

VielightNEWS

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“Where there is purpose, there is hope.” George Washington Carver

Breakthrough Revelation in Brain Patterns with Vielight Neuro Gamma

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Crucial recognition of Vielight technology and research in Nature Scientific Reports

Dr. Lew Lim to Present at the 2019 Sharp Brains Virtual Summit

Vielight to Exhibit at the American Psychiatric Association (APA) Annual Meeting

Vielight Study Succeeds

On April 19, 2019, a paper reporting the effect of the Neuro Gamma on brain oscillations was published by the high-impact Nature Scientific Reports. The double-blind controlled study entitled “Pulsed Near Infrared Transcranial and Intranasal Photobiomodulation Significantly Modulates Neural Oscillations: a pilot exploratory study”, described significant changes in brain waves and connectivity following single PBM sessions of only 20 minutes. The investigators were Reza Zomorodi of the Centre for Addiction and Mental Health (CAMH), Genane Loheswaran and Lew Lim of Vielight Inc., and Abhi Pushparaj of Ironstone Product Development, all based in Toronto, Canada.

Using near infrared light emitting diodes (LED), pulsing at 40 Hz and focusing on the default mode network, the study presented a novel discovery in brain response. The study demonstrates that the power spectrum in the high frequency brain waves of alpha, beta and gamma was significantly increased, whereas the low frequency spectrum of delta and theta was decreased. There was also greater global inhibition and higher connectivity in the high frequency bands.

According to Dr. Lew Lim, CEO of Vielight, “This is a study that should be of great significance to the world of brain stimulation and photobiomodulation (PBM) research. We showed for the first time that inducing pulsed near infrared (NIR) light to the brain has real impact in modulating brain oscillations, the kinds that are highly desirable

Dr. Lim added, “The most important question that this study answers is whether PBM has any effect on the brain. This study shows clearly that not only does it have an effect, but also it induces response that is quite consistent. Furthermore, it dispels the often-held notion that high-powered lasers are desirable for significant response.



Vielight Neuro Gamma in use during the study

for improving brain functions. You could not achieve this level of effect without negative side effects using electrical and magnetic brain stimulation methods.”

There is a lot in the physiology in a living human that enables good response with the right PBM parameters. This makes PBM an effective and versatile modality.”

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Lead investigator, Dr. Reza Zomorodi says: "It was a pleasant surprise that a home-use device directing a safe level of light to the brain can produce this level of modulation within 20 minutes. It was important that the modulations were consistently achieved without any negative side effects. The modulations appear to be frequency dependent, producing outcomes that are desirable for potentially addressing a number of conditions. This study unveils the exciting potential of PBM as a potent, non-invasive brain stimulation modality."

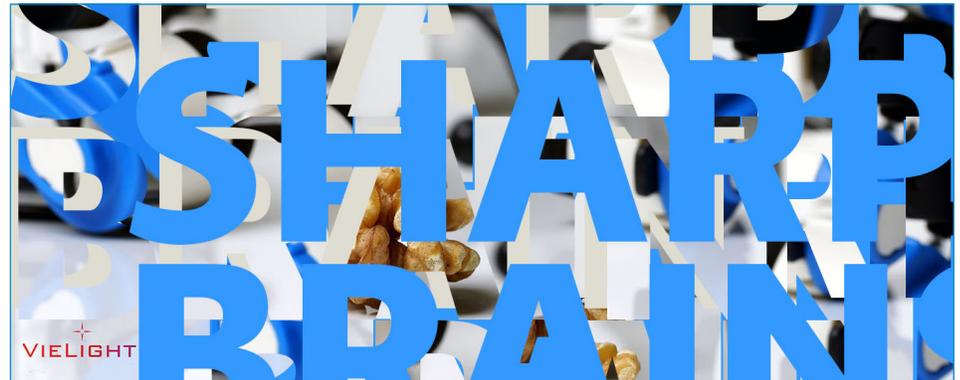
Dr. Lim further added, "We should now move forward to push the understanding of PBM further so that we can meaningfully improve people's lives, especially in the areas where other treatments have failed".

Dr. Lew Lim to Present at the 2019 Sharp Brains Virtual Summit

The 2019 SharpBrains Virtual Summit (May 7-9th, 2019) will feature over forty of the world's top experts, innovators and investors working to improve brain health

for all in light of growing neuroscience and digital tech. The Summit is held online and attendees can attend all sessions via their computers. Dr. Lim will update the attendees on new developments in brain photobiomodulation and exciting prospects for

and Research. She has years of experience in neuroscience, including EEG research. Dr. Smith was also an adjunct professor of anatomy and physiology at the University of Waterloo. She completed a degree in Kinesiology and Athletic Therapy. Fur-



the future of PBM. Frequent collaborator, Dr. Reza Zomorodi, will be presenting his views on the brain research landscape at the conference.

Dr. Alison Smith Joins Vielight

Alison Smith, Ph.D., will be joining Vielight as the Manager for Performance Science

thermore, she is a skilled medical writer and a regular meditator. Dr. Smith will be involved in Vielight initiatives in sports injuries, sports performance, cognitive performance and advanced meditation science.



Vielight to Exhibit at the American Psychiatric Association (APA) Annual Meeting

The meeting, to be held on May 18-22 2019, is the largest gathering of psychiatry-related professionals held annually. Over 13,000 anticipated attendees from around the globe will be attending this event. Most of the attendees are physicians from psychiatric and other mental health disciplines, social workers and nurses. The meeting features hundreds of educational sessions and presentations on the latest research, including more than 400 scientific sessions.

Attendees will have the opportunity to explore the Vielight technology which helps the brain. Additionally, they will be able to discuss the various initiatives the company is undertaking to support psychiatry.

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