

## case study

Van Andel Research Institute



“The Steelcase lab benches were designed by architects, designers and scientists to meet the changing needs of a modern scientific laboratory.”

**Linda Seestedt-Stanford**

Central Michigan University, Assistant Dean

Steelcase

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without hesitation  
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about building a  
new laboratory or  
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**Nick Duesbery, Ph.D.**  
Laboratory of Developmental Cell Biology

*Van Andel Research Institute (Grand Rapids, MI) a world class research institute dedicated to the improvement of human health.*

## A state-of-the-art facility.

### Objectives

A state-of-the-art facility. That's what the participants of the Van Andel Research Institute project wanted for their 160,000-square-foot facility. And given their need to remodel every four years due to new equipment and employees, they wanted to move away from the typical two to six weeks of down time required to reconfigure. Instead, they needed a flexible solution—one that could enable their 14,000-square-foot laboratory to be reconfigured over a weekend, without tearing down walls, changing furniture or removing items from drawers. In addition, the solution had to be able to support heavy test equipment and sustain vibration. The overall intent of the design would be to help facilitate communication and collaboration among researchers.



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# Past experience. New challenge.

## Situation

The team at the Van Andel Research Institute visited 20+ research institutes around the country for information and ideas on how they could achieve their goal for the facility. Van Andel then began working with Steelcase on the project—a new lab bench. Steelcase designers wanted to learn how researchers work, then collaborate with them to jointly create a solution to meet their needs.

Steelcase built a mock-up and, along with the Van Andel Research Institute team, invited six scientists to “kick the tires” in what was called a “duct tape test.” Researchers worked in the space for several weeks, identifying efficiency obstacles and workarounds by marking them with tape. Steelcase and the Van Andel project team could then continue solving for specific needs. After careful consideration, several evolutions and mock-ups, the solution evolved to a new level—to meet each and every requirement that had been identified.



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# 48-hour reconfiguration.

## Solution

The basic concept for the Van Andel Research Institute lab bench consisted of a central beam containing gases, vacuum lines, several independent electrical circuits and computer connections, with two upper shelves with lighting and a variable surface for standing or seated height. The solution was designed to accommodate future generations of technology and fiber-optics. It was even designed to accommodate a curtain that could isolate radioactivity.

Renowned architect, Rafael Viñoly, and a lead architect of Rafael Viñoly Architects, Jay Bargmann, collaborated with Steelcase designers to ensure that the end result was as handsome as it was practical. They incorporated curved lines into the shroud of the lighting fixture, designed to mimic the building's architecture.



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*This durable, steel-framed solution can easily be moved—over a weekend if necessary.*

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## Truly user-centered.

## Results

The Van Andel Research Institute team was pleased with the collaborative efforts and with the lab bench solution created for them. And as a result of listening to the scientists' needs, Steelcase was able to create a user-centered solution, backed by a variety of patents created for this project.

Back and forth iteration has resulted in on-going laboratory furniture installations—an average of two additional lab benches per month. Dr. George Vande Woude, Ph. D, Director, Van Andel Institute said, "I wouldn't do anything differently." But, given the evolution of the Steelcase laboratory furniture solution offering, he was eager to hear how



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**Results** *continued*

Steelcase was able to make the solution even better by incorporating some minor changes into later projects. Van Andel continues to work with Steelcase for their office renovation projects as well.

“The Steelcase lab benches were designed by architects, designers and scientists to meet the changing needs of a modern scientific laboratory. Having used the new benches daily for almost five years, I can say with conviction that the benches have met our needs. Since the installation, I have been able to restructure my laboratory space to suit my changing needs: bench surfaces have been raised and lowered to make new desk spaces and work areas and cabinets have been removed to open space for large pieces of equipment that must sit on the floor. I cannot imagine having to go back to the fixed benches I once had to work with. I recommend without hesitation the Steelcase lab benches to anyone who is thinking about building a new laboratory or remodeling an existing space.” - Nick Duesbery, Ph.D., Laboratory of Developmental Cell Biology.



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**Steelcase products used:**

Leap® seating

Leap stools

Steelcase Wood Furniture

Context®

Steelcase Laboratory Bench

**Credits:**

Architect and Designer: Rafael Viñoly  
Architects, New York, NY

Project Manager: James P. Gray, AIA,  
Grand Rapids, MI

Facilities Manager: Sam Pinto

Dealer: Custer Office Environments

General Contractor: Erhardt Construction,  
Ada, Mi

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