

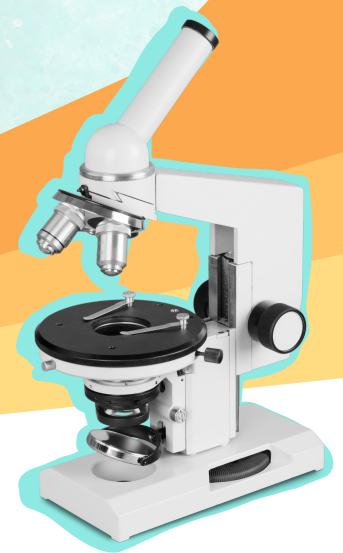


THE PROBLEM:

- Existing software solutions **limited patient and researcher interaction**, and lacked best practice standards for patient privacy and data rights.
- Current **de-identification methods** carry ample risks and challenges surrounding privacy.
- **Manual data management processes** are time-consuming, increase the risk of errors, and hamper the organizations's ability to learn, improve, and optimize continuously.

TEXAS A&M'S VISION:

- **Empower Data Stakeholders:** Enable researchers, institutional stewards, and patients to engage meaningfully in the research process.
- **Enhance Data Governance:** Utilize privacy-preserving techniques and dynamic consent to improve genomic data management.
- **Accelerate Research:** Strengthen patient-researcher agency, increase access for underrepresented individuals, and expedite the implementation of precision medicine tools.



TEXAS A&M HEALTH

REVOLUTIONARY CLINICAL GENOMICS RESEARCH

How LifeGraph Creates A Secure Data Ecosystem To Accelerate Research

Build a Trusted Collaborative Network

LifeGraph combines patient and population medical data with genomics, social determinants of health, real-world data, ambient data, and knowledge bases such as ClinGen and PharmGKB. This holistic view will empower researchers with the real-world, contextualized data they need to discover new insights and build computational models for superior clinical decision support.

With LifeGraph, Texas A&M Health Can:

- Securely link clinical and non-clinical data in knowledge graphs for a 360° view of all the data in their ecosystem.
- Capture and audit data history, lineage, and origin enterprise-wide.
- Build scalable knowledge graphs for analytics, automation, and AI.
- Automate data governance, transformation, cleansing, and mastering policies enforcement.

WHY LIFEGRAPH?

- Data unification into trusted knowledge graphs
- Immutability, traceability, and auditability
- Unified, dynamic data governance, including individual data ownership and consent
- Greater flexibility, adaptability, and scalability
- A high-quality, mastered “single source of truth” improves data consistency and trust
- Support complex analytics and intelligence on live, transacted data



By securely linking clinical and non-clinical data in knowledge graphs and allowing patients to make informed decisions about participating in clinical research across time and the patient journey, we can better support patients, institutional data stewards, and enable researchers to derive more value from data.”

– Rick Silva, PhD, Executive Director, Texas A&M Health

Privacy-First Techniques

Through privacy-preserving techniques, dynamic consent, and federated learning approaches, LifeGraph helps Texas A&M Health mitigate the risks and challenges associated with relying solely on de-identification methods for genomic data governance.

The next-gen collaborative research network will provide external researchers and patients alike with the ability to access research studies that benefit them and make more informed decisions about their participation in genomic research. Texas A&M Health aims to empower patients and researchers in managing data, improve access and trust for underrepresented groups, boost clinicogenomic research, and enhance precision medicine tools. This will lead to better patient outcomes and a brighter future for healthcare.

WHAT THE FUTURE HOLDS

Harness the Power of Real-World Data to Transform Research

This project will also explore the long-term goal of developing a secure system for sharing this data with external collaborators, ultimately aiming to improve healthcare for all.

WANT TO LEARN MORE?

For more information, visit <https://burstiq.com/solution-lifegraph-experience/> or call 888.355.7345