

### BACKGROUND

The Human Genome Project (HGP) is considered one of the greatest scientific achievements of the last century. BGI was founded in 1999 in order to participate in this significant research project. Since then, BGI has become a world-leading life science organization.



### SERVICES

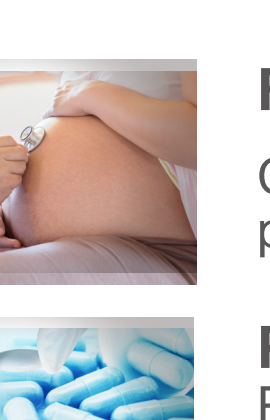
BGI leads innovative development in genomics and life sciences through its integrated model incorporating industry development, education and research in compliance with international bioethical protocols, and applies frontier multi-omics research findings to areas including medicine, healthcare, resource conservation, forensics and more; and provides cutting-edge

proprietary life science instruments and devices, technical support and solutions to accelerate industry transfer of genomic technologies and revolutionize current healthcare system towards precision medicine and precision healthcare, using "omics" to benefit the mankind.

### CORE CAPABILITIES

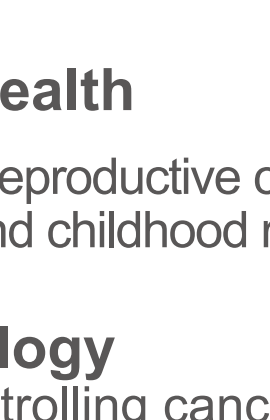
#### Research

#### BGI-Research



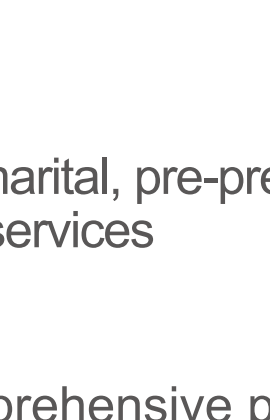
25

Innovation Centers  
(including 1 national and 7 provincial)



3200+

SCI Publications



1800+

Patent Applications

#### Sequencing Services

#### BGI-Genomics



##### Reproductive Health

Covering the whole reproductive cycle to provide premarital, pre-pregnancy, prenatal, newborn and childhood reproductive health services



##### Precision Oncology

Preventing and controlling cancers through a comprehensive precision oncology system which adopts the latest technologies and products to effectively prevent, screen, diagnose and monitor tumors



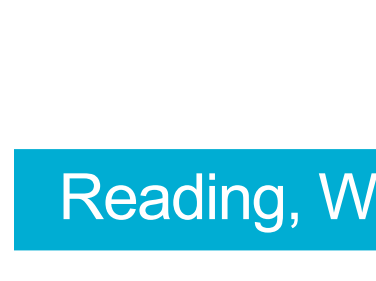
##### Pathogen Detection

- Using technological platforms like metagenomics to test for and analyze complicated or severe infections
- Establishing various technology and product systems for pathogen detection and attaining genus information on suspected pathogenic micro-organisms with the aid of a dedicated micro-organism database and intelligent algorithm
- Providing comprehensive and in-depth analytical reports to support the quick and accurate diagnosis of complicated or severe infections



##### Genomics Big Data and Synthesis

Providing services engaging in life science research with high-quality, cutting-edge solutions, including standardized technological services, such as gene sequencing, mass spectrometry analysis, biological database management and cloud data analytics, and customized services, such as gene synthesis, Oligo synthesis and whole genome/chromosome fragment restructuring and synthesis



##### Precision Medicine Solutions

Offering comprehensive precision medicine solutions and complete product lines to meet the needs of large medical institutions and support the growing market for the construction and operation of precision medicine centers

#### Advanced Tools in Life Sciences

#### MGI



Fully automated scale data production

Jan. 2021, launched MGISP-NE384, high-throughput automated nucleic acid extractor

Oct. 2020, launched DNBSEQ-T10x4RS genetic sequencing system

Aug. 2020, launched MGISTP-7000, high-throughput automated sample transfer processing system

Oct. 2019, launched DNBSEQ E, DNBelab D and DNBelab C series

Oct. 2018, launched ultra-high-throughput sequencer DNBSEQ-T7, MGISP-960 high-throughput automated sample preparation system

Oct. 2017, MGISEQ-2000 and MGISEQ-200 high-throughput genetic sequencers, remote ultrasound robot MGIUS-R3

Nov. 2016, launched the BGISEQ-50 desktop sequencing system

Oct. 2015, BGISEQ-500, high-throughput desktop genetic sequencer

Mar. 2013, acquisition of Complete Genomics (U.S. life sciences company)

Complete GENOMICS

#### Reading, Writing and Storage of Genetic Resources



##### Reading – Digitalization Platform

A leading "reading" platform producing petabytes of data annually

##### Writing – Synthesis and Editing Platform

Building a leading genome "writing" platform

##### Storage – Biorepository

An automated, low-cost and high-throughput biorepository

##### Storage – Bio-informatics Data Center

A secured database and highly efficient bio-informatics analysis platform

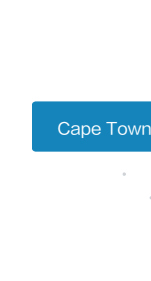
##### Storage – Biological Resource Center of Plants, Animals and Micro-organisms

Building a digitalized biodiversity conservation base and biological resource center

##### China National GeneBank DataBase (CNCBdb)

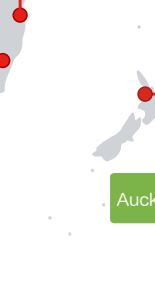
A comprehensive database for biological data sharing and applications

### QUICK FACTS



1999

BGI was founded in 1999.



7000+

BGI has more than 7000 employees worldwide.



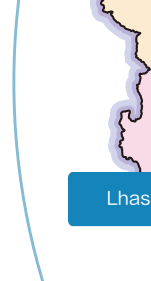
100+

Services and solutions are available in 100+ countries and regions.



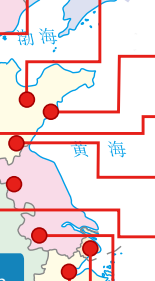
Shenzhen

Headquartered in Shenzhen.



31

Services and solutions are available in 31 provinces, autonomous regions and municipalities in Mainland China.

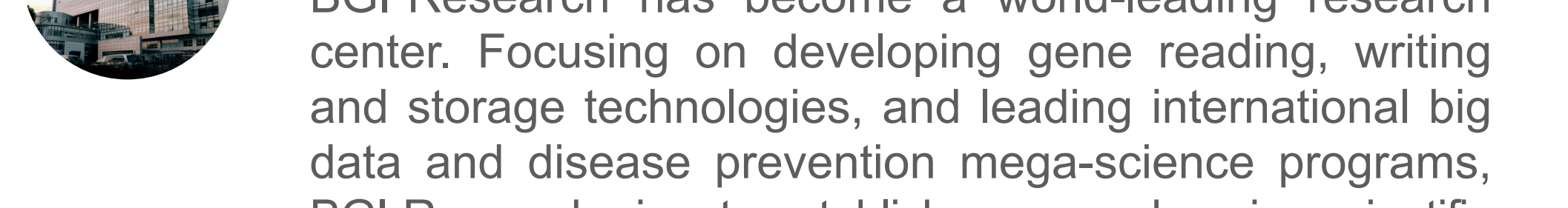


410+

410+ scientific papers published in the world's leading journals such as *Nature* series, *Science* series, *Cell* series, and *New England Journal of Medicine*.

### GLOBAL PRESENCE

BGI is headquartered in Shenzhen, with services and solutions available in more than 100 countries and regions around the world.



### ORGANIZATIONS

#### BGI-Research



BGI-Research is one of the top ten basic research institutions in Shenzhen. After years of dedication in genomic research, BGI-Research has become a world-leading research center. Focusing on developing gene reading, writing and storage technologies, and leading international big data and disease prevention mega-science programs, BGI-Research aims to establish a comprehensive scientific research system covering bioinformatics, human genomics, agricultural genomics, microbiology, and marine biology.

#### BGI-College



Specialized in innovative higher education and training at international standard to foster future talents in life sciences for advancing scientific research and development.

#### China National GeneBank (Operated by BGI-Research)



China National GeneBank (CNCB) is one of the key scientific infrastructures in Shenzhen, approved and funded by the Chinese government. CNCB is committed to supporting public welfare, life science research, innovation and industry incubation, through effective bioresource conservation, digitalization and utilization.

#### GigaScience



Launched in July 2012, *GigaScience* aims to revolutionize publishing by promoting reproducibility of scientific research analyses, data dissemination, organization, understanding, and use.

#### BGI-Genomics (Shenzhen Stock Exchange: 300676)



A world leader in scientific and precision medicine services that:

- provides leading research and precision medicine solutions to science institutes, enterprises, medical facilities and healthcare organizations
- works to advance technological innovation, reduce birth defects, fight tumors and protect against serious illness
- promotes precision medicine to cure infections

#### MGI



MGI is committed to enabling effective and affordable healthcare solutions for all. MGI produces sequencing devices, equipment, consumables and reagents to support life science research, medicine and healthcare. MGI's multi-omics platforms include genetic sequencing, mass spectrometry and medical imaging. Its mission is to develop and promote advanced life science tools for future healthcare.

#### FGI



FGI is committed to providing world-leading high-accuracy forensic DNA testing to benefit the society. FGI innovates forensic application through integrating industry, education, and research. It has one of the first third-party forensic centers approved by Ministry of Justice of China.

#### BGI-MED



Engaged in the clinical transformation and application of gene science and technology achievements, enabling patients to receive accurate diagnosis and treatment, promoting the transformation from traditional medicine to precision medicine.

#### BGI-Agro



BGI Agro, based on BGI's technical strengths in genomics and bioinformatics, is an innovative organization supporting genomic research and development in agricultural applications.

#### BGI-Health



BGI Health aims to provide precision health services and solutions by analyzing multi-omic data for BGI employees and their families, including precision prevention, intervention and improvement. It strives to provide full-life-cycle precision health services for more people in future.

#### Mammoth Foundation



China's first public welfare foundation that works for public benefit based on gene technology was co-initiated by BGI, Vanke Foundation, Green Pine Capital and Galaxy Holding Group. We take aim at "working together on charity and making all benefit from gene technology". We uphold the principle of promoting and developing gene technology that is people-oriented, equal, all-inclusive, convenient and accessible. We mainly work on medical subsidy and assistance, popular science & education, and crossover communication among others.

To learn more about us, please visit



Facebook



Twitter



Website

E-mail: [info@genomics.cn](mailto:info@genomics.cn) / [media@genomics.cn](mailto:media@genomics.cn)

Copyright ©2021 BGI, All Rights Reserved. (2021.07)