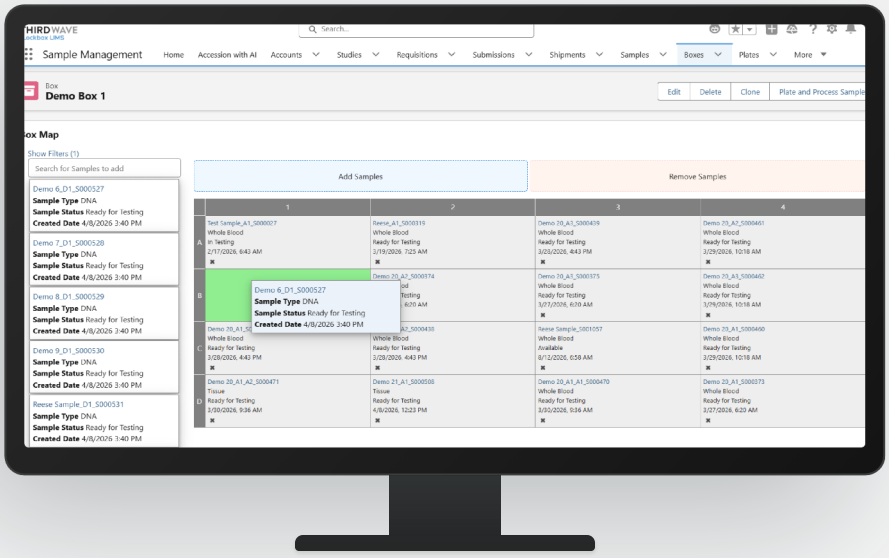
THIRD WAVE ANALYTICS

THIRD WAVE Lockbox LIMS

for Biobanks & Biorepositories

Complete biospecimen visibility. From collection through storage, distribution, and beyond.

Manage the complete biospecimen lifecycle with a configurable LIMS designed to support the complex sample tracking, storage, study management, and regulatory needs of Biobanks and Biorepositories.



Track every sample. Know where it is. Understand its history.

01	02	03	04	05	06
Collection	Accessioning	Processing	Storage	Distribution	Retirement

LIFECYCLE & WORKFLOWS

Your samples are valuable. Keep their complete history connected.

Biobanks and Biorepositories manage valuable and often irreplaceable biospecimens across complex workflows, long-term storage environments, research studies, and multiple locations.

Lockbox LIMS provides a centralized system for managing biospecimens and their data throughout the lifecycle, from receipt and accessioning through processing, aliquoting, storage, distribution, and retirement, so your team knows where a sample is, where it came from, and what has happened to it.

Track the complete biospecimen lifecycle

Lockbox LIMS supports:

- Parent specimens, aliquots, and derivatives
- Freeze/thaw cycles
- Storage assignments and relocation
- Complete chain of custody
- Remaining sample volume
- Sample check-in and check-out
- Specimen retirement and destruction

Standardize biobanking workflows

Configure Lockbox LIMS to support workflows such as:

01 Collection	02 Receipt	03 Accessioning	04 Centrifugation	05 Aliquoting
06 Extraction	07 QC	08 Storage	09 Distribution	10 Disposal

Your processes determine the workflow—not the other way around.

One sample. One connected history.

From collection through final disposition, Lockbox LIMS helps maintain complete traceability across the biospecimen lifecycle, on workflows configured around your processes.

STORAGE MANAGEMENT

Simplify storage management across your biorepository

When your organization manages thousands or millions of specimens, knowing exactly where each sample is stored is essential.

Lockbox LIMS provides hierarchical storage management that allows your team to organize and locate specimens across your entire storage environment.

Track samples from site to position

Configure storage hierarchies that reflect your actual facilities:

Site › Building › Room › Freezer › Shelf › Rack › Box › Position

Quickly locate samples without searching spreadsheets, paper records, or physically opening freezer boxes.

See more than a storage location

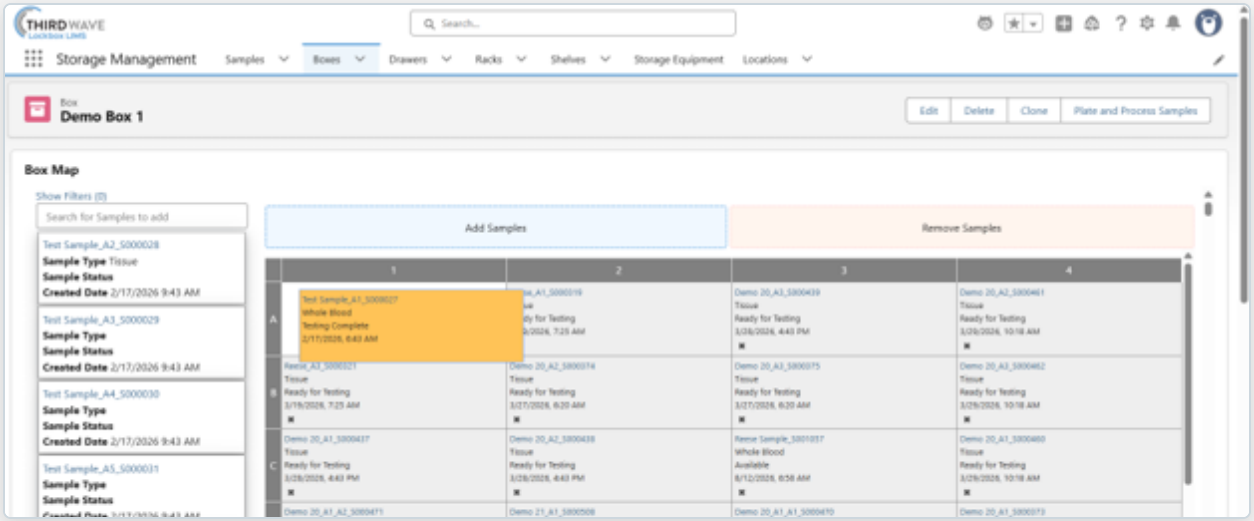
Storage is connected to the rest of the sample record, giving users access to sample status, lineage, study associations, remaining volume, and history.

Visualize your storage

Graphical storage tools show where specimens are located and how storage space is being used.

With Lockbox LIMS, teams can:

- View freezer, rack, box, and sample relationships
- Visualize box contents and occupancy
- Search for available storage positions
- Relocate samples while maintaining traceability
- Monitor freezer and storage capacity
- Track freeze/thaw cycles
- Maintain sample location history



Find samples without opening the freezer.

Give your team digital visibility into your storage environment before they ever touch a freezer door.

STUDIES & RESEARCHERS

Connect samples, studies, and researchers

Managing biospecimens involves more than knowing where they are stored. Biobanks also need to understand how specimens can be used, which studies they support, and who should have access to them.

Lockbox LIMS connects sample information with study and workflow data to help teams manage research requests while maintaining appropriate controls.

Study management

Keep critical study and specimen information accessible, including:

- Study and project associations
- Participant and sample information
- Consent information and document versions
- Sample-use restrictions
- Consent and sample expiration dates
- Withdrawal and destruction requests
- Cohort and visit information
- Sample check-in and check-out by researchers or study coordinators for use in their studies

Search sample metadata to identify specimens that meet specific research criteria, and support request, approval, fulfillment, and distribution workflows.

Customer portal

Give external users controlled access to the information and processes they need via a Customer Portal. Researchers can be given access to:

- Searchable sample information
- Study-specific samples
- Sample or service requests
- Request status
- Reports and documentation
- Shipment information

Access can be configured around the individual user, study, principal investigator, project, or other requirements.

Visualize complex sample lineage

Maintain connections between parent samples, aliquots, and derived materials such as DNA, RNA, buffy coat, and PRBCs.

Lineage can include a full audit trail, recording who handled or changed each sample, what was done, and when.

Secure by design

Profiles and permission sets control what each internal and external user can see and do, down to individual fields, so researchers access only the samples and data they're approved for.

Open access for research. Full control for your team.

Connect every specimen to its study, consent, and lineage, and give researchers self-service access governed by the permissions you define.

SECURITY & COMPLIANCE

Protect sensitive data. Maintain traceability.

Biobanks and Biorepositories may manage sensitive patient, donor, research, and specimen information. Lockbox LIMS provides configurable security and data controls to help protect information and support regulatory requirements.

Security & data integrity

- Role-based access controls
- Profiles and permission sets
- Field-level security
- Detailed audit trails
- Electronic signatures
- Data encryption
- Multi-factor authentication
- Single sign-on
- Controlled visibility of sensitive data

Configure access so users see the information appropriate for their role, project, study, or department.

Support for regulatory requirements

Lockbox LIMS supports regulated laboratory environments and requirements including:

HIPAA | GDPR | CAP | CLIA | GLP | FDA 21 CFR Part 11

Audit trails provide visibility into what changed, who made the change, and when it occurred, supporting data integrity and audit readiness.

Barcode labeling

Generate labels for parent specimens, aliquots, and derived samples, plates and boxes to support identification and traceability throughout laboratory and storage workflows.

Connect your laboratory ecosystem. Your LIMS shouldn't become another data silo.

Lockbox LIMS supports configurable integrations and data exchange with instruments and third-party systems through RESTful APIs and CSV import/export. Potential connections include:

- EHR and EMR systems
- Clinical databases
- Sequencing platforms
- Plate readers
- Tube etchers and label printers
- Freezer monitoring systems
- Other laboratory and enterprise applications

ONE FLEXIBLE PLATFORM

Built around your biobank. Ready to grow with it.

No two Biobanks or Biorepositories operate exactly the same way. Lockbox LIMS is highly configurable, so you can build workflows, data structures, security controls, reports, and processes around the way your team actually works. As your repository grows, Lockbox LIMS grows with it.

More than sample & storage management

01 **Sample tracking**
Visibility into sample status, lineage, location, history, and chain of custody.

02 **Storage management**
Hierarchical locations, box contents, capacity, sample movements, and freeze/thaw cycles.

03 **Study management**
Connect participants, studies, samples, consent information, visits, and research requirements.

04 **Workflow management**
Standardize accessioning, processing, aliquoting, QC, storage, and distribution.

05 **Shipping & distribution**
Track specimen movement between sites, laboratories, storage facilities, and researchers.

06 **Inventory management**
Consumables, collection kits, lots, expiration dates, locations, and inventory levels.

07 **Reports & dashboards**
Monitor inventories, freezer capacity, operational trends, and workflow activity.

08 **Integrations**
Connect instruments, laboratory systems, enterprise applications, and external data sources.

Put your focus back on science.

Your biospecimens deserve more than spreadsheets, disconnected systems, and manual processes. Manage samples, storage, studies, workflows, and data in one configurable platform, with the visibility and traceability to support today's research and tomorrow's growth.

See Lockbox LIMS in action

Discover how Lockbox LIMS can be configured around your Biobank or Biorepository.

Schedule a Demo →

thirdwaveanalytics.com/contact-us