Biobank Data Management - Multiple Challenges, One Solution

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Agenda

Data Management

Operational & Regulatory Challenges

Informatics as the Key Solution

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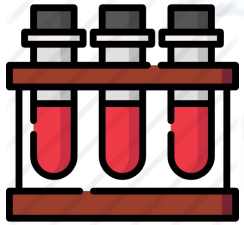
Data Management at Biobanks



Biobanks are large collections of biospecimens linked to relevant personal and health information.

Collection

Processing

Storage

Distribution

Biobanks play an essential role in biomedical research by collecting, processing, storing, and distributing biospecimens and associated data.

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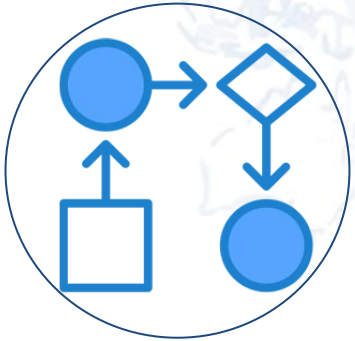
Biobanking Operational Challenges

Locating Stored Samples

Managing Samples & Associated Data

Safeguarding PHI

Managing Staff Training



Automating & Standardizing Workflows

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Regulatory Compliance

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Solution to Biobanking Challenges

Informatics is the Key Solution

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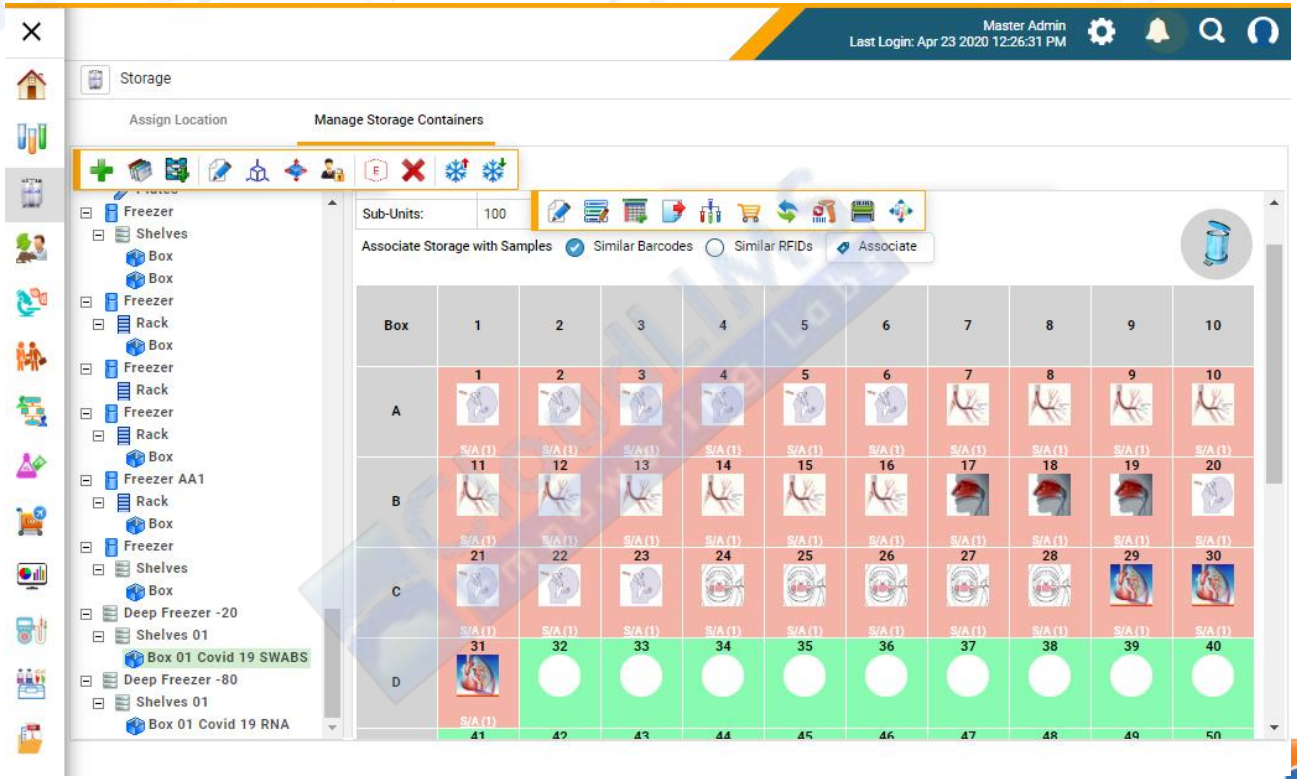
Manage & Locate Stored Samples

Mirror storage inventory and locate stored samples with ease



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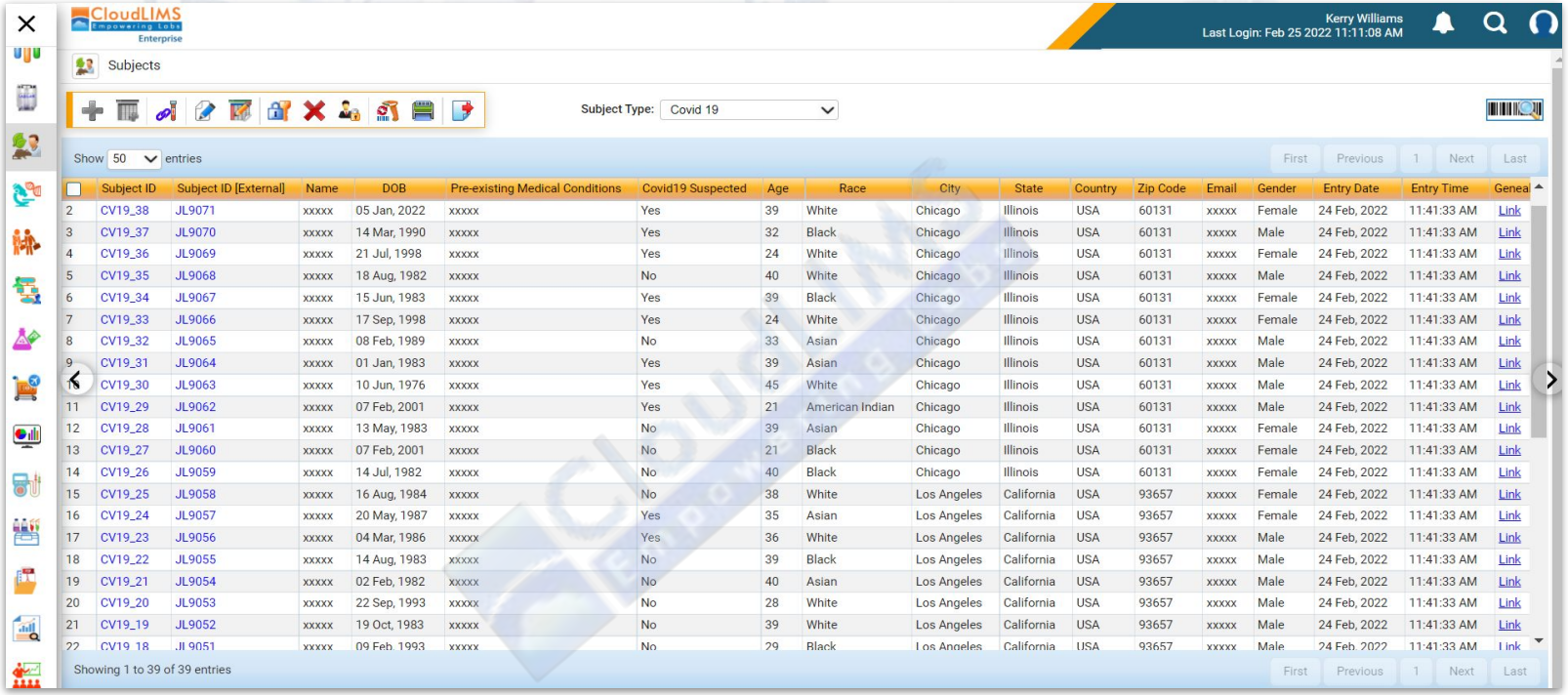
Safeguard PHI of Donors

Anonymize sensitive PHI and limit PHI access to authorized staff



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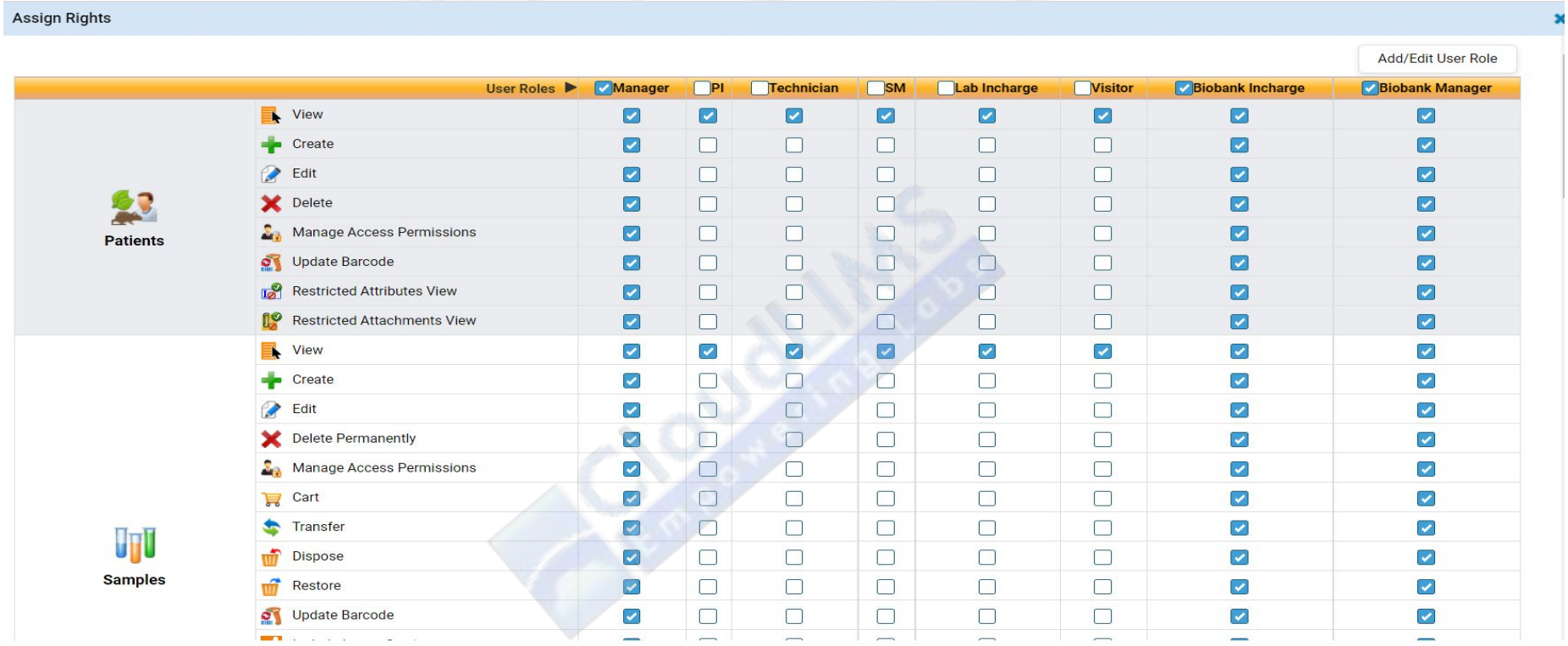
Assign Rights to Staff for Various Activities



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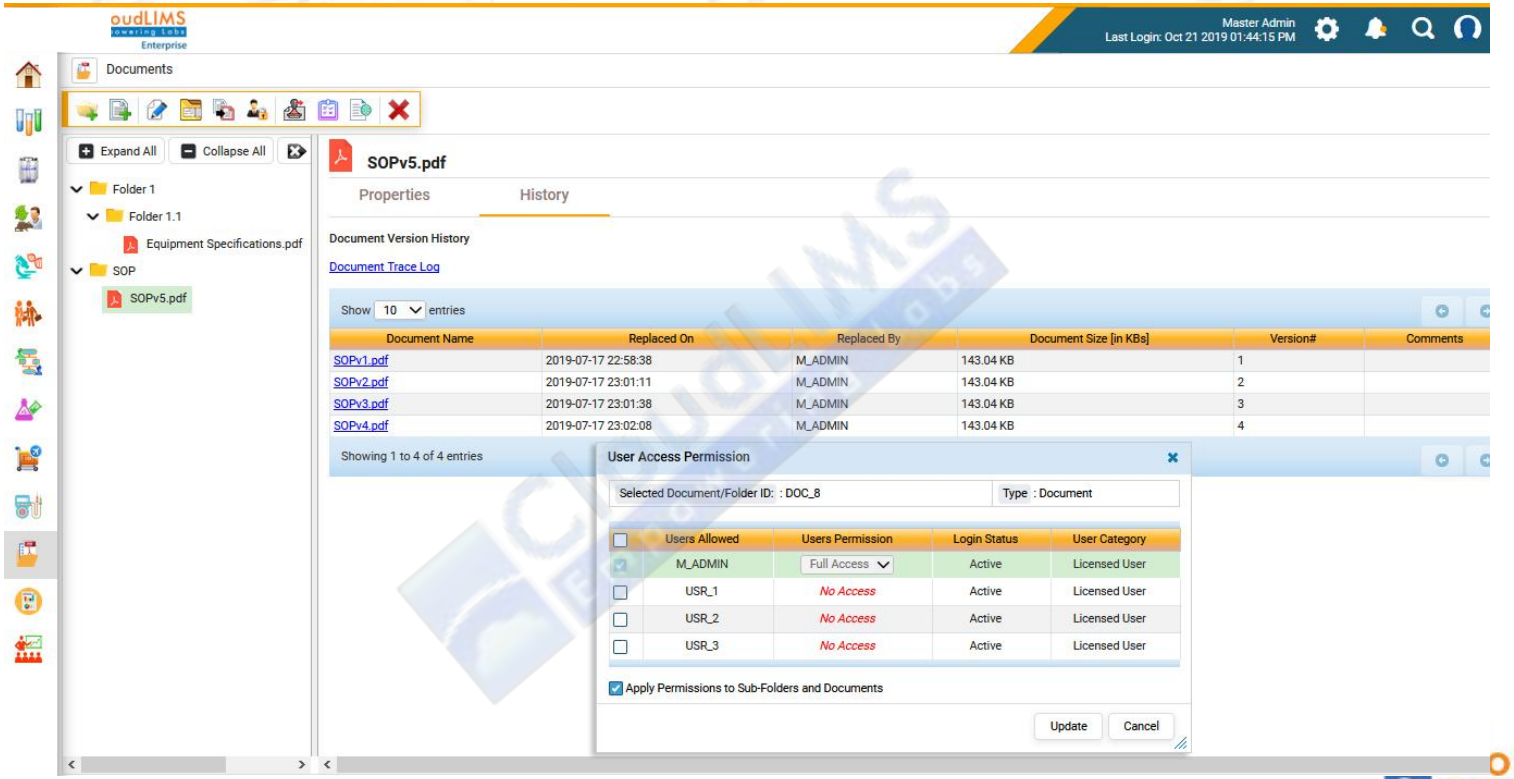
Manage Documents

Manage documents, such as Standard Operating Procedures (SOPs), and provide quick access of documents to all authorized users



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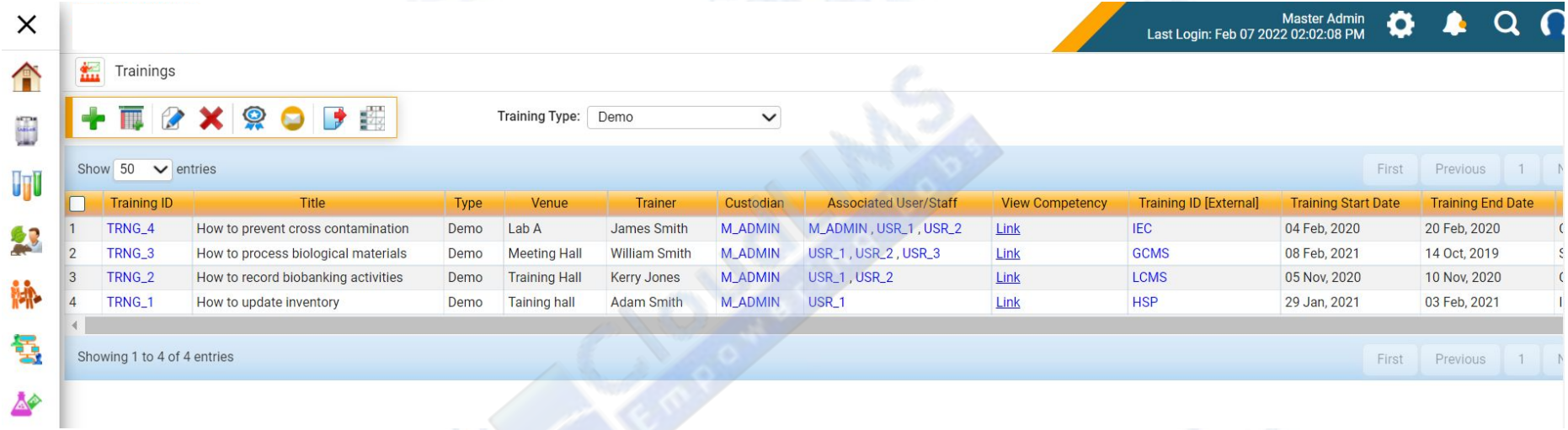
Manage Staff Training

Manage staff training & their competency



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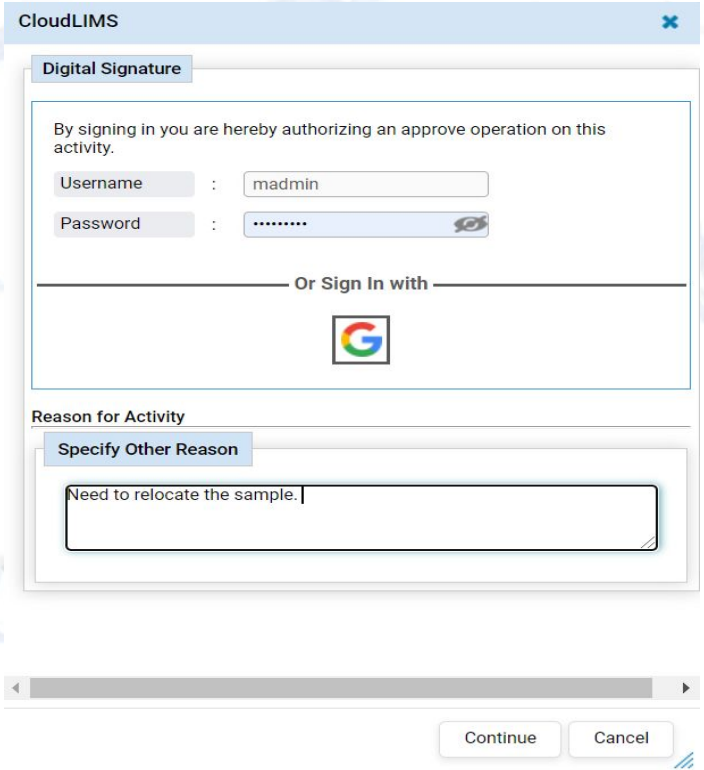
Authenticate Key Activities

Enforce staff to authenticate key activities using electronic signatures (21 CFR Part 11)



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Benefits of Cloud-based Informatics

- No upfront investment
- Automatic data backups
- Enhanced data security
- Real-time data sharing
- Rapid scalability

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Key Takeaways

- The importance of biobanks in research
- Common data management, operational, and regulatory challenges of biobanks
- How digital solutions, such as a LIMS, can help biobanks overcome operational challenges
- Key benefits of cloud-based informatics tailored to biobanking

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