



Projects · NTHRYS Biotech Labs

AI Biosensors > AI CRISPR-Based Biosensor Diagnostics Development

# AI CRISPR-Based Biosensor Diagnostics Development

AI Biosensors Project Category

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Explore focused-area projects under AI CRISPR-Based Biosensor Diagnostics Development, part of AI Biosensors at NTHRYS Biotech Labs.

## FOCUSED AREAS

### Real-Time CRISPR Pathogen Detection SaaS Platform

A cloud-based SaaS platform that integrates AI-driven CRISPR biosensors for rapid pathogen identification in clinical samples with real-time results dashboard and automated reporting. Enables laboratories and hospitals to reduce diagnostic turnaround time from hours to minutes, commanding premium pricing for urgent care facilities and pandemic response teams.

### AI-Powered CRISPR Point-of-Care Testing Device Suite

A portable, handheld CRISPR biosensor device with embedded AI models for rapid on-site disease diagnosis without laboratory infrastructure. Generates recurring revenue through device sales, consumable cartridges, and software licensing to clinics, pharmacies, and remote healthcare providers globally.

### CRISPR Diagnostic Data Analytics Intelligence Tool

An advanced analytics platform that processes CRISPR biosensor output data using machine learning to identify disease patterns, predict patient outcomes, and optimize diagnostic protocols. Monetizes through subscription tiers for hospitals, research institutions, and pharmaceutical companies conducting diagnostic validation studies.

### Multiplexed AI CRISPR Biomarker Detection Commercial Kit

A commercial diagnostic kit enabling simultaneous detection of multiple biomarkers using CRISPR arrays with AI-powered interpretation software for cancer, cardiovascular, and infectious disease screening. Builds revenue through direct kit sales, volume-based pricing agreements with clinical laboratories, and licensing to in vitro diagnostic manufacturers.

### Enterprise CRISPR Biosensor Integration Middleware Platform

A middleware solution that seamlessly integrates CRISPR biosensor hardware with existing laboratory information systems and electronic health records using AI-driven data harmonization. Charges implementation fees, annual licensing, and per-test transaction fees from hospital networks and large diagnostic service providers.

### AI Model Validation Service for CRISPR Diagnostic Accuracy

A specialized consulting and validation service that deploys custom AI models to optimize CRISPR biosensor sensitivity, specificity, and turnaround time for client diagnostic assays. Generates revenue through professional services contracts, model licensing, and success-based pricing tied to diagnostic performance improvements.

### **White-Label CRISPR Biosensor Software Platform Provider**

A customizable white-label software platform enabling biotech companies and diagnostics firms to deploy branded CRISPR biosensor solutions with integrated AI analytics without developing proprietary technology. Monetizes through licensing agreements, revenue sharing models, and tiered pricing based on testing volume and geographic territory.

### **Regulatory Compliance and AI Validation Consulting Services**

A professional services firm specializing in FDA, CE, and international regulatory pathways for AI-enabled CRISPR biosensor diagnostics, including AI model documentation and validation. Generates high-margin revenue through consulting contracts, expert testimony, and ongoing compliance support for diagnostic manufacturers seeking market approval.

### **Automated CRISPR Assay Development AI Platform Studio**

An AI-powered platform that automates the design and optimization of CRISPR guide RNA sequences and detection workflows, reducing assay development cycles from months to weeks. Licenses the platform on a subscription basis to pharmaceutical companies, diagnostic manufacturers, and contract research organizations developing diagnostic assays.

### **CRISPR Biosensor Performance Monitoring and Optimization Service**

A managed service offering continuous performance monitoring, predictive maintenance, and AI-driven optimization of deployed CRISPR biosensor systems across distributed laboratory networks. Delivers revenue through annual managed service contracts with tiered pricing based on device fleet size and real-time performance guarantees.