BullFrog AI Holdings

Nasdaq: BFRG

Using AI to Identify Molecular Drivers of Disease

Accelerating Discovery of Novel Targets & Therapies

Forward Looking Statements

This presentation contains forward-looking statements. In addition, from time to time, we or our representatives may make forward-looking statements orally or in writing. We base these forward-looking statements on our expectations and projections about future events, which we derive from the information currently available to us. Such forward-looking statements relate to future events or our future performance, including: our financial performance and projections; our growth in revenue and earnings; and our business prospects and opportunities. You can identify forward-looking statements by those that are not historical in nature, particularly those that use terminology such as “may,” “should,” “expects,” “anticipates,” “contemplates,” “estimates,” “believes,” “plans,” “projected,” “predicts,” “potential,” or “hopes” or the negative of these or similar terms. In evaluating these forward-looking statements, you should consider various factors, including: our ability to change the direction of the Company; our ability to keep pace with new technology and changing market needs; and the competitive environment of our business. These and other factors may cause our actual results to differ materially from any forward-looking statement. Forward-looking statements are only predictions. The forward-looking events discussed in this document and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties and assumptions about us. We are not obligated to publicly update or revise any forward-looking statement, whether as a result of uncertainties and assumptions, the forward-looking events discussed in this document and other statements made from time to time by us or our representatives might not occur. See offering documents for further risks and disclosures. Past performance is not indicative of future results. There is now guarantee that any specific outcome will be achieved. Investments may be speculative, illiquid and there is a total risk of loss.

Why BullFrog AI?

Neuropsychiatric data partnership with the Lieber Institute (access to the world’s largest neuropsych brain tissue repository).

Licensed JHU Applied Physics Lab’s breakthrough AI technology

Massive addressable market (~$158 B by 2034) with strong macro tailwinds (rising development costs and lengthy regulatory pathways).

Lean operating model – one major bio-bucks licensing deal could self-fund operations for 10+ years.

Industry Problem

- **~12% success rate for drugs entering Phase 1 - high failure, high cost**
- **>$200B spent annually on pharma R&D with low return on investment**
- **Smaller biotechs lack AI tools to analyze complex biomedical data**
- **Urgent need for affordable, scalable AI solutions to boost efficiency and outcomes**

Targets Identified Across 3 Neuropsychiatric Diseases from 1,000-case Dataset

bfLEAP™

BullFrog AI's bfLEAP platform incorporates proprietary methods:

- **True multi-modal analytics**
- **Data and disease agnostic**
- **Scalable and explainable AI**

APL JOHNS HOPKINS APPLIED PHYSICS LABORATORY

- Graph analytics to build evidence networks
- Best-in-class link prediction algorithms
- Community detection in affiliation networks

- Robust ML Embeddings for biological data
- Structure discovery in complex systems
- Multi-domain bioinformatic analysis

Solution:

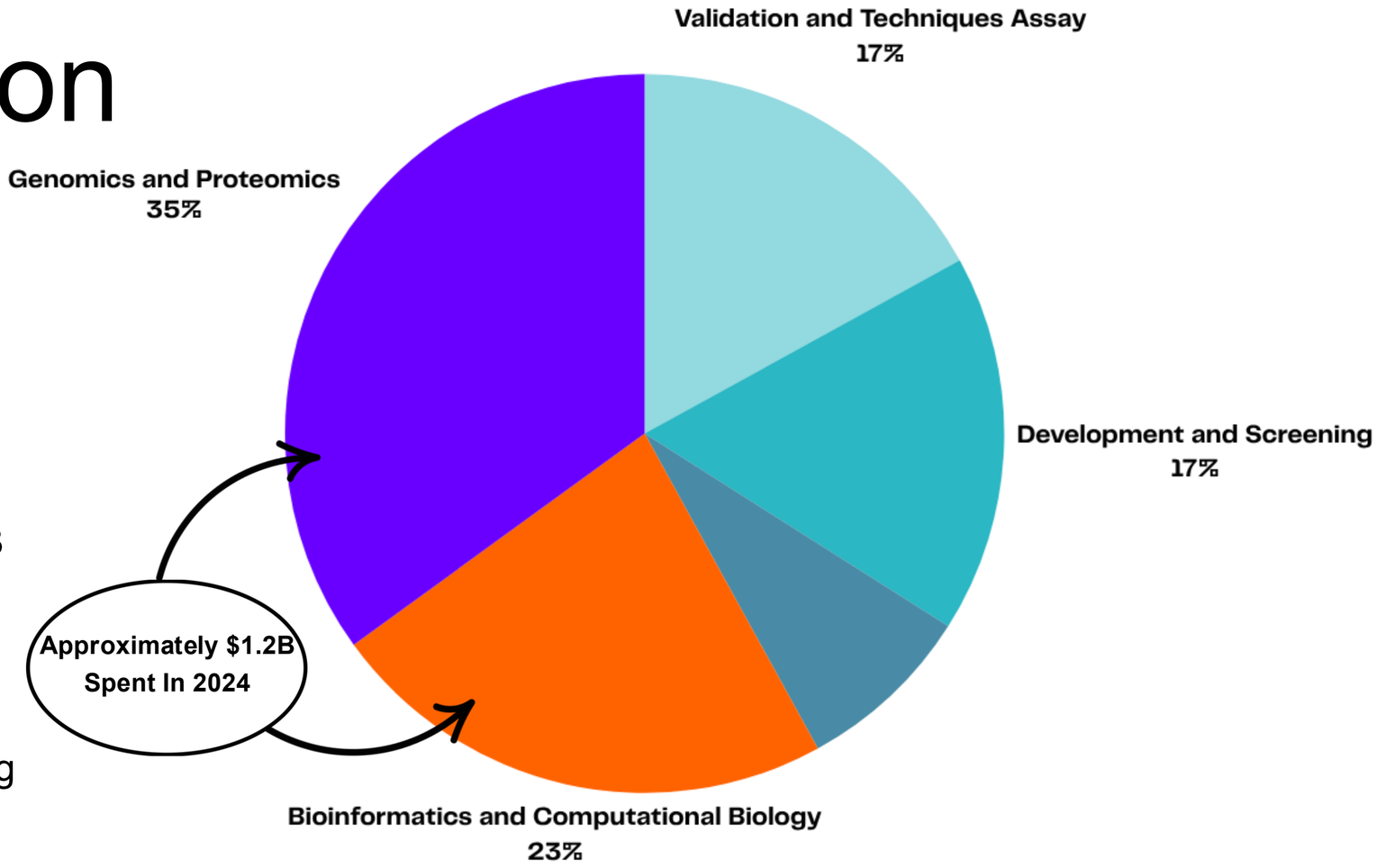
BullFrog Data Networks® platform powered by the proprietary bfLEAP® AI – an AI-driven system that can analyze high-dimensional, multi-modal biological data to uncover hidden disease drivers and patterns that traditional methods miss.

Accelerates drug discovery and development – using AI for target identification, drug repurposing, and clinical trial optimization helps speed up drug discovery/development and reduce costs.

Accessible to smaller biopharma – the platform is designed as an affordable, scalable solution tailored for small and mid-sized companies. This emphasizes that BullFrog can empower clients who lack big budgets, a key market differentiator.

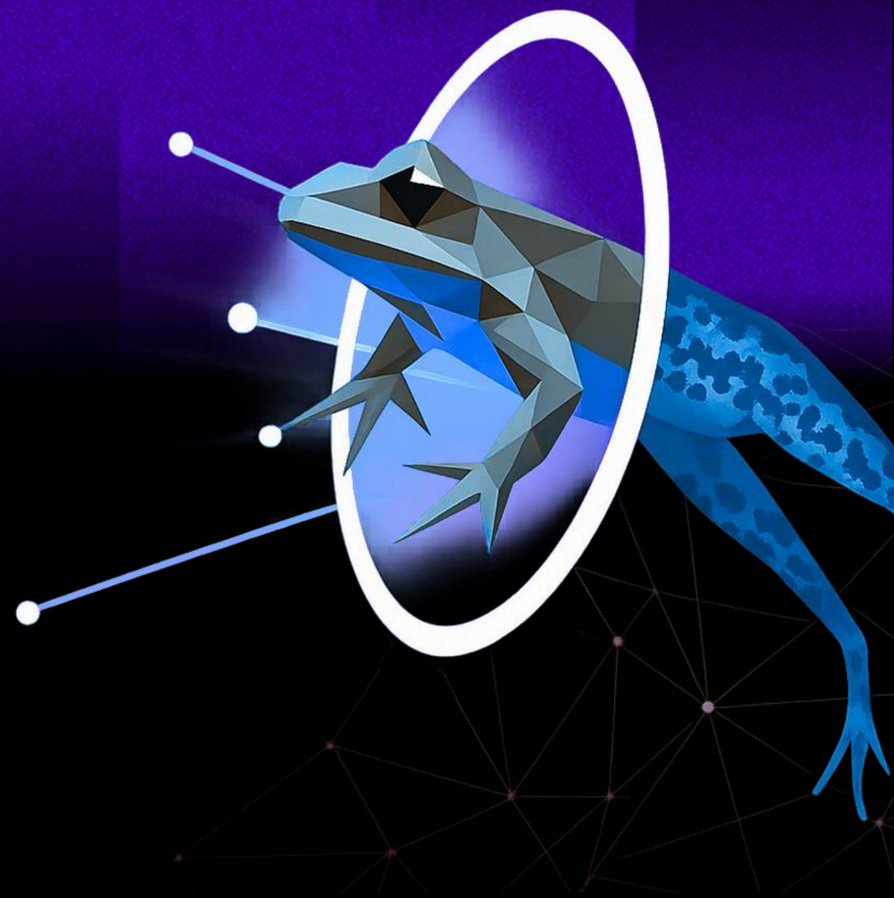
Market Opportunity and Segmentation

- Drug discovery market projected to grow from ~$72B (2025) to ~$158B by 2034
- Real-world data (RWD) market expected to triple: $16B (2023) → $48B (2032)
- Multi-omics data market to grow 4x: $2.6B (2023) → $10.7B (2033)
- BullFrog AI positioned to capitalize on industry demand for faster, lower-cost drug development



Our Business Model

- **AI-driven partnerships: Structure discovery deals with upfront fees, milestones, and royalties ("bio-bucks" model).**
- **Internal pipeline monetization: Advance in-licensed assets, then out-license or co-develop for revenue.**
- **SaaS-style platform sales: License BullFrog Data Networks® to biotechs for recurring, scalable revenue.**
- **Multi-pronged strategy: Combines services, licensing, and pipeline to maximize revenue opportunities.**



Exclusive Partnership with Lieber Institute for Brain Development

Three-year strategic partnership with the Lieber Institute for Brain Development (LIBD)

>2,800 brain samples from dlPFC, mPFC, hippocampus, dentate gyrus, and caudate

Molecular Insights into schizophrenia, bipolar disorder, major depressive disorder

Revenue Roadmap

Near-Term (0–12 Months)

BullFrog Data Networks® licensing revenue

Generate revenue from feasibility studies & collaborations

Monetize IP through early licensing deals

Introduce new technology solutions and data for enabling R&D

Mid-Term (12–24 Months)

Secure milestone payments from partnered programs

Expand into later stage discovery and early development

Continue Innovating

Long-Term (24+ Months)

Co-develop drug assets with equity/royalty upside

Grow platform revenue through network effect & data integration

Continue Innovating

BullFrog Data Networks™ Solutions Library

Cloud-Native Scalability: enables global biopharma organizations to securely analyze massive, multi-modal biomedical datasets with minimal integration overhead.

Accelerating Trial Timelines: platform enables rapid identification of biomarkers, cohort stratification, and trial design optimization.

Modular Architecture: including target selection, mechanism-of-action analysis, and clinical trial optimization.

Revenue Model: Designed for long-term enterprise adoption through modular, cross-functional components that scale across departments.

bfPREP™: automates cleansing, standardization, and transformation of fragmented clinical, omics, and real-world datasets.

The Leadership Team

Vin Singh
Chairman and CEO

- Serial entrepreneur with leadership roles in biotech and cell therapy; founder of Next Healthcare and co-founder of MaxCyte (Nasdaq: MXCT, ~$1.5B market cap)
- Global cell therapy executive with operational and strategic experience at Thermo Fisher Scientific
- Multi-disciplinary academic background with degrees in engineering and business from Rutgers, RPI, and Johns Hopkins

Josh Blacher
Chief Financial Officer

- Veteran CFO with capital markets and operational experience at RNA Disease Diagnostics, InMed, Therapix, and Galmed Pharmaceuticals
- Deep strategic and corporate development expertise from leadership roles at Teva Pharmaceuticals and Columbus Circle Capital
- Institutional finance background with investment roles at Morgan Stanley and Deutsche Asset Management; MBA in Finance from Columbia Business School

Praveen Kudithipudi, MD, MBA
Chief Business Development Officer

- Business development leader with experience at Deep Genomics and Otsuka, specializing in AI-driven drug discovery and strategic licensing
- Former healthcare investment banker with deep capital markets expertise from senior roles at WestPark Capital
- Physician-executive with a neuroscience background and an Executive MBA from NYU, combining clinical insight with biotech commercialization

Kristin Bigos, PH.D.
Senior Director CNS

- President ASCPT
- Assistant Professor at Johns Hopkins School of Medicine with joint appointments in medicine, psychiatry, and pharmacology
- Leading researcher in neuropsychiatric drug development, with a focus on precision medicine for mental health disorders
- Academic foundation in pharmaceutical sciences, holding a Ph.D. from the University of Pittsburgh and a B.S. from Penn State

Contact Us

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