

# Vielight News

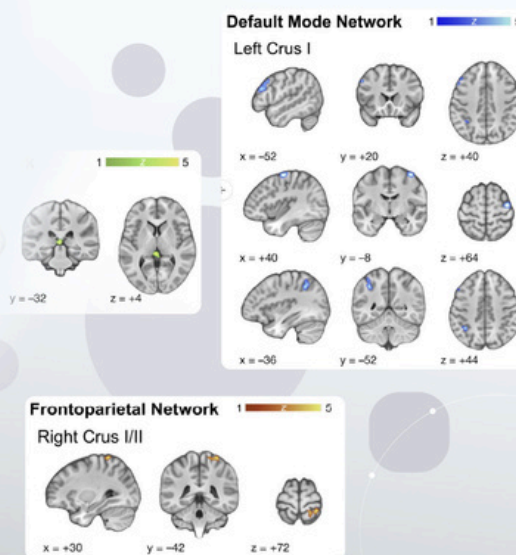
Accelerating photobiomodulation.



## Improvements in Resting-State Functional Connectivity of the Cerebellum (TBI)

with Vielight Neuro Gamma

30 participants



## New TBI Study | Vielight Improves Cerebellar Efficiency

A [new TBI study](#) by the U of Utah utilizing the Vielight Neuro enrolled thirty (**n=30**) individuals with a documented history of repetitive head acceleration event (**RHAEs**). Resting-state functional magnetic resonance imaging (**fMRI**) scans were acquired from participants both before and after.

The analysis of the fMRI data revealed significant and specific changes in brain connectivity patterns after Vielight itPBM:

- **Decreased Between-Network Connectivity:** Researchers observed an overall decrease in functional connectivity between different brain networks. This suggests a reduction in non-specific or inefficient “crosstalk” between distinct functional systems.
- **Increased Within-Network Connectivity:** Conversely, the study found an overall increase in functional connectivity within the established networks. This indicates that the connections binding these networks became stronger and more coherent.
- **Specific Network Effects:** These changes were noted as being particularly prominent within the Salience Network (SN) and the Frontoparietal Network (FPN), two networks crucial for attention, cognitive control, and sensory processing.

## Newsletter Highlights

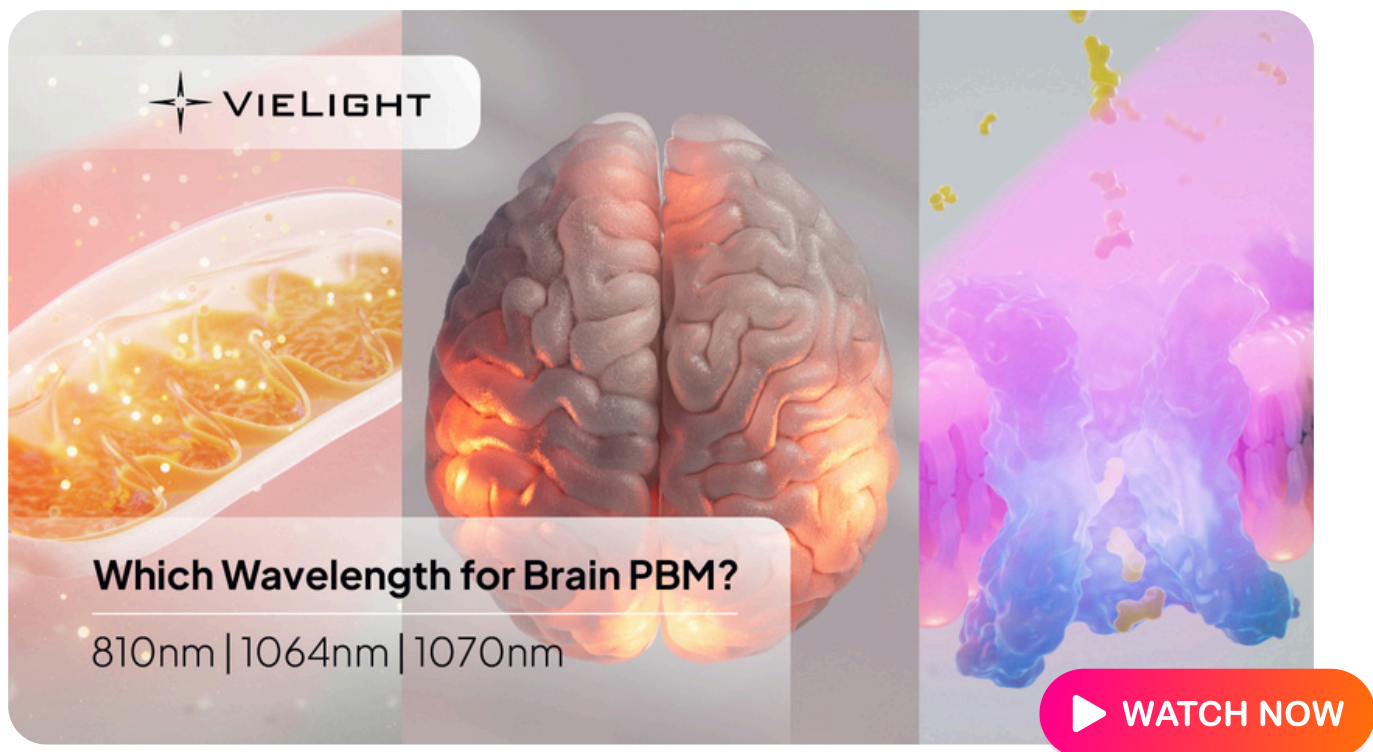
New TBI Study | Vielight Improves Cerebellar Efficiency

Which Wavelength for Brain Photobiomodulation?

Dr. Cody Rall's Vielight Analysis

[NEWSLETTER ARCHIVE](#)

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## Which Wavelength for Brain Photobiomodulation? 810 nm | 1064 nm | 1070nm

Curious if the 810nm, 1064nm or 1070nm wavelength is better for brain photobiomodulation? This animation cuts straight to published literature to clarify the differences between each wavelength.

We compare how each wavelength handles absorption and scattering to penetrate the skull and skin, along with their different biological effects. Then, we perform a real-world demonstration on a real human skull with the Vielight Neuro against a 1070nm helmet.

This is to demonstrate why this entire debate might miss the point if we ignore one other crucial factor: irradiance (the intensity of the light). Effective PBM depends on the right combination of both wavelength and sufficient irradiance to trigger a real biological response.

Read the full article here: [Link](#)



### Dr. Cody Rall's Vielight Analysis

Dr. Cody Rall, a US Navy Psychiatrist performs a deep dive on the science behind Vielight technology and the incredibly potential it has for the brain.

Interested in buying Vielight? Use the 10%code: **RALL25VL**

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