



INDYGENEUS AI CAPABILITIES: COVID-19 AND PATHOGEN GENOMIC SEQUENCING

[HTTPS://INDYGENEUS.AI/](https://indygeneus.ai/) | INFO@INDYGENEUS.AI

IndyGeneUS AI is a Service-Disabled Veteran-Owned Small Business (SDVOSB) and minority owned genomics company headquartered in Nairobi, Kenya with a Washington DC office. We were founded to democratize representation in precision medicine by leveraging next-generation sequencing (NGS), advanced molecular techniques like gene editing, and bioinformatics analyses to drive health equity. Our services provide end-to-end, scalable, long-term solutions for genomic research programs recruiting and mobilizing the appropriate personnel, skill sets, and technologies. Our model entails leveraging strategic partnerships with key stakeholders, building a value-add network, and providing customized genomics solutions. Founded in 2020, IndyGeneUS AI is a with access to designated federal programs for companies led by Military Veterans. Our team and partners consist of Diaspora and African life scientists and business professionals with significant experience in African and US health ecosystems. We also have deep expertise in resource mobilization for pandemic response, logistics, healthcare and technology healthcare policy, data security and key relationships with government and private sector institutions across the Continent.

CAPABILITIES

- Study design consultation
- Genotyping by sequence
- Targeted sequencing
- Targeted gene expression profiling
- Small genome sequencing
- Metagenomics
- Bioinformatics analyses (NGS/Sanger)
 - Biomarker discovery - multiomic data
 - Centromere & telomere analysis
 - Comparative genomic analysis
 - Customized analysis pipeline development
 - Data QC
 - Disease genetics - GWAS, TWAS etc.
 - Epigenomics
 - Genome mapping-assembly & annotation
 - Immunoepitidomics
 - Transcriptome mapping
 - Small RNA mapping
 - Machine learning/artificial intelligence
 - Weighted gene co-expression network analysis (WGCNA)

KEY DIFFERENTIATORS

- Kenyan business entity with Nairobi HQ, a presence in South Africa, and U.S. office in Washington D.C.
- Integrated end-to-end genomics solutions
- Strategic blend of business, drug regulatory, pandemic response, and scientific knowledge
- Blockchain encrypted repository
- FedRAMP authorized platform utilization

EXPERIENCE AND EXPERTISE

- Research study design
- Virtual participant recruitment
- Clinical trial management
- 30 years of combined sequencing experience
- FDA regulatory consultation

SEQUENCING PLATFORMS

- Illumina
- Oxford Nanopore
- Ion Torrent



Study Design

Participant
Recruitment

NGS

Bioinformatics
Analyses

ML/AI
Insights