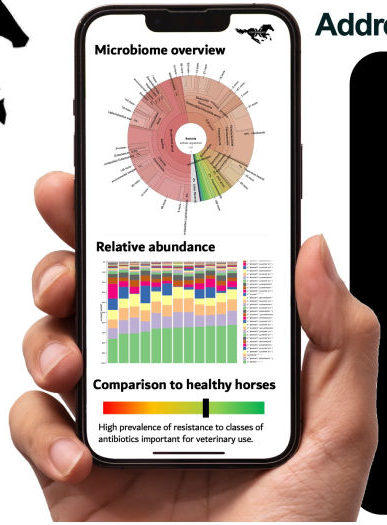
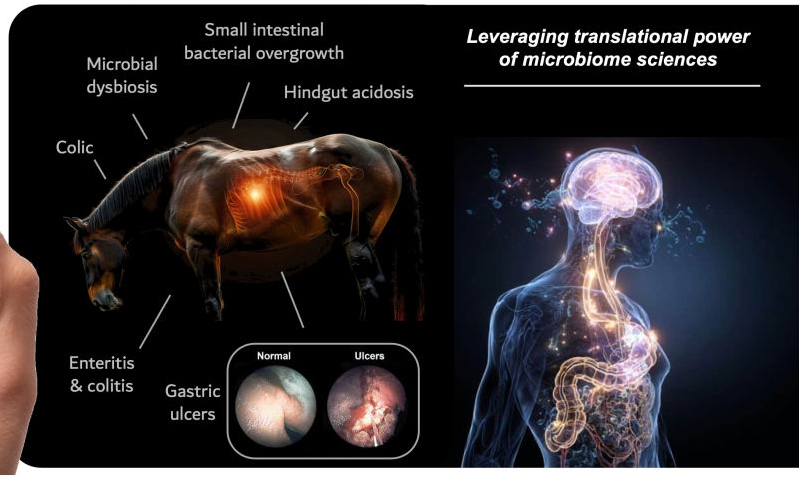
Performance X Ltd.

Precision Microbiome Intelligence for Animal and Human Health

PI: **Prof. Tommy Tsan Yuk Lam**





Technology

AI-driven **microbiome analytics and probiotic discovery platform** integrating metagenomic sequencing with machine learning to identify microbial patterns linked to health, disease risk, and performance outcomes.

The technology delivers **clinically actionable microbiome insights** and supports the design of **species-specific probiotics** for both equine and human health applications.

Stage of Development

AI analytics and sequencing pipeline validated and under further development using equine datasets.

Pilot probiotic strain library under genomic characterization.

Functional medicine clinical collaborations under discussion for cross-domain testing.

Preparing for early commercial rollout for veterinary use and validation at accredited equine research institutions in 2026.

Key Advantages

Species-specific precision: Veterinary-focused platform with direct scalability to human microbiome solutions.

Dual-market relevance: Under validation in elite racehorses; adaptable to other veterinary and human clinical use.

Data-driven insights: Proprietary AI models under development provide interpretability and predictive health markers.

Non-invasive testing: Simple sampling with rapid turnaround and digital reporting.

Opportunities

Human Health: Integration with diagnostic and functional medicine platforms for personalized gut health management.

Veterinary & Livestock: Precision probiotics for equine, bovine, and companion animal health.

Data Licensing: Collaborative research and data-driven insights for pharmaceutical and nutraceutical partners.

Global Expansion: Entry into global racing jurisdictions, with future transition to human clinical sectors.

Intellectual Property

Proprietary AI algorithms for microbiome interpretation and disease prediction.

Equine-specific probiotic strains and microbial formulations, delivery mechanisms, and computational frameworks for planned IP filings.

Defensible data moat: Each analysis strengthens our models and enhances predictive accuracy.

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