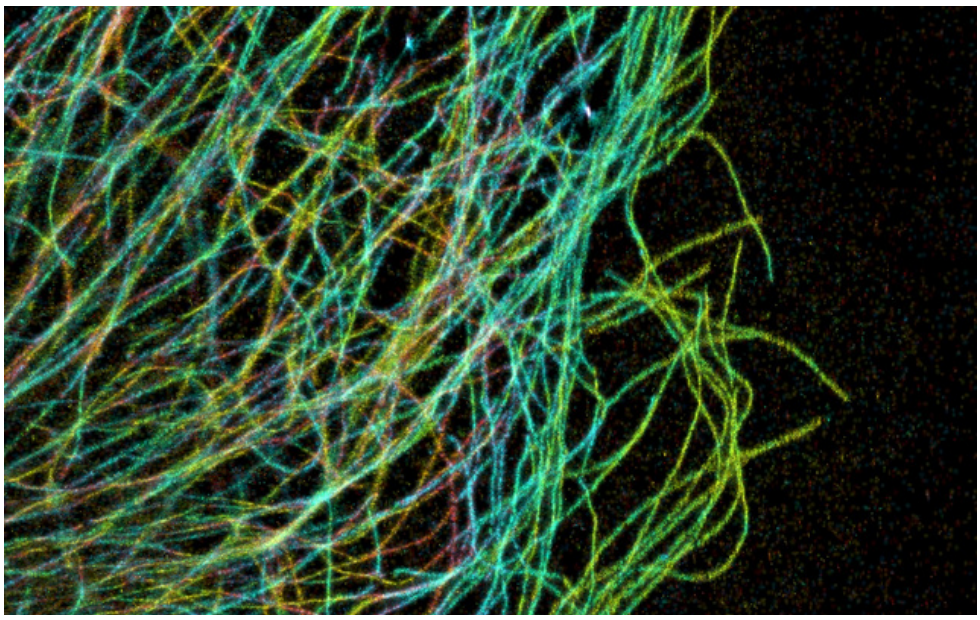
NOVEMBER 2023

Vielight News

Accelerating photobiomodulation.



VIELIGHT NEURO - EFFECTS ON CELLULAR STRUCTURE

A pre-print of a new spectroscopy study on microtubules featuring the Vielight Neuro (810nm/10Hz) is now available. This study was led by Dr. Jack Tuszynski.

In the pathology of Alzheimer's disease and related dementias, fundamental cellular structures called microtubules are known to exhibit dysfunction and have been discussed in connection with disease progression.

In this recent study focused on tubulin, the protein building block of microtubules, we discovered that pulsed near-infrared light from the Vielight Neuro induces significant structural alterations that directly impact the stability and dynamicity of microtubules.

Consequently, the dynamic behavior of dysfunctional microtubules may be restored, allowing for the potential rejuvenation of microtubules in neurons.

Newsletter Highlights

VIELIGHT

VIELIGHT SPOTLIGHT

Dr. Jack Tuszynski is a Fellow of the National Institute for Nanotechnology of Canada. He is an Allard Chair and Professor in Experimental Oncology in the Department of Oncology at the University of Alberta's Cross Cancer Institute and a Professor in the Department of Physics.

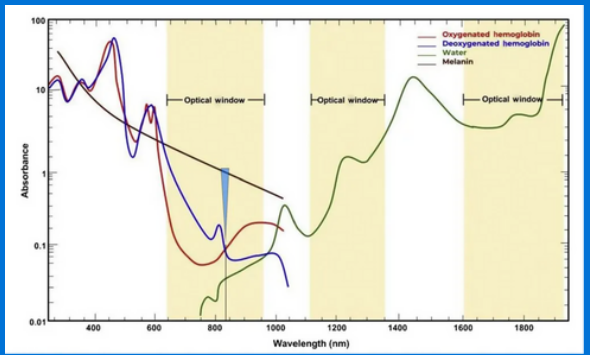
His research conducted with the Vielight Neuro Alpha provides a deeper level of understanding of the way living cells, cellular structures, and components such as microtubules respond to NIR photobiomodulation.

CELEBRATING WOMEN RESEARCHERS AT VIELIGHT

At Vielight, we oversee the largest independent research and innovation program in the world focused on brain and systemic photobiomodulation.

This would not be possible without our research team led by female PhD scientists from a diverse range of backgrounds: from pharmacology, psychiatry to medical biophysics.

We proudly celebrate our female researchers for their outstanding contributions, driving impactful advancements and reshaping the boundaries of possibility in neurotech innovation.



THE 810NM WAVELENGTH

Based on computer modelling, the 810nm wavelength is superior for penetration on the electromagnetic spectrum. This was proposed in 2018, and confirmed in 2020, by Harvard Medical School. Part of the explanation for the deeper penetration by 810 nm is the low absorbance by blood and water.