

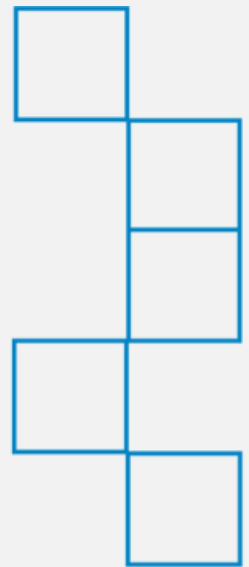


THE ADAPTABLE LABORATORY

Why Modular Casework is Now
Essential to Modern Research
Environments

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ABOUT KEWAUNEE SCIENTIFIC

For over a century, Kewaunee Scientific has been building more than laboratory furniture; we've been building trust. We collaborate with architects, lab planners, contractors, and research institutions with one shared purpose: Creating environments that empower scientific discovery.

As an American manufacturer, we take pride in keeping design, fabrication, and testing under one roof. Every system we produce is built with the same philosophy - durability, flexibility, and a commitment to the future of discovery.

INTRODUCTION: THE PACE OF CHANGE INSIDE THE MODERN LAB

I've spent enough time walking through laboratories to know one thing: Change never waits. Programs pivot. Equipment evolves. Research directions shift overnight. And far too often, the built environment struggles to keep up.

Traditional casework alone was never designed for this kind of agility. When a bench or utility chase can't adapt, it becomes more than a design limitation; it becomes a barrier to progress.

That is why modularity is no longer a luxury; it's the strategic backbone of modern laboratory design. The labs that adapt the quickest are the ones that remain productive the longest.



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THE CHANGING LANDSCAPE OF LABORATORY DESIGN

Research today isn't confined by discipline or department. It's fluid, collaborative, and interdisciplinary. Teams expand and contract as projects evolve. A lab that supported one kind of experiment last year might support something entirely different this year.

Facility directors are under pressure to keep up, to support change without triggering construction projects every time a grant shifts direction. Permanence used to be a virtue. Now, it's an obstacle.

Adaptability has become the new measure of performance. The ability to reconfigure without disruption isn't just convenient; it's strategic. Every institution I've worked with faces the same challenge. Spaces built for past projects must evolve to meet the current needs.

WHY ADAPTABILITY MATTERS IN MODERN SCIENCE

Fixed millwork has a certain nostalgic charm: Solid, beautiful, and permanent. For many labs, that permanence delivers stability and a sense of craftsmanship that stands the test of time.

A strong foundation matters, but pairing permanence with flexibility ensures labs can adapt to tomorrow's needs. When spaces lack built-in adaptability, even small changes can become major projects — opening walls, rerouting utilities, and scheduling downtime that stretches from days to weeks. What begins as a strength can turn into a constraint unless the design anticipates evolution.

The impact isn't only financial; it can include lost productivity, delayed research, and frustration for scientists who need to move faster than the infrastructure allows. Adaptable furniture helps bridge this gap, complementing fixed casework by providing options for spaces that demand agility.



THE RISE OF MODULARITY

I've seen firsthand how a modular environment changes the way people work. When reconfiguration becomes an operational task instead of a construction project, everything moves faster, and morale follows.

MODULARITY AS A STRATEGIC ADVANTAGE

Modularity turns infrastructure from a fixed expense into a flexible asset. New instruments fit without weeks of downtime. Workflows evolve in hours, not months. Over time, that flexibility compounds in value, both financially and operationally.

FLEXIBILITY FUELS INNOVATION

But the real shift isn't mechanical, it's cultural. When people know their space can evolve with them, they approach innovation differently. They experiment more. They collaborate more. They stop designing around their constraints.

That's the promise of modularity: A laboratory that's built to think, grow, and adapt just like the science it supports.



BUILT TO LAST. DESIGNED TO CHANGE. KEWAUNEE'S MODULAR PHILOSOPHY

At Kewaunee, we approach modularity with two simple principles:
Build it to last. Design it to change.

AMERICAN MANUFACTURING QUALITY

Keeping production here in the U.S. allows us to control every variable that affects quality, from materials to machining. We test our systems under real conditions, not theoretical ones, because real science doesn't happen in theory.

Local manufacturing also shortens lead times, strengthens service, and keeps accountability where it belongs: Close to home.

A BROAD, FLEXIBLE CATALOG

Kewaunee offers one of the most comprehensive modular casework portfolios in the industry. Each system integrates with others, making reconfiguration intuitive and future-proof. A laboratory built with Kewaunee components isn't static; it's scalable. It can grow, reorganize, or specialize without starting from scratch.

Unlike imported commodity systems designed for cost over longevity, our approach is an investment in performance, safety, and long-term adaptability.

PROOF IN PRACTICE: EVOLUTION AND ENTERPRISE

EVOLUTION - ADAPTABLE CASEWORK PLATFORM

The Evolution system was born out of constant change. It's a platform that allows teams to rearrange, add, or remove components without disruption. Heavy-duty where it matters, refined where it counts, Evolution bridges the gap between flexibility and durability. Whether in teaching labs or pilot-scale R&D spaces, it provides a foundation that grows with your mission.

ENTERPRISE - INTEGRATING PERFORMANCE & INFRASTRUCTURE

Enterprise takes modularity a step further by embedding flexibility directly into the infrastructure. Power, data, and plumbing can be rerouted or expanded as research needs evolve. Adjustable shelving, mobile work surfaces, and integrated service pathways make Enterprise ideal for high-performance environments where adaptability is more than a feature; it's an expectation.

Together, these platforms show how Kewaunee transforms adaptability from a product trait into a facility-wide advantage.



THE PAYOFF: ADAPTABILITY AS STRATEGY

Every lab director I've spoken with shares the same realization - adaptability pays for itself. It's an investment that delivers measurable returns, making it a strategic advantage rather than an operational expense.

ADAPTABILITY FOR LONG-TERM VALUE:

- **Lower Lifecycle Costs:** Fewer renovations mean less waste, less downtime, and more money directed toward research instead of construction.
- **Minimal Downtime:** Reconfiguration happens between experiments, not between fiscal years.
- **Sustained Usability:** As technology and priorities change, the lab stays relevant.
- **Greater Employee Satisfaction:** Scientists work better when their environment supports, not hinders, their process.

Adaptability doesn't just make a lab more efficient. It makes it more resilient.



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CHOOSING THE RIGHT MODULAR PARTNER

Selecting a modular partner is about more than choosing a product line. It's about aligning with a philosophy. You need a partner who understands both engineering precision and the realities of scientific work.

Kewaunee delivers both.

Our integrated design, manufacturing, and service model ensures every system, from concept to installation, meets the same standard of reliability and repeatability.

When institutions invest in Kewaunee, they're not buying casework. They're building a partnership that will support their goals today and their evolution tomorrow.

CONCLUSION: DESIGNING FOR WHAT'S NEXT

Science doesn't stand still, and neither should the spaces that support it. The laboratory of the future is defined by possibility. Modular casework turns the lab itself into a living system. One that grows, adapts, and sustains innovation.

At Kewaunee, we've seen what happens when flexibility meets craftsmanship. It doesn't just change the layout of a lab. It changes how people think, collaborate, and discover.

That's what adaptability really means: Equipping science with the tools to evolve.



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ABOUT THE AUTHOR

Lance Gray is a Product Manager at Kewaunee Scientific, where he specializes in laboratory furniture systems that support innovation, compliance, and long-term performance.

With a background in building products and a focus on fenestration and modular lab benches, Lance brings a practical, user-centric perspective to lab design.

REFERENCES

1. Scientific Equipment and Furniture Association (SEFA). SEFA 10 – Recommended Practices for Laboratory Furniture. Retrieved from www.sefalabs.com.
2. National Institutes of Health (NIH). NIH Design Requirements Manual (DRM). Retrieved from www.orf.od.nih.gov.
3. Lab Manager Magazine. Future-Ready Laboratory Design Trends. Retrieved from www.labmanager.com.
4. National Science Foundation (NSF). Research Funding and Facility Planning Data. Retrieved from www.nsf.gov.
5. Science Direct. Trends in Flexible Laboratory Infrastructure. Retrieved from www.sciencedirect.com.umentation)

AUTHOR'S NOTE

This paper reflects not just Kewaunee's philosophy, but my own experiences walking labs, talking with planners, and watching the way innovation collides with infrastructure.

The takeaway is simple: The future belongs to spaces that can adapt as fast as the science inside them.





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