

Novel Psychoplastogenic Tropanes for Treating Brain Disorders

Tech ID: 34755 / UC Case 2023-9A2-0

ABSTRACT

Researchers at the University of California, Davis have developed non-hallucinogenic compounds with clinically relevant therapeutic efficacy that promote neural growth and plasticity.

FULL DESCRIPTION

This technology encompasses non-hallucinogenic psychoplastogens that may have distinct advantages over their hallucinogenic counterparts. These compounds promote neuron growth and can improve neuronal architecture, thereby demonstrating antidepressant, anxiolytic, and anti-addictive effects. These compounds potentially rectify deleterious changes in neuronal structure associated with neuropsychiatric and neurological diseases/disorders without the subjective effects limiting the clinical utility of hallucinogenic compounds.

APPLICATIONS

- ▶ Treatment of neuropsychiatric disorders like depression, anxiety, and addiction.
- ▶ Therapeutic use in neurological diseases associated with altered synaptic connectivity and plasticity.

FEATURES/BENEFITS

- ▶ Non-hallucinogenic properties as compared to their hallucinogenic counterparts.
- ▶ Potential antidepressant, anxiolytic, and anti-addictive effects.
- ▶ Promotion of neuronal growth and improvement of neuronal architecture.
- ▶ Reduces deleterious changes in neuronal structure associated with neuropsychiatric and neurological diseases/disorders.
- ▶ Overcomes the limited clinical utility of hallucinogenic compounds due to their subjective effects.
- ▶ Chemical space is distinct from classic serotonergic psychedelics.

PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Published Application	WO 2025/014719	01/16/2025	2023-9A2

Additional Patent Pending

CONTACT

Prabakaran
 Soundararajan
psoundararajan@ucdavis.edu
 tel: .



INVENTORS

- ▶ Chow, Winston
- ▶ Olson, David E.
- ▶ Warren, Hunter

OTHER INFORMATION

KEYWORDS

addiction, anxiolytic, antidepressant, brain disorders, neuronal growth, neuronal plasticity, neuropsychiatric, neurological diseases, psychoplastogens, tropanes

CATEGORIZED AS

- ▶ **Medical**
 - ▶ Disease: Central Nervous System
 - ▶ Disease: Substance Abuse
 - ▶ Therapeutics

RELATED CASES

2023-9A2-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ [Combinations of Psychoplastogens and DYRK1A Inhibitors](#)
- ▶ [dimerLight](#)
- ▶ [Psychoplastogens For Treating Hearing-Related Disorders](#)

University of California, Davis

Technology Transfer Office

1 Shields Avenue, Mrak Hall 4th Floor,
Davis, CA 95616

Tel:

530.754.8649

techtransfer@ucdavis.edu

<https://research.ucdavis.edu/technology-transfer/>

Fax:

530.754.7620

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