

Stanford Genome Sequencing Service Center (GSSC)

<http://med.stanford.edu/gssc.html>

Stanford Genetics Bioinformatics Service Center (GBSC) Compute Infrastructure

On-premise Cluster:

- dbGaP-compliant
- WGS pipelines (HugeSeq/MuTect, Stanford/Broad best practices)
- Single-cell RNA-Seq pipeline (Stanford best practices)
- 400+ NGS-related software applications and pipelines
- 50+ servers with 32-48 cores, 128-384 GB RAM
- 1 server 96 cores and 1.5 TB RAM
- 1 supercomputer with 640 cores and 10 TB of RAM

DNAnexus Platform:

- Sequencing Center Workflow
- Simple cost-effective cloud platform on AWS/Azure
- RNA-Seq, CHIP-Seq, WGBS pipelines (ENCODE best practices)

Google Cloud Platform:

- dbGaP-secure integration
- Extensive QC and data mining tools developed

Stanford CESCG Overall Workflow

