

7 Proven Strategies to Become a Better Lab Manager



Once you've settled into the lab manager role, the question becomes: *How do I make operations smoother without slowing down the science?* In a biotech environment where every milestone matters, operational efficiency isn't just a nice-to-have. It's essential to hitting R&D goals, securing the next round of funding, and ultimately bringing your platform or therapeutic to market.

The good news? You don't need to overhaul everything. Many impactful improvements are tactical, targeted, and can show results almost immediately. Here are 7 strategies you can implement to level up your lab management strategy to help your team move science forward.

- ✓ Design an Environment That Supports High-Performance Science
- ✓ Streamline Lab Organization Around Supply Workflows
- ✓ Shift from Reactive to Proactive Inventory Management
- ✓ Operationalize Knowledge with SOPs and Templates
- ✓ Make Time for Strategic Lab Meetings
- ✓ Centralize Lab Purchasing to Avoid Chaos and Cut Costs
- ✓ Eliminate the Black Box Around Spend and Ordering Errors

1. Design an Environment That Supports High-Performance Science

Biotech research is fast-paced, high-stakes, and full of uncertainty. Delays from supply shortages, unclear expectations, or communication breakdowns can derail progress. Your job as a lab manager is to remove those barriers and create conditions for great science to happen.

Set the Tone

People take cues from how you show up—especially when things go wrong. When experiments fail or timelines slip, respond with curiosity and support instead of blame. This builds psychological safety and encourages people to speak up early when something's off, which ultimately helps prevent small issues from becoming bigger problems. How you handle setbacks sets the standard for how your team navigates uncertainty and pressure.

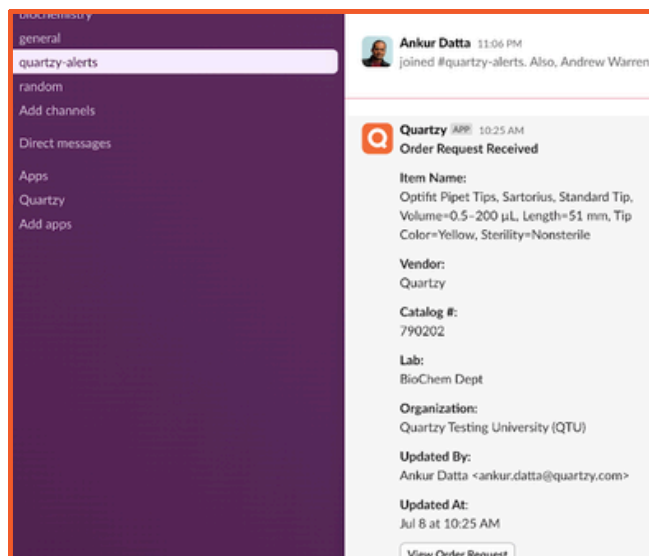
Invest in communication

Regular one-on-ones and team check-ins help surface roadblocks early, before they impact timelines or morale. Weekly stand-ups focused on updates, blockers, and requests for help can improve alignment and reduce unnecessary back-and-forth. Clear, consistent communication also helps researchers feel more connected to broader goals and supported in their day-to-day work.

Recognize contributions

A quick Slack or Teams shoutout or a team lunch to celebrate a milestone can go a long way in maintaining morale. This is especially important when it comes to operational tasks—like updating inventory, labeling reagents, or following SOPs—that scientists may see as administrative or compliance-related drudgery. When lab managers explain the why behind these tasks and publicly recognize the people who follow through, it reinforces their importance and helps build a culture where operational discipline is valued as part of doing great science.

Slack Notifications



Quartzly Tips

- **Keep communication centralized and transparent.** Comment threads live directly inside each Quartzly order request, so the whole team stays informed. No more searching for emails in your inbox or tracking down post-it notes left on your desk. ➤ [Learn more](#)
- **Connect Quartzly to the tools your team already uses.** With Slack and Teams integrations, Quartzly automatically notifies your channels when orders are placed—eliminating manual updates and keeping everyone aligned in real time. ➤ [Learn more](#)

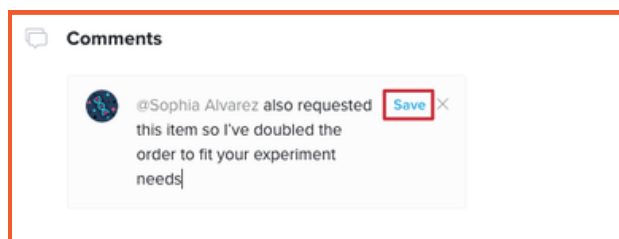
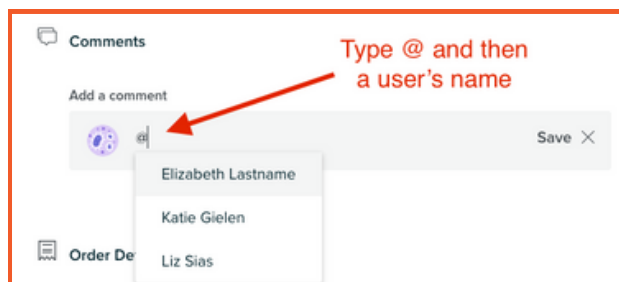
“Comment threads live directly inside each Quartzly order request, so the whole team stays informed. No more searching for emails in your inbox or tracking down post-it notes left on your desk.”



Ian Lacadin

Inventory Coordinator at Champion's Oncology

Comment Threads



2. Streamline Lab Organization Around Supply Workflows

In biotech labs, time spent looking for reagents or troubleshooting labeling confusion is time not spent on experiments. The key is aligning organization with how the team actually works.

Audit the bench layout

Observe where bottlenecks happen. Whether it's too many people at one station or frequent back-and-forth to grab reagents, adjust the setup to support smoother movement. Keep essential tools within arm's reach and group materials by task or assay type. Involving your team in this process not only leads to smarter layouts, but also helps build buy-in for maintaining the new system.

Fix high-friction zones

High-friction zones are areas in the lab where bottlenecks, confusion, or inefficiencies routinely occur—typically shared spaces like fridges, freezers, chemical cabinets, or supply drawers. These spots tend to accumulate expired materials, duplicates, or unlabeled items, which not only wastes budget but also slows people down during critical experiments. Schedule regular cleanouts and use visual systems like printed box maps, “use first” stickers, or labeled bins to make storage more intuitive and reduce time spent searching or second-guessing.

Visual cues > verbal cues

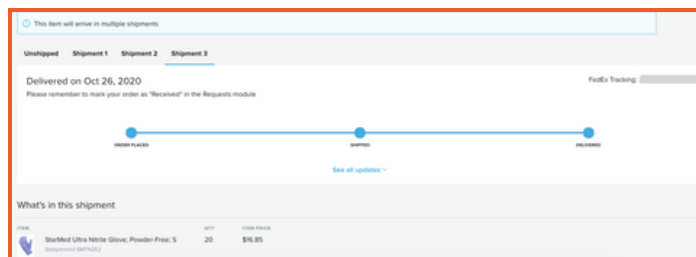
A clear visual system helps prevent mix-ups and saves time when training or onboarding. Instead of relying on community-based knowledge, you're creating a repeatable framework that anyone can follow. Think of it as building a visual SOP for how your lab is laid out—one that reduces cognitive load and increases independence. Examples include color-coded tape for designated bench areas, printed maps for freezer box layouts, clearly labeled shelves and drawers, “use first” stickers on time-sensitive reagents, and laminated signage that explains common workflows or equipment status. These small additions help make the lab self-explanatory, even for new team members.



Quartzy Tips

- **See the status of every order no matter where it came from.** Track orders from both Quartzy and external suppliers in a single dashboard to prevent mix-ups and reduce delays. ➤ [Learn more](#)
- **Use Quartzy Interactive Freezer Boxes.** Keep track of inventory items by using Quartzy's interactive freezer boxes. The box maps can be printed out and placed on the front of or near freezers so contents of boxes can be checked before opening up the freezer and letting out that cold air. ➤ [Learn more](#)

Check Order Status



Print Freezer Box Map

← Back to Item Details Manage Locations

-80 C Angela's Box Print

A1 +	A2 +	A3 +	A4 +	Klenow Enzyme... A5	Klenow Enzyme... A6	Klenow Enzyme... A7	Klenow Enzyme... A8	Klenow Enzyme... A9
B1 +	B2 +	B3 +	B4 +	Klenow Enzyme... B5	Klenow Enzyme... B6	Klenow Enzyme... B7	Klenow Enzyme... B8	Klenow Enzyme... B9
pLVTHM	pLVTHM	pLVTHM	pLVTHM					
C1	C2	C3	C4	C5 +	C6 +	C7 +	C8 +	C9 +
pLKO1	pLKO1	pLKO1	pLKO1	D5 +	pLKO1	pLKO1	pLKO1	pLKO1
D1	D2	D3	D4	D5 +	D6	D7	D8	D9
E1 +	E2 +	E3 +	E4 +	E5 +	E6 +	E7 +	E8 +	E9 +
F1 +	F2 +	F3 +	F4 +	F5 +	F6 +	F7 +	F8 +	F9 +
G1 +	G2 +	G3 +	G4 +	G5 +	G6 +	G7 +	G8 +	G9 +
H1 +	H2 +	H3 +	H4 +	H5 +	H6 +	H7 +	H8 +	H9 +
I1 +	I2 +	I3 +	I4 +	I5 +	I6 +	I7 +	I8 +	I9 +

3. Shift from Reactive to Proactive Inventory Management

Running out of key materials during a critical experiment isn't just frustrating—it can throw off project timelines, investor updates, or compromise the ability to generate reliable data. Proactive inventory management ensures that researchers always have what they need to do their experiments and is one of the fastest ways to improve lab productivity.

Automate when possible

Automation helps eliminate the guesswork and reduces the risk of human error, especially in busy or understaffed labs. With lab supply management systems, order data and inventory updates are captured in real time saving hours of manual tracking and allowing your team to focus on science instead of spreadsheets.

Standardize ordering protocols

When everyone follows the same process, you reduce confusion and improve accountability. Standard protocols also help prevent over-ordering or duplicated effort, which is especially critical when working with limited budgets and tight timelines. Document these workflows and revisit them regularly to adapt to your lab's evolving needs.

Create an Up-to-Date Inventory System

A well-organized system makes it easy to know what's in stock, where it's located, and when it needs to be reordered. Tools like barcoding or mobile scanning can speed up updates, reduce manual errors, and make onboarding new team members far easier. This ensures your lab stays productive even during staffing changes.



Quartzzy Tips

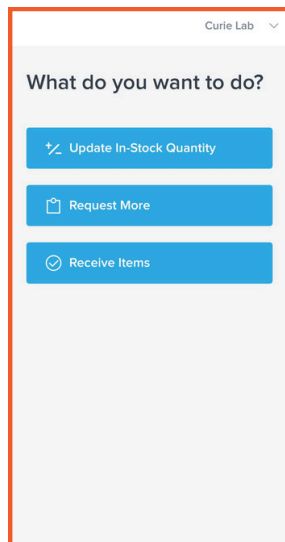
- **Get alerts before stockouts happen.** Auto-notifications let you know when inventory runs low or order statuses change—helping you act early and avoid supply interruptions. ➤ [Learn more](#)
- **Use the Quartzzy mobile app to know exactly what's in stock.** Real-time inventory updates show what's been used and what's on hand, so you can plan purchases with confidence. ➤ [Learn more](#)

"I love the barcode system. I have it all organized like a grocery store in our lab. Everything is labeled with a barcode. We have 2 iPads that stay in the lab and our scientists use them all the time to scan things in and out and request more of the items they need."

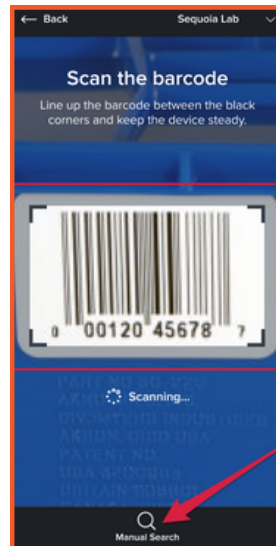
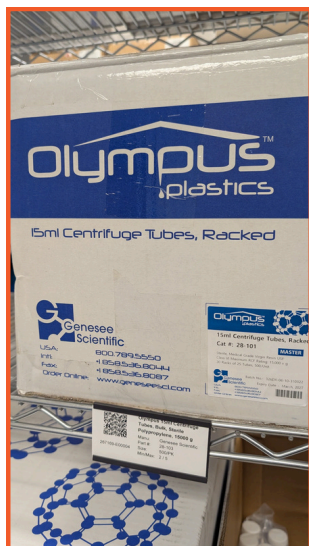


Gena Van Blunk
Logistics and Procurement Specialist
at BioAnalysis

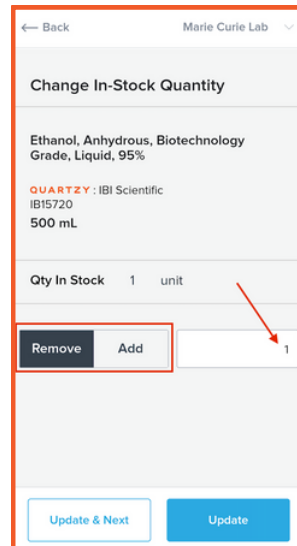
Using the Mobile App



1 Select action



3 Scan barcode



4 Update stock

4. Operationalize Knowledge with SOPs and Templates

Consistency isn't just about compliance—it's about speed. When people spend time reinventing routine tasks or searching for how to run an assay, that's time lost.

Centralize documentation

That includes maintaining a central repository for Safety Data Sheets (SDSs), instrument logs, SOPs, and your Environmental Health and Safety (EHS) plan. While there are tools that can simplify this, the key is to operationalize safety in a way that protects your team and avoids compliance risks—without creating unnecessary friction for researchers. Centralization ensures consistency, improves onboarding, and keeps your lab running safely and smoothly. If your lab uses Google Workspace, you can take advantage of tools like Google's AI agent, Gemini, to quickly search for SOPs, equipment guides, or any document you need right from your Drive—making it even easier for your team to find and follow established processes.

Version control matters

In many labs, this responsibility falls to the lab manager or a QA/QC lead. It would be someone who understands both the day-to-day workflows and compliance requirements. For example, a quarterly review of protocols or safety procedures can help catch outdated steps before they lead to errors. Having a documented review schedule ensures nothing falls through the cracks as your team scales or workflows evolve.

Use templates for repeatable workflows

Templates save time, reduce variability, and help maintain quality across routine tasks. They also create a safety net during transitions which ensures that institutional knowledge isn't lost when staff changes or grows.



Quartz Tips

- **Give your team the right access for the right tasks.** Role-based permissions ensure that only the right people can place orders, approve spend, or adjust inventory—aligned with your lab's structure and compliance needs. ➤ [Learn more](#)
- **Effortlessly manage SDSs in Quartz.** Quartz's SDS automation feature eliminates the hassle by automatically linking SDS to corresponding inventory items—saving time, reducing errors, and ensuring critical safety information is always at your fingertips. ➤ [Learn more](#)

Custom Approval Workflows

Quartz Testing University (QTU) / Redwood Lab Account #50-94849-410

Members Locations Inventory Types Vendors Backups Addresses Approvals Developers Lab Settings

Approvals

General Approval Settings Request Approval Routing Purchase Order Approval Routing

First Approval

For requests: of item type Chemical - Hazardous

send an approval request to: Rowan Ashby

All other item types will skip this step.

+ Add Step

Second Approval

For requests: not already approved

send an approval request to: Sage Wilder

who can fully approve requests up to: leave blank for no limit

After this, the request is fully approved.

+ Add Step

Save Workflow Cancel

SDS Automation

Safety Details [Waste Sticker](#) [Edit Safety Details](#)

Upload SDS X Sigma-SDS270997.pdf Last revised Nov 2023

Hazard Identifications	NFPA Diamond	Hazard Statements
		<p>H315 : Causes skin irritation.</p> <p>H319 : Causes serious eye irritation.</p> <p>H336 : May cause drowsiness or dizziness.</p> <p>H351 : Suspected of causing cancer.</p>
Storage	Disposal Protocol	Recommended PPE
Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Heat sensitive. Handle and store under inert gas.	<ul style="list-style-type: none">• DO NOT POUR DOWN DRAIN.• Dispose of contents/ container to an approved waste disposal plant.	<ul style="list-style-type: none">• Eyeshields• Faceshields• Full-face respirator (US)• Gloves• Multi-purpose combination respirator cartridge (US)
Precautions		
<ul style="list-style-type: none">• Causes skin irritation.• Causes serious eye irritation.• May cause drowsiness or dizziness.• Suspected of causing cancer.• Obtain special instructions before use.• Do not handle until all safety precautions have been read and understood.• Avoid breathing mist or vapors.• Wash skin thoroughly after handling.• Use only outdoors or in a well-ventilated area.• Wear protective gloves/ protective clothing/ eye protection/ face protection.• IF ON SKIN: Wash with plenty of soap and water.• IF INHALED: Remove person to fresh air and keep comfortable for breathing.• Call a POISON CENTER/ doctor if you feel unwell.• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.• IF exposed or concerned: Get medical advice/ attention.• If skin irritation occurs: Get medical advice/ attention.• If eye irritation persists: Get medical advice/ attention.• Take off contaminated clothing and wash before reuse.		

5. Make Time for Strategic Lab Meetings

It's easy to deprioritize meetings in a high-urgency environment, but a well-run 30-minute sync can surface blockers, align goals, and reduce back-and-forth the rest of the week. Different types of meetings serve different purposes: weekly standups help identify immediate needs and keep experiments on track, monthly or quarterly budget reviews ensure the team understands spend and can plan future orders, and quarterly compliance meetings keep safety protocols and documentation up to date. Together, these touchpoints help the team stay aligned, informed, and able to move quickly without sacrificing coordination.

Include the right people

Focus the invite list on those directly involved in lab execution—typically the lab manager, researchers, and the science lead. If your team includes a separate operations or procurement manager, they should be included as well to address inventory or vendor-related issues. Avoid including C-level executives or administrative staff unless their input is needed that week. This is especially important for your lab's weekly meetings since it keeps the meetings focused and tactical which ensures it remains a useful forum for solving problems, not just sharing updates.

Share context, not just updates

Help people understand why their work matters in the broader milestone timeline. Connecting day-to-day tasks to key goals builds alignment and motivation. When team members see how their contributions move the company forward, they're more likely to stay engaged and speak up when something's off track.

Keep it focused

You might try a "highs, lows, needs" format where each person shares a success, a challenge, and a request for help. This keeps the conversation grounded in real-time and quickly surfaces any blockers. The lab manager should lead the meeting, come prepared with a clear agenda, and be flexible. If there's nothing urgent to cover, don't be afraid to cancel to respect everyone's time. Evaluate scheduled meetings regularly to make sure they are still necessary. Don't meet just to meet.



Quartzy Tip

- **Use operational data to guide conversations.** Activity logs track every order and inventory change, helping your team spot patterns, troubleshoot issues, and highlight improvements. Learn more about Quartzy's **Spend Dashboard** and **Consumption Reports**.

*"I really love the Spend Dashboard. I think it's **crucial to operational efficiency**."*

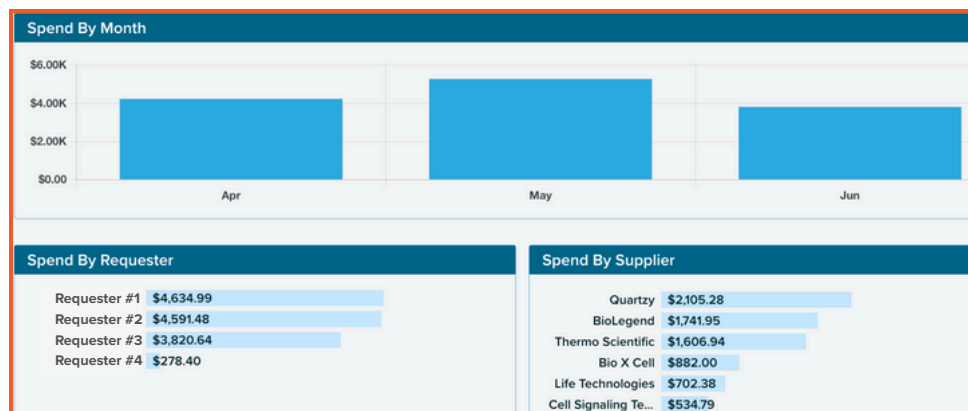
Amber reduced company spending by over \$100K in one month by centralizing procurement and switching request management to Quartzy.



Amber Vallejo

Senior Manager, Facilities, Operations and Procurement

Spend Dashboard



6. Centralize Lab Purchasing to Avoid Chaos and Cut Costs

Coordinating lab orders across team members, departments, and suppliers can quickly spiral into confusion, delays, and wasted budget.

Centralize or outsource ordering

When ordering happens across emails, spreadsheets, and individual supplier portals, it's easy for things to fall through the cracks. A centralized system improves transparency, speeds up approvals, and reduces duplicate or unnecessary orders. For lean biotech teams, there are also services that can take on the time-consuming tasks of ordering and vendor communication—helping labs stay on track without needing to hire additional staff.

Define roles

In fast-moving labs, it's essential to have clear rules around who can buy what. Defining ordering roles helps prevent unapproved purchases and gives leadership better control over spend. It also ensures compliance with internal policies and external funding requirements—especially when grant reporting or audits are involved.

Consolidate Suppliers

Managing dozens of vendors can create unnecessary administrative complexity. Consolidating orders through fewer suppliers simplifies invoicing, streamlines packing slip review, and can lead to bulk or shipping discounts. It also reduces the time finance and ops teams spend tracking down payments or resolving mismatched documents.

Track Order Update History

The screenshot displays a Quartzzy interface for a lab purchase request. At the top, the item name is '6500 | LIGHT DIAGNOSTICS™ Rabies DFA III, LIGHT DIAGNOSTICS™ Rabies DFA III'. A 'Request Again' button is visible. Below the item name, it says 'Requested by Elizabeth L.'. There are input fields for 'Shipping & Handling' and 'Vendor' (with sub-fields for 'URL' and 'Contact Info'). A 'Back to top' link is on the right. A vertical menu on the right side includes 'Request', 'Comments', 'Order Details', 'Custom Fields', 'Vendor', and 'History' (which is highlighted with a red box). Below this menu, a 'History' section shows a timeline of updates: 'Sep 4, 2024 11:23 AM Item marked as received by Liz Sias', 'Aug 30, 2024 02:09 PM Item ordered by Liz Sias', 'Aug 30, 2024 02:08 PM Request approved by Liz Sias', and 'Aug 30, 2024 01:56 PM Item requested by Elizabeth Lastname'. At the bottom, a summary box shows the item name, price '\$513.00', and quantity '1 = EA'.



Quartzzy Tips

- **Track orders, usage, and approvals.** Quartzzy gives your entire team visibility into order status, approval history, and inventory usage—all in one place. This transparency helps prevent duplicate orders, speeds up purchasing, and improves accountability across lab and finance teams. ➤ [Learn more](#)
- **Let BioPASS handle the heavy lifting.** BioPASS is Quartzzy's virtual lab manager service that takes ordering, follow-ups, and vendor communication off your plate. It's ideal for lean biotech teams that want to stay organized and efficient without adding headcount. ➤ [Learn more](#)
- **Customize approval workflows by role.** With Quartzzy's role-based permissions, you can define exactly who can request, approve, and place orders—aligned with your lab's structure. This reduces rogue spending, improves compliance, and keeps your purchasing process running smoothly. ➤ [Learn more](#)

7. Eliminate the Black Box Around Spend and Ordering Errors

Labs often overspend—or overshoot timelines—because they lack clarity into what’s been ordered, what’s arrived, and what’s actually been billed. Without a system in place for reviewing discrepancies, it’s easy for duplicate payments, missing items, or vendor issues to go unnoticed.

Implement 3-way matching

This process helps ensure that you're only paying for what was actually ordered and received—no more, no less. While it may sound like extra administrative overhead just to catch occasional errors, those errors can easily cost labs thousands of dollars in overpayments, missed items, or duplicate invoices. Fortunately, there are tools available today that help automate the matching process, reducing the manual effort while giving your team more confidence in the accuracy of every payment. Especially in biotech, where supply costs add up quickly, this kind of validation is a smart way to protect your budget.

Centralized records of receipts

Having all order data and delivery confirmations in one place allows teams to spot problems before they escalate. Whether it’s a missing reagent or a partial shipment, early visibility means faster resolution. It also simplifies communication between the lab, vendors, and finance.

Align with Finance tools

When teams operate from disconnected systems, it often leads to confusion, duplicated effort, and payment delays. Aligning purchasing and invoicing data between departments reduces back-and-forth and speeds up reconciliation. This alignment is critical for month-end close, grant reporting, and maintaining good vendor relationships.



Quartzy Tips

- **Reconcile orders with confidence.** Quartzy’s Invoices Module lets you compare what was ordered, what was received, and what was invoiced—all in one place. This 3-way matching reduces payment errors, simplifies reconciliation, and helps finance teams catch issues before they become costly. ➤ [Learn more](#)
- **Integrate with QuickBooks and NetSuite.** Quartzy connects directly with your accounting systems to streamline purchasing and reduce manual data entry. This integration saves time, minimizes errors, and ensures finance and lab teams are always working from the same source of truth. ➤ [Learn more](#)

*“As a startup, we don’t have an ERP. We have separate systems for accounting, purchasing, and HR. Specifically for accounting, **Quartzy integrates with QuickBooks** so it’s really easy for us to sync transactions and transactional data with just a click of a button. So there is no fear of [errors from] manual entry. This helps with accuracy, reporting, and is a huge time saver.”*



Cody Cuccio
Finance Officer at Tiba Biotech

Strong lab management is a combination of structure, communication, and care. But in a biotech startup, where every dollar and every data point matters, it’s also about resourcefulness. When you’re operating with lean teams and tight timelines, you don’t always have the luxury of hiring more staff or throwing money at operational challenges. That’s why the way you manage your lab can have an outsized impact on your company’s ability to hit milestones and grow.

By focusing on both the operational and interpersonal aspects of leadership, you can create a lab environment where people thrive and where science moves forward efficiently, collaboratively, and with far less chaos.

Scan QR code to get a live demo.



info.quartzy.com/demo

