector, Simon said. "[Display] panels will give brighter and more vivid images than a projector would, because the room's ambient light in the path of the projector would cause washout," she said.

The room originally held several small cubicles and did not have existing inputs for AV. All electrical and data components had to be surface mounted, and an existing column obstructed sight lines, which left only one logical space to place the video wall.

"It's a small room with a low ceiling, and with all of the electrical and data components surface mounted, it was a tight fit – so much so that we ended up not using the bottom bezel of the bezel package," Roberts said.

After taking off the bottom bezel, a CompView technician created custom-fabricated pieces to go along the outer sides of the video wall to block off the rails of the display mounts, creating a cleaner look.



Connectivity is on a rolling rack to the side of the column, with all inputs on the front of the rack. All types of computers and platforms can connect, whether laptop, tablet, PC or Mac.

"Everyone needed to be able to access and share the system, and the system needed to be simple to use, so that various users and groups didn't need to be an expert on all the technologies," Simon said.

To enable this system control, CompView added a color touch panel, so users can choose what inputs to show on which displays and how they want the layout to look, and trained library staff on how to use it.

## The TRAIL Space's Success

The TRAIL incubator space offers comfortable seating on two colorful, modular sofas; a table with a whiteboard surface; and two smaller wall-mounted whiteboards. The flooring is hardwood-style acoustic tiling to absorb sound.

The main focus is the six-panel video wall. Users can bring their own devices or use the university's computer tower for data visualization projects, 3-D imaging and presentations.

"The university did a nice job with the furnishings in this space," Simon said. "The AV package and furnishings together are really beautiful."

It's not your typical higher-ed research conference area, she added.

"I don't usually see something this elaborate, between the flooring, neat furniture and video wall," Simon said. "I think it's a pretty unique space."

Patridge said the response from researchers and users has been very positive.

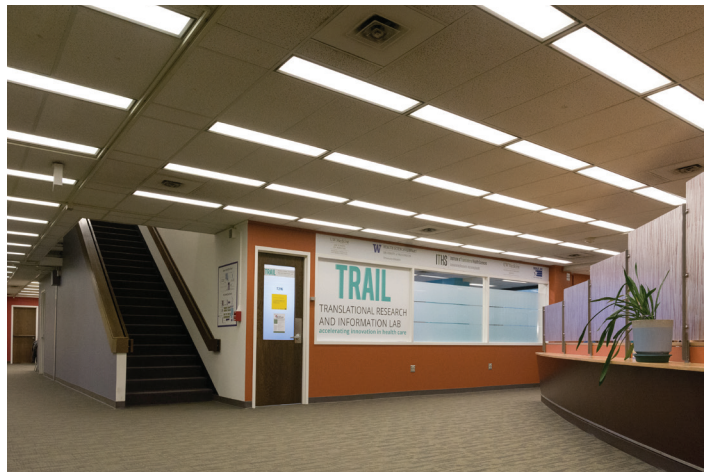
"People have been very pleased," she said. "They say it's a relaxing and inviting space, and they've really enjoyed having the data wall – being able to see what everyone is seeing, and using it to visualize data."

Bardyn added that the transformation of the former office space into the TRAIL Incubator Space is analogous to the transformation that is occurring in the health sciences research space.

"We must show that we can turn separate workflows to support health sciences researchers and clinical investigators – formerly discrete audiences – into a mass of productive regional clinical investigators working with real-time data flow on a video wall ... to solve population health problems," she said. "[We must demonstrate that this] transformed approach to technology and information services could be equally reliable and valid to the approach we desire to retire."

Patridge added that the video wall has sparked interest across the campus: A fellow librarian at the university's Foster School of Business library came to look at the TRAIL incubator space to investigate whether a video wall was right for that library as well.

"We do have other digital signage on campus, but typically it's used more traditionally – for displaying events and student lounge areas – so it's kind of cool that we took the same product and transformed it into something researchers can use for data visualization and 3-D imaging projects," Patridge said. "It's been a really big success."



## NEC Display Solutions of America

866-NEC-MORE

[www.necdisplay.com](http://www.necdisplay.com)