

# ADVANCING BREAKTHROUGH THERAPEUTICS FOR CNS DISORDERS

Public Information Overview

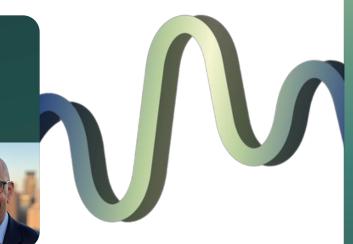




## Advancing breakthrough therapeutics for central nervous system disorders

"Our vision at EQUULUS Therapeutics is to turn the promise of psychedelics into real-world therapeutics that transform patients' lives and set a new standard in neuroscience healthcare."

— Bob Discordia, Co-founder & CEO



48.5M

Annual **addiction** cases in the US

13M

Annual cases of **PTSD** in the US

2.9M

Adults in the US with active epilepsy

21M

Adults in the US with **depression** 

Source: HHS, NIMH NDA, CDC, USVA

#### **OPPORTUNITY**



Effective treatments for CNS disorders remain a critical, unmet need

CNS disorders contribute to **more disability-adjusted life years (DALYs)** than any other disease category.

\$800B+

\$1.5T

Annual healthcare cost of CNS disorders

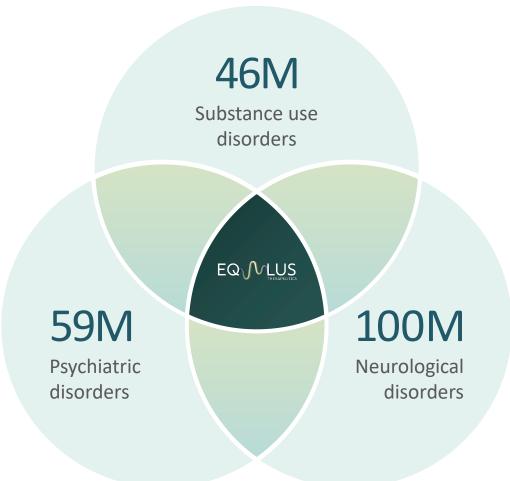
Annual cost to the US economy of CNS diseases

443M

1 in 3

Annual DALYs contributed by CNS disorders

Of people are affected by neurological conditions



Sources: NeuroToday, ITIF, Lancet, NIH NIDA, JAMA, NIMH

#### **MARKET**



CNS therapeutics are a \$117B market, projected to double by 2034

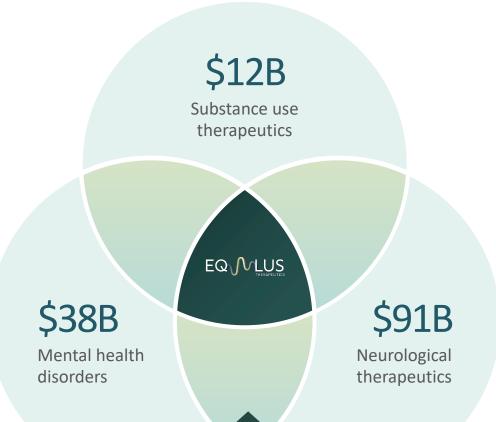
Neurological disorders are the leading cause of disability worldwide, affecting **over 3 billion people** 

Patients with mental health or substance use disorder accounted for **over 30% of total US health care** spending

Current CNS therapeutics are **often ineffective**, focus on symptoms, and/or have serious side effects

Failure rates for new CNS disorder drugs are very high relative to most other areas of drug discovery

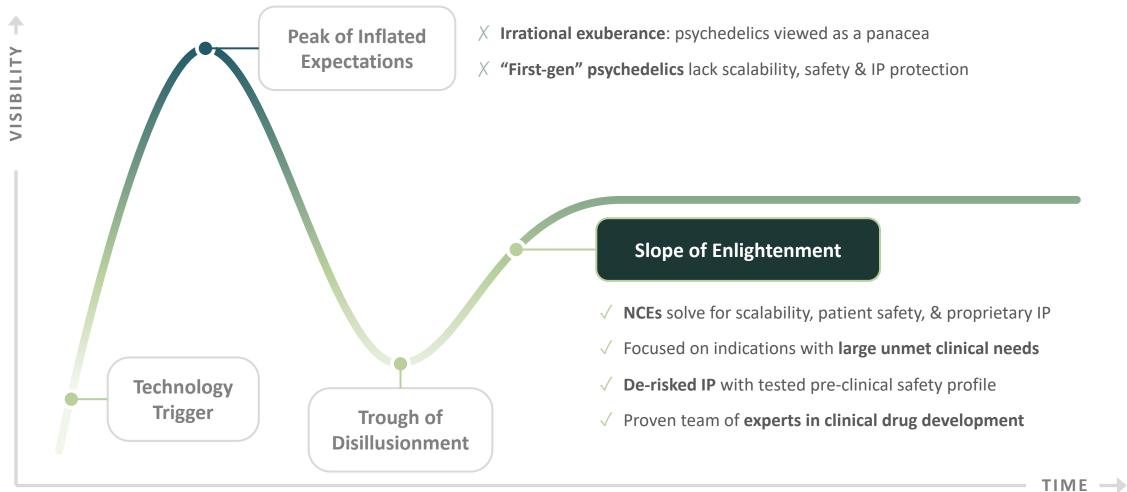
Sources: Precedence, Biospace, Grandview, Statista, WHO, Neuropharm, NIH



EQUULUS' transdiagnostic approach increases success rates, accelerates approvals, and amplifies value: a single therapeutic can address multiple conditions by targeting shared biologic pathways



## Psychedelics are at a critical juncture



#### **OUR DIFFERENCE**

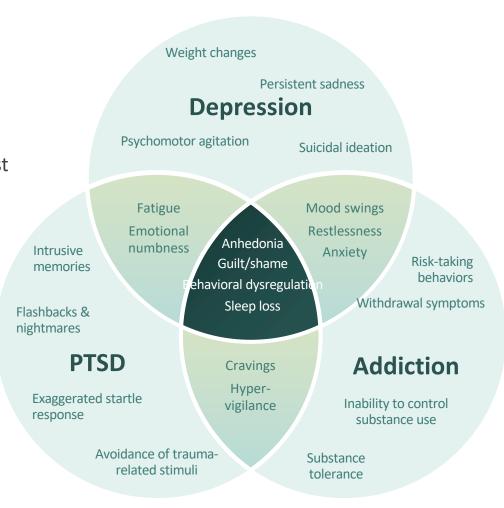


### Transdiagnostic development

Transdiagnostic development recognizes shared symptoms; challenges the boundaries of traditional diagnostic silos.

Overlapping symptoms suggest overlapping neurobiological circuits, such as...

- √ Stress response systems
- √ Behavioral regulation
- ✓ Negative emotions
- ✓ Reward pathways



#### **EXAMPLES**

#### **Cognitive enhancers**

Agents enhancing prefrontal cortex function may improve behavioral regulation & goal-directed behavior.

## **Emotional** regulation therapies

Drugs modulating glutamate or serotonergic systems could address irritability and emotional numbness.

#### **Sleep-focused interventions**

Pharmacological agents targeting
GABAergic or melatonin pathways might
alleviate sleep disturbances across all
three disorders.





## Uniquely positioned with proprietary data and validated lead candidates



Early proof of concept and expedited paths to large pharma partnerships position our assets as

"acquisition-ready" from day one











## Filed **six provisional patent** applications and **two PCT** applications

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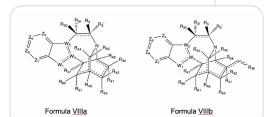
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## Experts in drug discovery, development & commercialization



Co-Founder, CEO

Robert Discordia, PhD



Chief Business Officer **Drew Mouton**, MBA, MGM



Co-Founder, Medicinal Chemistry **Bruce Blough**, PhD



Co-Founder, Clinical Psychology
Peter Hendricks, PhD



Co-Founder, Neuropharmacology **Kevin Murnane**, PhD

#### **ADVISORS**



## Scientific advisory board







Bruce Car, DVM, PhD
Senior Scientific Advisor





John Renger, PhD
Senior Neuroscientific Advisor





Angela Hargrove, MHA
Sr. Scientific Advisor

















#### **ASSETS**

## Programs at EQUULUS

	Asset	Stage	Primary Indication(s)	Milestone <sup>†</sup>
	MDMA Analog	Discovery	PTSD	Candidate Selection 2027
*	Fenfluramine / Fen- Phen Analog	Discovery	Seizure Disorders/ Obesity	Candidate Selection 2027
	EQL-101	Candidate Selection	Substance Use Disorders; PTSD	Phase-1/2a start Q4 2026 / Q1 2027
	Confidential In- License	IND-Enabling (Pre-Phase I)	Acute Suicidality (ER, Inpatient); Adjunctive MDD	Phase-1 2026

<sup>\* 5</sup>HT Releaser Technology || NCE Platform

<sup>&</sup>lt;sup>†</sup> Assumes successful funding Q4/25



## 5HT Releaser Technology NCE Platform

MDMA & Fenfluramine/FenPhen Analogs



#### **TECHNOLOGY**



## 5HT Releaser Technology NCE Platform

Library\* of over 1400 small molecule neurotransmitter releasers representing 12 chemotypes

#### COMPOUNDS



- Serotonin selective releasers
- Serotonin/Norepinephrine releaser
- Dopamine/Serotonin/Norepinephrine

Differing profiles of  $5HT_{2A}/5HT_{2C}$  agonist activity

#### TARGET INDICATIONS



PTSD/Anxiety	MDMA analog	
Epilepsy	Fenfluramine analog	
Obesity	Fen-Phen analog	
Addiction	Proof-of-concept analog	

#### **Multiple Drug Candidates**

Derisked compounds with advanced safety data and druggable properties.

#### **Accelerated Path**

Targeting indications and advanced lead candidates with faster path to approval.

#### **High Barrier to Entry**

Existing platform represents a decade of work and >\$10M of investment.

#### **Cardio-safe**

Many compounds with no 5-HT<sub>2b</sub> receptor activity exist in all 12 chemotypes.

#### **Proprietary Data**

Difficult to obtain dopamine, serotonin, and norepinephrine transporter data.

#### **Cost-efficient IP**

Co-founder's proprietary knowledge and SAR expertise accelerate NCE discovery.

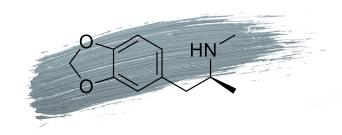
<sup>\*</sup> Library built by co-founder Dr. Bruce Blough



## 5HT Releaser Technology Platform

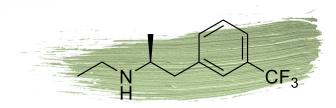
#### **MDMA Analog:**

- Our MDMA-inspired, discovery stage, small molecule is being designed to preserve pro-extinction and pro-social neuroplasticity benefits for the treatment of PTSD while minimizing stimulant load, hyperthermia risk, and abuse liability.
- Through structure—activity optimization, we aim to decouple therapeutic signaling from unwanted effects for a cardio-safer, non-hallucinogenic profile.
- **Next Milestone**: Candidate Selection



#### **Fenfluramine Analog:**

- Our next-generation fenfluramine-class agent is being designed to retain seizure-modifying and appetite-regulating efficacy while reducing historical cardiovascular liabilities associated with legacy fenfluramine.
- Through structure—activity optimization, the medicinal chemistry is focused on selective serotonergic modulation and improved developability to support use in seizure disorders such as epilepsy and obesity.
- Next Milestone: Candidate Selection







## Ibogaine Analog Program

EQL-101



## Ibogaine analog program: EQL-101

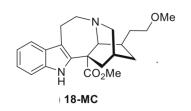
EQUULUS is developing a safe, non-hallucinogenic, non-addictive therapy that will rapidly and dramatically reduce cravings and withdrawal symptoms in substance use disorders and PTSD.

#### **Ibogaine**

- ✓ Potent and effective substance for addiction
- x Highly hallucinogenic
- x Cardiotoxic with reported fatalities
- x Cannot be patented as COM

#### 18-MC: a synthetic ibogaine analog

- ✓ Potent and effective substance for addiction (pre-clinical)
- ✓ Non-hallucinogenic (clinical)
- √ Non-cardiotoxic (clinical)
- x Highly complex metabolism
- x Primary patents expired



#### **EQL-101**

Equulus is the only company developing an ibogaine analog aimed at being:

- ✓ Effective substance for addiction
- ✓ Non-hallucinogenic (clinical evidence)
- √ Non-cardiotoxic (clinical evidence)
- √ Scalable
- √ Commercializable through FDA
- √ 6 provisional patents and 2 PCT patents filed





## Equulus as the Next Gilgamesh

Success Factor	Gilgamesh Pharma	Equulus Therapeutics
Scientific Innovation	Novel psychoplastogens & ibogaine analogs	Non-hallucinogenic ibogaine analog (EQL- 101)
Clinical Progress	Phase 2a (94% remission); milestone-linked deal	Stealth-emerged preclinical pipeline
Leadership & Expertise	Established, proven drug development team	Distinguished team, strong CNS biotech backbone
External Validation	Fierce 15, AbbVie deal talks (~\$1B+ milestone)	Early attention in psychedelic and neuroscience biotech community
Exit Potential	Acquisition in progress	Positioned for high-value partnership trajectory

"Like Gilgamesh before us, Equulus is harnessing the next generation of psychoplastogens to deliver breakthrough CNS therapies—with the potential for transformative clinical results and strategic exits."



#### **HIGHLIGHTS**

## Join Equulus in developing effective, modern therapeutics for CNS disorders



#### **Portfolio of Novel Assets**

Highly competitive ibogaine analog with robust COM patents & 5HT Releaser NCE Platform.



#### **Large Indications**

Addressing unmet clinical needs for chronic indications with multi-billion-dollar market demand.



#### **Transdiagnostic Approach**

Increases development success rates with high-value therapeutics for several indications.



#### **World-Class Team**

Industry & academic experts: led
200+ combined CNS clinical trials, multiple
INDs and NDAs.



#### **Robust IP Strategy**

Filed six provisional patent applications and two PCT applications.

**CONTACT US** 

#### **Bob Discordia**

Co-founder & CEO

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