STANDARD SEED PRODUCT CATALOG

Plant-based therapeutics, translational science, and regulatory pathways.

A magazine-style scientific catalog of programs, assays, compound-intelligence systems, and translational development pathways designed to turn botanical and natural-product innovation into evidence-ready therapeutic products.

2026 Edition

A Browsing-First Approach to Scientific Discovery

This catalog is designed for exploration, not linear reading. Each product and platform entry follows a consistent structure: what it is, the evidence systems supporting it, biological targets addressed, development pathway, and actionable next steps. Browse by interest area or regulatory ambition.

Our integrated credibility system unites science, chemistry, screening, clinical strategy, and regulatory policy into a coherent framework. Whether you seek consumer wellness innovations or IND-track clinical programs, each entry maps directly to its appropriate regulatory pathway —from supplement positioning to botanical drug development.

HOW TO READ THIS CATALOG

REGULATORY PATHS WE BUILD FOR

How Regulation Shapes Evidence Plans From the Start

Every therapeutic pathway demands a distinct evidence architecture. Consumer wellness products require safety documentation and quality consistency. Supplement/NDI tracks mandate identity verification, manufacturing controls, and structure-function claim support. OTC pathways need monograph compliance or NDA-level efficacy data. Botanical INDs require chemistry standardization, pharmacology packages, and clinical protocols. Conventional IND/NDA programs demand full GLP toxicology and Phase I-III trials. Companion Animal Wellness follows NASC guidelines with safety and biomarker support. We align chemistry, screening, claims strategy, and trial design with your regulatory destination from day one.

CONSUMER WELLNESS	SUPLEMENT/NDI OTC	CONVENTIONALLY NDI
Reglatal BOTANICAL IND	Reglatial CONVENTIONAL IND/DA	Reglatial COMPANIAL ANIMAL WELLNESS

From Mechanistic Question to Assay Selection

SCIENTIFIC CREDIBILITY INFRASTRUCTURE

Chemistry Workflows

Our chemistry workflows ensure compound confidence through rigorous identification, spectroscopic interpretation, high-resolution mass spectrometry, and NMR confirmation—building the analytical foundation regulators require.

Translational Layer

The translational layer bridges chemistry to biology: chemical-guided protein discovery, protein "lock" mapping, and computational binding evaluation transform molecular data into mechanistic hypotheses.

NCI-60 SCREENING CAPABILITY

Oncology Screening: 60 Cell Lines, One Decisive Profile

The NCI-60 panel represents the gold standard in oncology screening—60 human tumor cell lines spanning nine major cancer types: leukemia, melanoma, and cancers of the lung, colon, brain, ovary, breast, prostate, and kidney. Our assay format employs ATP-based CellTiter-Glo detection in 384-well plates with 72-hour compound exposure.

Beyond simple activity detection, the NCI-60 delivers a response fingerprint—a pattern of differential sensitivity across tumor types that reveals tumor selectivity and distinguishes cytotoxic mechanisms from targeted effects. This phenotypic signal guides compound prioritization before committing to costly in vivo models. Each profile integrates into our translational pipeline: compound screening → response fingerprint → selectivity mapping → mechanistic hypothesis → prioritized follow-up studies.

How Screening Informs Translational Decisions

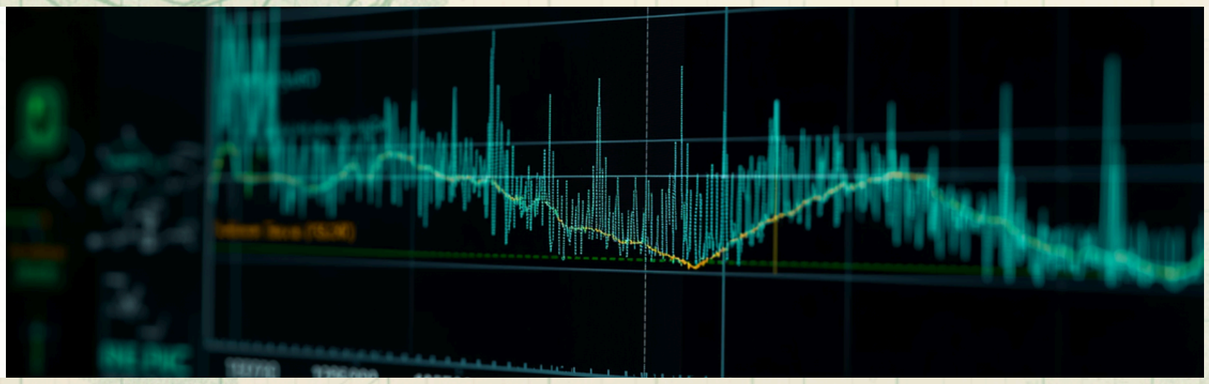
Decision Flow Logic

The NCI-60 panel functions as strategic triage, not a decorative badge. Each compound or extract generates an activity profile that reveals response fingerprints across tumor types. These fingerprints narrow to tumor selectivity maps, enabling comparative interpretation against known mechanism classes and guiding prioritized follow-up studies.

Signal to Hypothesis

Phenotypic signals progressively narrow toward translational hypotheses. Raw activity becomes fingerprint, fingerprint becomes selectivity pattern, and selectivity guides mechanistic inquiry. This systematic narrowing transforms screening data into actionable compound intelligence for pathway-specific development.

READING NCI-60 AS A DECISION SYSTEM



AI MASS SPECTROMETRY PLATFORM

Transforming Complex Mixtures into Confident Chemistry

Regulatory Chemistry Confidence

Example: Cannflavin A analysis demonstrates parent ion logic and fragment interpretation workflows, delivering publication-ready structural evidence that satisfies regulatory documentation requirements.

Spectral Intelligence

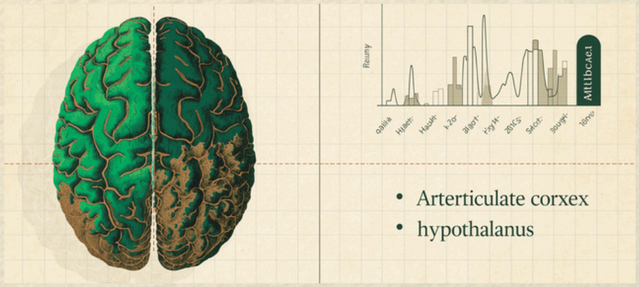
Our fusion neural networks combine high-resolution mass spectrometry with AI-driven spectral interpretation. This enables rapid structural confirmation and regulatory-grade chemistry confidence for complex botanical extracts and natural product mixtures.

Platform Capabilities

Key capabilities include feature fingerprinting for batch-to-batch comparison, compound prioritization scoring, and automated structural annotation—accelerating the path from raw extract to characterized therapeutic candidate.

Proton MRS Within MRI: Mapping Neurochemical Signatures

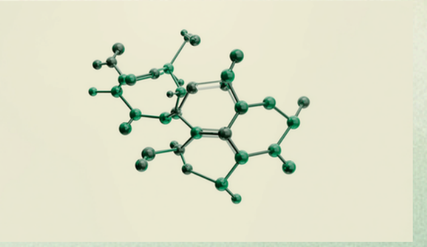
This clinical program employs proton magnetic resonance spectroscopy (MRS) within MRI to investigate neurochemical brain signatures relevant to sleep architecture, autonomic regulation, and stress recovery. Rather than positioning CBN as generic wellness, we frame the program mechanistically—targeting specific voxel placements in the anterior cingulate cortex and hypothalamus to capture metabolite ratios and neurotransmitter precursors. Possible Readouts include GABA/glutamate ratios, NAA concentrations, and choline markers. Brain Regions of Interest encompass the ACC for emotional regulation and hypothalamic nuclei for autonomic control. Our Translational Hypothesis links subjective sleep and recovery outcomes to quantifiable neurochemical context, building an evidence bridge from botanical intervention to measurable CNS endpoints.



CBN NEUROENERGETICS CLINICAL PROGRAM

Colorado Chromatography-Derived Therapeutic

PANCREATIC ONCOLOGY ASSET



Why Readers Should Care

Our lead oncology asset derives from Colorado Chromatography's proprietary isolation platform, targeting pancreatic ductal adenocarcinoma (PDAC). With 92% of PDAC tumors harboring KRAS mutations, this represents one of oncology's most formidable therapeutic challenges and greatest unmet needs.

Translational Development Arc

PDAC remains among the deadliest cancers with five-year survival under 12%. RAS-driven disease has resisted conventional approaches for decades, demanding novel molecular strategies and biology-driven screening.

Drinkable Oral System for Vascular Support

This drinkable oral formulation represents a sophisticated approach to erectile function support, designed around absorption optimization, vascular and metabolic enhancement, and formulation elegance. Key botanicals include Fucus vesiculosus and Panax-type ginseng, positioned within a broader physiological strategy targeting nitric oxide pathways and circulatory health.

Bioavailability engineering ensures active compounds reach target tissues effectively. Manufacturing consistency protocols maintain batch-to-batch reliability essential for regulatory positioning. The supplement/NDI pathway offers the clearest route to market while supporting meaningful structure-function claims. Formulation design directly links to pathway selection—dose form influences compliance, absorption kinetics shape efficacy windows, and ingredient sourcing determines regulatory documentation requirements.

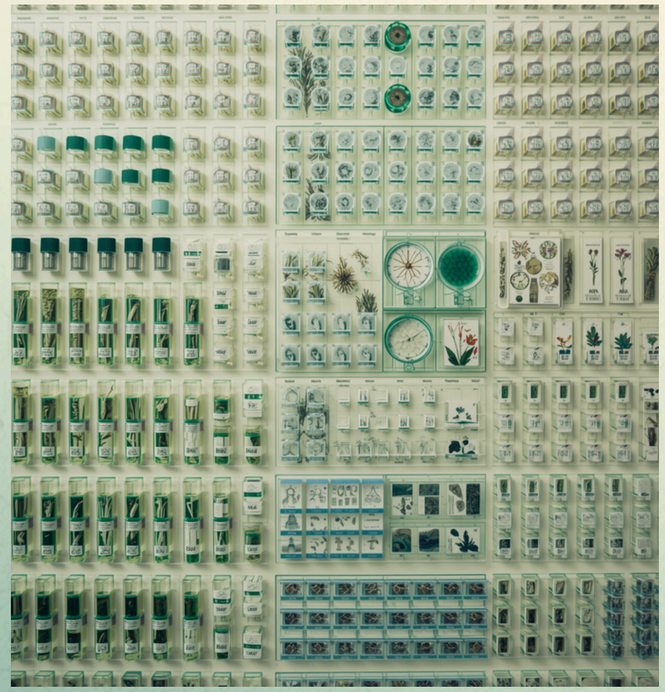
BOTANICAL ED FORMULATION

DOG LONGEVITY WATER

Hydration-First Functional Delivery for Companion Animal Wellness

Dog Longevity Water represents a hydration-first delivery vehicle engineered with functional ingredients: electrolytes for cellular hydration, polyphenols for antioxidant support, adaptogenic mushrooms, microbiome-supporting fibers, and anti-inflammatory botanicals. The scientific logic centers on five pillars—optimal hydration, gut resilience, inflammatory tone modulation, metabolic steadiness, and healthy aging support. This credible wellness concept offers biomarker and observational data potential, positioning it as a premium veterinary lifestyle product with genuine scientific foundation.

PORTFOLIO SUMMARY



Integrated Pipeline Architecture

Consumer Wellness

Consumer wellness products leverage botanical formulations with established safety profiles, targeting hydration, metabolic support, and daily resilience through supplement pathways.

Supplement / NDI

NDI-track supplements undergo rigorous chemistry validation and safety screening, building regulatory-ready dossiers for market authorization.

Clinical Evidence

Clinical evidence programs employ biomarker studies, MRS imaging, and controlled trials to establish mechanistic credibility beyond wellness claims.

IND-Track Oncology

IND-track oncology assets progress through NCI-60 screening, target validation, and translational development toward investigational new drug applications.

THANK YOU

Let's Continue the Conversation

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