

# THE UNIVERSITY OF UTAH

## Utah Population Database (UPDB) 2023 Biennial Internal Security Audit

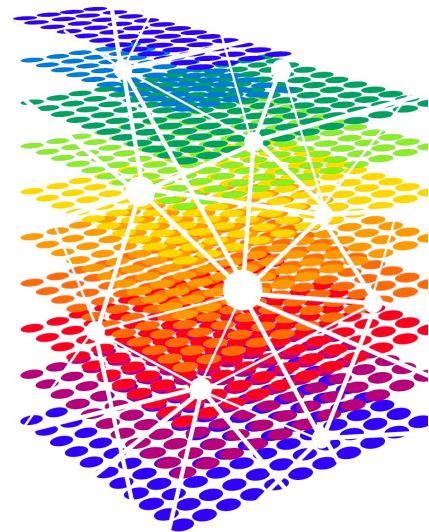
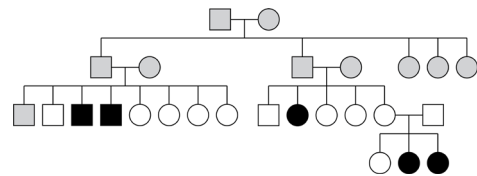
Nicola J Camp, PhD | UPDB Director

Jared DeWitt, MS | UPDB Senior Security Analyst



# Overview of UPDB

- Biomedical & Health-Related Research
  - Understand disease and improve health
  - Discoveries relevant to families in Utah
- Clustering of diseases in families
  - Inheritance of a disease / multiple diseases
- Risk factors for disease or outcomes
  - Genetic, Environment, Social Determinants
- Prevention
  - National cancer screening guidelines
  - Genes discovered in Utah





# Security Framework

## **NIST** Special Publication 800-171 Rev. 2

- Created for contractors with federal government funding to safeguard sensitive data
- Widely used to protect non-classified sensitive information
- 110 security protections

<https://csrc.nist.gov/pubs/sp/800/171/r2/upd1/final>



# Audit Methodology

- System Security Plan
  - Review and test each security protection
- Plan of Action & Milestones
  - Solutions and resources
  - Risk assessment based on NIST SP800-30 guidelines  
<https://csrc.nist.gov/pubs/sp/800/30/r1/final>
- Dynamic documents to continually improve security

# Summary of Findings

- 91 protections fully implemented and effective
- 19 protections need additional steps for full implementation
  - 16 low risk, 3 moderate risk
  - 0 high risk, 0 critical risk

110 protections





# Commitment

- Complete planned actions and milestones
- Maintain cybersecurity maturity with NIST SP800-171 guidelines
- Conduct ongoing assessments
  - Identification of emerging cybersecurity risks
  - Effective implementation of security protections

# Key Participants

## Utah Population Database

- Nicola Camp | Director
- Jared DeWitt | Senior Data Security Analyst

## University of Utah Information Security Office

- Trevor Long | Director, Governance, Risk & Compliance
- Laurent Lecointre | Senior Data Security Analyst

## Huntsman Cancer Institute Computing and Technology Group

- Tony Murillo | Director

## University of Utah Research Integrity and Compliance

- Caren Frost | Associate Vice President
- Jahn Barlow | Director, Resource for Genetic and Epidemiologic Research