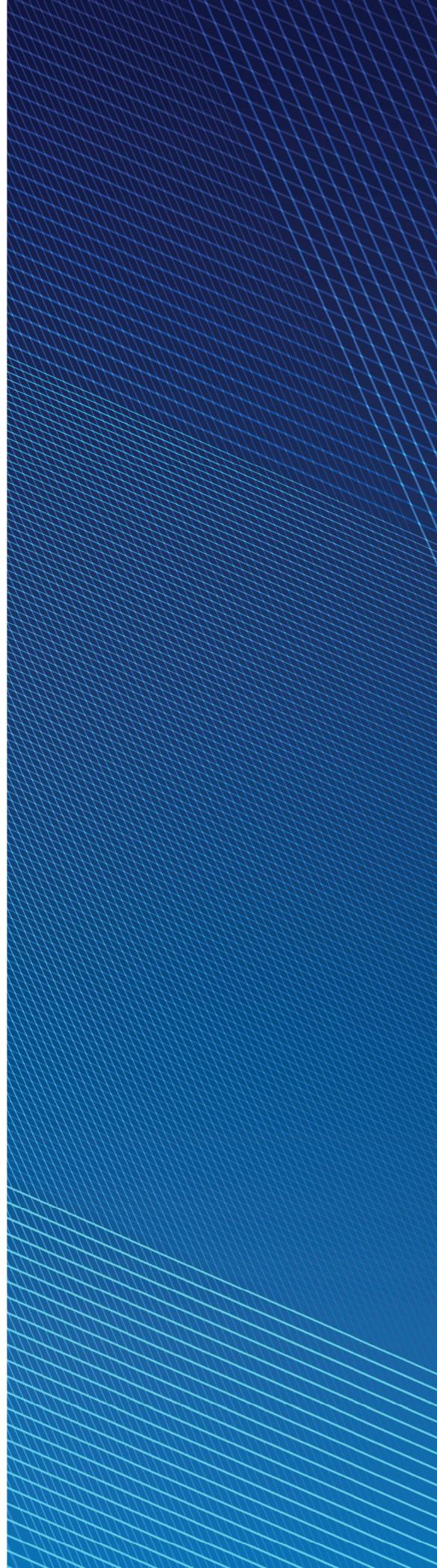


DNANEXUS RECEIVES THE 2023 COMPANY OF THE YEAR AWARD

*Identified as best in class in the global precision
medicine informatics industry*



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. DNAnexus excels in many of the criteria in the precision medicine informatics space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

DNAnexus: Leading Biomedical Cloud-based Data Management and Analysis Platform

Founded in 2009 as a spin-off of Stanford University and based in Mountain View, California, DNAnexus provides comprehensive security, quality, and privacy framework for precision medicine and multi-omics informatics and data management. The company is the trusted choice of top pharmaceutical companies, global diagnostic test providers, genome centers, and sequencing service providers. It focuses on advancing precision medicine by empowering customers to derive insights from large-scale genomics, multi-omics, and clinical datasets.

Many organizations, including the United States (US) Food and Drug Administration (FDA), rely on DNAnexus to support their genomics programs. Since 2013, the company has established itself as a leader in cloud computing and bioinformatics platforms that handle complex data processing for genomics and multi-omics. In March 2022, DNAnexus raised \$200 million in a financing round led by Blackstone Inc. funds. This opportunity will help the company accelerate its product roadmap for genomics and multi-omics analyses and drive precision medicine forward.

DNAnexus has expanded its global network for data integration, collaboration, and analysis, including multi-omics and multi-modal data capabilities. It continues to innovate and develop products that build upon industry trends and enable impactful solutions for the industry’s future needs. It has over 100 enterprise customers worldwide, including North America, Europe, Asia-Pacific, South America, and Africa, and has processed more than 80 petabytes of data.

The company's dedicated, best-in-class services and support teams help its customers achieve their research goals and successes by providing unmatched scientific and subject matter expertise. DNAnexus' platform handles extreme scale and high-velocity data processing for genomics, multi-omics, and beyond.

DNAnexus' Platforms: Managing Multi-omics and Clinical Data Challenges

The shift toward value-based, outcome-driven healthcare moves away from the one-size-fits-all approach toward biomarker-guided targeted medicine. The market demands an increased focus on population health initiatives to develop sustainable economic models, policies, and strategies. With these transformative trends, one major challenge the industry faces is the exponential growth of data,

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***- Natalia Casanovas,
Best Practices Research Analyst***

particularly genomic data, which is being processed and used more than ever.

High data volume and heterogeneity pose a challenge for storage, analysis, and integration. Sharing and storing large-scale data creates a significant bottleneck for precision medicine and preventive healthcare research. Thus, there is a growing need for large amounts of data and its analysis to support better clinical decision-making and provide more effective therapies. However, the companies that require the data differ from those that can generate it, posing a conundrum.

The world is moving towards real-world evidence (RWE), which integrates omics data and presents new privacy, security, and compliance challenges.

Innovative Platform Solutions Empowering Precision Medicine Informatics

Precision medicine is making rapid strides in prevention, diagnosis, and targeted disease management, unfolding significant progress in oncology and other complex diseases. DNAnexus offers a range of cutting-edge solutions to address the complex challenges of genomics research and clinical pipelines. Advanced omics analysis and data-driven approaches will drive precision medicine applications across the healthcare continuum.

DNAnexus® **Titan** is a next-generation sequencing (NGS) data management and analysis platform that delivers trusted, high-performance data analysis solutions. With Titan, researchers can power their genomics research and clinical pipelines with exceptional security, speed, and scalability.

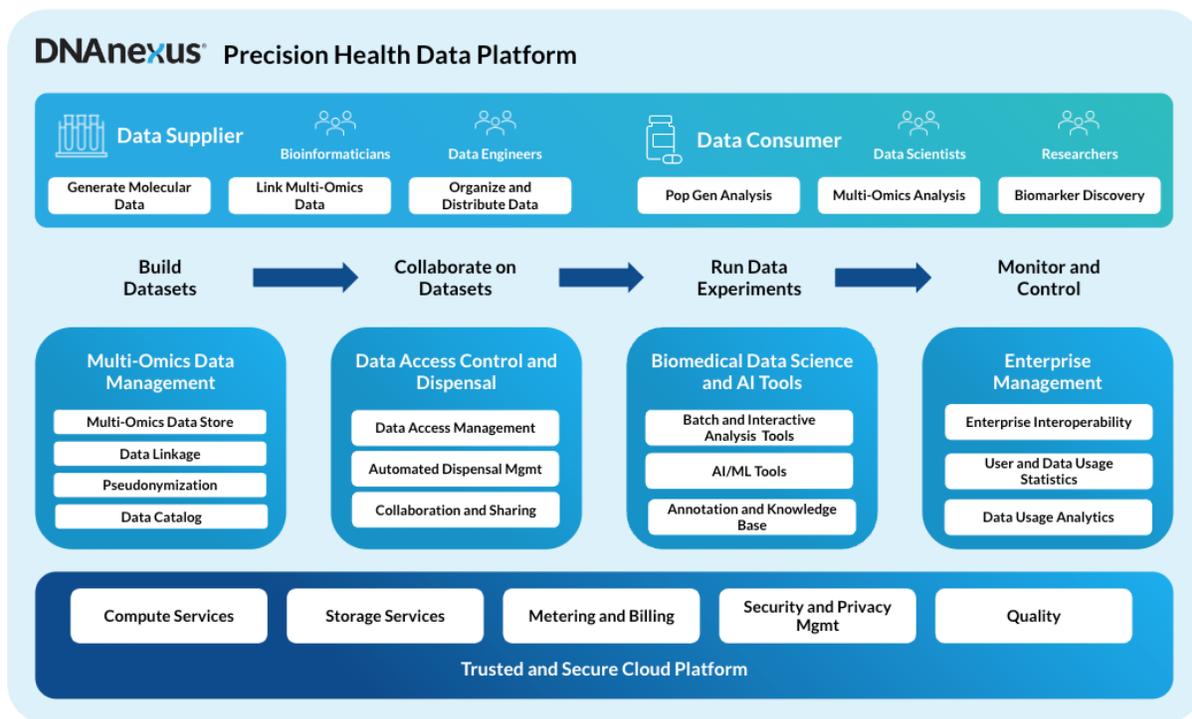
In addition to Titan, the company offers DNAnexus® **Apollo**, a multi-omics data science exploration, analysis, and discovery platform. The Apollo platform shatters significant data bottlenecks and enables researchers to release the power of genomics and multi-omics in translational research. Researchers can easily explore and analyze complex data sets and discover valuable insights that can lead to breakthroughs in precision medicine.

DNAexus® **Portals** is another innovative platform, a fit-to-purpose, white-label, online workspace. Portals enables cross-disciplinary collaboration, scales data, and pipeline distribution, and allows unique customer engagement. Researchers can create customized, private, and collaborative environments that meet the specific needs of their research projects.

DNAexus® **GxP Support** is a regulatory quality service ensuring bioinformatics work complies with all applicable best practice standards. The service demonstrates to regulators that researchers are observing the full range of good practice quality guidelines and regulations (GxP), from documentation to testing environments to Quality Management Systems and audits, to ensure quality and reliability and streamline the regulatory compliance process.

Finally, the company has partnered with leading national organizations. The United Kingdom (UK) Biobank uses DNAexus to provide a platform that democratizes data access and enables researchers worldwide to analyze complex data sets securely called the UK Biobank Research Analyses Platform (RAP). DNAexus' all-in-one platform combines secure and compliant cloud infrastructure with powerful tools and access to the vast amounts of data available from UK Biobank. With over 20 petabytes of genetic, imaging, lifestyle, and health record data from half a million UK participants, the database is vital for researchers investigating the most common life-threatening diseases.¹

DNAexus Multi-Omics Cloud



Courtesy of DNAexus

¹ [Discover the UK Biobank! \(dnanexus.com\)](https://www.dnanexus.com), accessed April 2023

The company's platform enables researchers worldwide to access and analyze the growing dataset securely, and it has already attracted, as of April 2023, over 3,850 scientists globally, including 80% of the Top 20 Pharma. With 2,260 projects created and a community forum of 440 members, the UK Biobank RAP is a valuable resource for researchers seeking to accelerate their biomedical research.² The platform is growing, with 30,000 UK Biobank users registered for data.³

PrecisionFDA, developed by and served on DNAnexus, is the FDA's flagship cloud-based service for collaborative regulatory science and submissions incorporating multi-omics informatics and RWD. PrecisionFDA serves over 5,000 users globally from industry, academia, and government, presenting scientific challenges to advance the FDA's evaluation of informatics in regulatory submissions in the context of safety and efficacy. The platform's FedRAMP authorization enables the FDA to use precisionFDA for RWD acquisition and improves sponsor-reviewer interactions, using cloud-based partner integrations that were not previously possible.

DNAnexus also drives innovation in the pharma industry. It allows the same platform on one side of the organization to be flexible and agile for researchers. In contrast, the other side can be locked down to support human clinical trials or drug manufacturing, thanks to 21 CFR Part 11 compliance. DNAnexus has brought robust and modern engineering practices to strict compliance regimes, allowing the company to innovate and release rapidly, securely, and reliably. DNAnexus' initiatives allow its customers to develop in a way that advances research and innovation.

Cultivating Innovation Through Collaboration and Co-Development for Customer Satisfaction

DNAnexus highlights the importance of collaboration and co-development with customers, particularly with innovative leaders in different companies, to create and sustain an innovation culture. Precision medicine is a rapidly evolving field that requires close collaboration to help customers achieve their goals. The company regularly participates in hackathons to stay close to research and understand new technological developments that can influence bioinformatics.

The company believes the only way to work effectively is by understanding what customers are trying to achieve. Therefore, they hire people with science backgrounds in every company area. By talking at the science level, they can fundamentally understand and help customers think in the right ways for advancement.

Beyond commercial customers, their collaborations with UK Biobank, FDA, St Jude Cloud, and other research-centric efforts are critical for innovation, providing a pulse on the research community and a feedback loop for the company.

DNAnexus places a high degree of importance on providing customer satisfaction and success. The company understands that buying its software is just one part of a customer's journey and seeks to support its customers at every stage. For example, when Regeneron Pharmaceuticals started its genomics genetics center, it selected DNAnexus as its cloud system. The company stayed in close contact with

² *Ibid.*

³ DNAnexus' Interview with Frost & Sullivan, April 2023; [UK Biobank Democratizes Data Access with its own Cloud-Based Data Analysis Platform - Inside DNAnexus](#), accessed April 2023

Regeneron, understanding every business challenge they faced and providing the necessary support.

In 2019, Regeneron and DNAnexus joined forces to support the creation of the 500K whole exome sequence (WES) data set. The companies utilized an innovative "geno/pheno cohort browser" user

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interface as part of the DNAnexus Apollo Platform to democratize data access. This cohort browser enables diverse teams to easily explore thousands of phenotypic fields and millions of genomic variants from hundreds of thousands of samples, allowing researchers to create their cohorts.⁴

DNAnexus ensures that once a customer signs up, it has customer success people engaged who help them onboard successfully and continue to work with them at multiple levels in their organizations. The company

aligns its strategies with customers' needs and continuously seeks to enhance the ownership experience. DNAnexus's non-adversarial, seamless approach and close relationships position it as a partner of choice.

Evolving from a Sequencing Data Processing Platform to a Nexus of Data and Science

Historically, DNAnexus has let its products and science speak for itself. However, there is a greater focus on communicating the company's vision to the world, as DNAnexus has evolved to be more than just an NGS data processing platform.

The company envisions building a network almost like the nexus of data and science and wants to be the critical infrastructure enabling this concept. DNAnexus plans to update its branding and design with a new website at the end of the third quarter and update messaging to evolve closer to where the vision has grown. DNAnexus stresses the importance of communicating its brand values to the world and enabling great things for the industry and scientific community. DNAnexus interoperable systems and digitized data storage and analysis will also help democratize healthcare tools and further reduce bottlenecks and dependency on multiple tech integrators.

Frost & Sullivan believes the company is well-positioned to drive the precision medicine informatics space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

⁴ [The RGC UK Biobank Consortium Data Delivery and Cohort Browser \(bio-itworld.com\)](https://www.bio-itworld.com), accessed April 2023

Conclusion

DNAxexus has established itself as a global leader in providing a comprehensive security, quality, and privacy framework for precision medicine informatics and multi-omic data management. The company offers innovative solutions to the complex challenges of genomics research and clinical pipelines, such as the exponential growth of multi-omic data and subsequent analysis to support better clinical decision-making driving precision medicine.

Through its partnership with the UK Biobank, DNAxexus provides a platform that democratizes data access and enables researchers worldwide to analyze complex data sets securely. DNAxexus has also played a key role in driving innovation in the pharmaceutical industry by offering a free and open platform for researchers while ensuring it meets the requirements of human clinical trials and drug manufacturing, enabling targeted genome-based therapy development.

DNAxexus emphasizes the importance of collaboration with customers, participating in hackathons, and monitoring regulatory agencies to foster an innovation culture. The company continues to innovate and develop products that build upon industry trends and enable impactful solutions for the future needs of the industry.

With its strong overall performance, DNAxexus earns Frost & Sullivan's 2023 Global Company of the Year Award in the precision medicine informatics industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends:

Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

