1/2025: Plan of Action and Milestones (POAM): Compliance with NIH genomic data management

Actions: Identify vendor partners and start the process to design, expand, validate, and audit infrastructure to support new NIH policies around genomic data

- 1. Complete: Develop an architecture to expand infrastructure compatible with NIST 800 requirements.
- 2. Complete: Obtain quotes from vendor to expand NIST-compliant infrastructure.
- 3. Complete: Obtain quotes from vendor for an external NIST audit of existing and new infrastructure. Quotes will be obtained for both NIST 800-171 (store genomic data) and 800-53 (share genomic data).
- 4. Complete: Verify we have or will have the capacity to deploy the new infrastructure in PavH (H28D) datacenter.

Milestone (complete: 12/16/24): Identified resources required to satisfy near-term infrastructure requirements to support in-scope NIH genomic data management.

Actions: Identify sources of funding, acquire, and deploy new infrastructure

- 1. Complete: VPR funded purchase of a 10PB storage expansion using Self Encrypted Drives (SED)
- 2. Complete: COM funded purchase of three addition DGX H200 nodes
- 3. Complete: Execute on hardware and audit orders with UK ITS
- 4. Complete: (12/31/2024) Storage hardware delivered to UK
- 5. Complete: (1/6/2025) Compute hardware delivered to UK
- 6. Deploy new storage to existing cluster
- 7. Deploy new compute nodes to existing cluster

Milestone (in-progress est. early February 2025): Research expansion deployment is complete.

Actions: Validate and audit genomics management infrastructure is NIST-compliant

- 1. UK NIST team will compile documentation based on previous NIST audits and in collaboration with our contracted audit vendor will self-attest NIST 800-171 compliance for the existing and new infrastructure.
- 2. Complete: (1/17/2025) UK NIST team in conjunction with researchers and technology teams will develop a migration and mitigation plan.
- 3. Conduct external NIST 800-171 audit with vendor
- 4. Conduct external NIST 800-53 audit with vendor

Milestone (in-progress): Genomic infrastructure is NIST 800-171 (est. February 2025) and 53 (est. April 2025) compliant

Actions: Identify non-compliant researchers and migrate workloads to compliant infrastructure

- 1. Communicate identification and migration instructions to researchers
- 2. In-progress (11/2024): Transfer of genomic data to compliant infrastructure
- 3. Complete migration and conduct a follow-up researcher survey to identify additional needs.

Milestone (in-progress est. May 2025): Researcher data migrated Genomic infrastructure is NIST 800-171 and 53 compliant