



The Global Network for Genomics™

DNAnexus combines expertise in cloud computing and bioinformatics to create the global network for genomics. DNAnexus provides security, scalability, and collaboration, for organizations that are pursuing genomic-based approaches to health, in the clinic and in the research lab. The DNAnexus team works directly with organizations to tackle some of the most challenging and exciting opportunities in human health, making it easier—and in many cases feasible—to work with genomic data. The future of human health is in genomics. DNAnexus brings it all together.

WHAT WE DO

DELIVER a secure and trusted genome informatics and data management platform;

POWER organizations to tackle the world's most complex bioinformatics challenges;

ENABLE a global network for sharing genomic information to advance research and medicine.

WHO WE SERVE

We help top biopharmaceutical and bioagricultural companies, leading genome centers, pioneering diagnostic test providers, sequencing service providers, and research consortia accelerate their genomics programs globally.

SUPPORTING YOUR SCIENCE

Our team of genomics and cloud computing experts is ready to seamlessly migrate your local production pipeline to the cloud. From initial assessment to implementation, you've got a top notch partner on your side.

KEEPING YOUR DATA SECURE

DNAnexus complies with ISO 27001 and 27002 international security standards, which ensures the highest levels of compliance with clinical regulations. These include HIPAA, CLIA, and GCP. In addition, DNAnexus is willing to execute agreements incorporating the European Union's (EU's) Standard Contractual Clauses for transfers of personal data out of the EU. DNAnexus works to ensure mechanisms for data access requests and vending data to approved requestors meet security standards for dbGaP and TCGA data in the cloud.

AT A GLANCE

NAME: DNAnexus, Inc.

SUMMARY OVERVIEW:

Global cloud-based platform providing secure, scalable and collaborative solutions for the genomics industry

HEADQUARTERS: Mountain View, CA

FOUNDED: 2009

WEBSITE:

www.dnanexus.com

“DNAnexus allows us to collaboratively analyze genomic data at all scales, from single samples and clinical trios to family-based studies and large cohorts, ultimately enabling the HGSC to drive gene discovery and analysis for Mendelian disorders, complex disease, and everything in between.”

William Salerno, PhD

Director of Genome Informatics
Human Genome Sequencing Center,
Baylor College of Medicine.

CASE STUDIES: How DNAnexus Accelerates Genomic Medicine



Regeneron Genetics Center

Biopharmaceutical Company

Enabling one of the largest scale integration of next-generation sequencing and patient EHR data. DNAnexus worked closely with Regeneron to bring them online and rapidly scale up to more than 1,000 exomes processed per week and allow seamless and secure interactions with collaborators like Geisinger Health System.



The Garvan Institute

Sequencing Service Provider

With the acquisition of an Illumina HiSeq X Ten sequencing system, the Garvan Institute set its sights on becoming a global provider of whole genome sequencing services. To manage the massive amount of data that comes with sequencing 18,000 whole genomes a year, Garvan turned to DNAnexus to facilitate data exchange between the sequencer and the customer.



ENCODE Data Coordination Center (DCC) at Stanford University

International Consortium

To map all the sequence features of the human and mouse genomes, the ENCODE DCC at Stanford University needed a unified collaborative platform to process thousands of datasets while maintaining transparency, reproducibility, and data provenance. By sharing these pipelines, thousands of scientists globally can generate results consistent with ENCODE data.



Pacific Biosciences

Sequencing Instrument Manufacturer

Whole genome assembly is data and compute intensive. Pacific Biosciences chose DNAnexus to support its assembly tool, FALCON, offering scientists access to a rapid and cost-effective solution, producing full and accurate *de novo* human genome assemblies. Working with Cold Spring Harbor Laboratory, DNAnexus assembled a human genome in under 21 hours, the fastest assembly in history.

KEY HIGHLIGHTS:



GLOBAL CLOUD including operations in China with WuXi NextCODE



DATA COMPLIANCE: Certified ISO 27001 compliant, HIPAA, CLIA, GCP, EU regulations, & more



REPRODUCE PIPELINES consistently via version-controlled analyses and tools



CONTROL DATA through admin-defined access and permission-based controls

KEY ACCOMPLISHMENTS:

21 hours

Accomplished fastest assembly of human genome ever

3,000 whole genomes/day

Processing up to 3,000 whole genomes per day across the platform

37,000 cores on-demand

Managed largest genomic analysis performed in the cloud

100% cloud-based

Powering largest clinical sequencing project in US