AUGUST 2024

Vielight News

Accelerating photobiomodulation.

NEW ALZHEIMER'S REVIEW STUDY BY VIELIGHT FOUNDER

This newly published **review study** by Dr. Lew Lim, the inventor of home-use brain photobiomodulation and Vielight founder was recently published in the Frontiers in Neurology journal.

This manuscript presents a model of Alzheimer's Disease (AD) pathophysiology, from genetic predispositions leading to mitochondrial dysfunction and amyloid/tau accumulation, to broader factors like blood-brain barrier integrity, vascular health, and inflammation.

Photobiomodulation (PBM) is proposed as a therapeutic approach, using near-infrared light to target these mechanisms, with evidence suggesting improvements in memory and cognition.

EEG data reveal brain network changes, suggesting PBM parameters such as wavelength, power density, and pulse frequency can be tailored to optimize outcomes, potentially using artificial intelligence for personalized AD treatment.

Read it here: **Link**

Newsletter Highlights

VIELIGHT

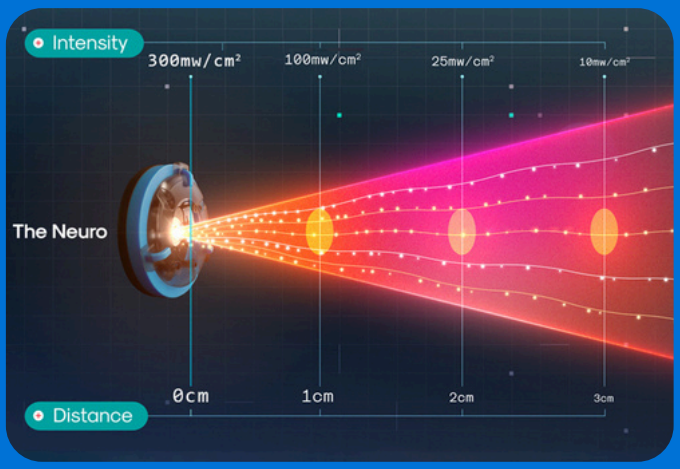
The Vielight Neuro Explained Video | Inventor and Scientists

Dive into the engineering and research behind the Vielight Neuro, explained by the inventor, Dr. Lew Lim and Vielight scientists, Dr. Genane and Dr. Nazanin.

Dr. Lew, PhD explains the reasons behind the Vielight Neuro's unique design, the difference in pulse rates and the supporting independent research ranging from neurodegeneration to brain performance in the US military.

Dr. Genane, PhD Pharmacology, covers aspects from a neurophysiological perspective while **Dr. Nazanin, PhD Medical Biophysics**, touches on aspects from an imaging and photonic perspective.

Watch the full video here: Link



DID YOU KNOW?

The irradiance of sunlight is approximately ≈100 mW/cm2 at sea level on a clear day and has a wavelength range of ≈10 - 1100+ nm

So why not just stand outside? The sun contains harmful UV rays (100-400nm) and hair is a natural barrier to light energy.

The Neuro emits ≈300 mW/cm2 of 810nm NIR energy (no harmful UV rays) with a lens form factor designed to bypass hair.