

VielightNEWS

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

2019 in Retrospect: it has been a busy year.

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Warm Season's Greetings to you and your loved ones from all of us at Vielight!

Report from Dr. Lew Lim, the Founder & CEO of Vielight.

Imaging Shows the Effect of Neuro Alpha on Managing Movement

What Has Vielight Done in 2019?

Report from Dr. Lew Lim, the Founder & CEO of Vielight

“2019 has been particularly busy for Vielight. We pushed the frontiers of brain photobiomodulation (PBM) understanding, translating ideas into cutting-edge products. This calls upon the combination of engineering skills, science and user safety.

In 2019 we released updated versions of the Neuro Alpha and Gamma devices, as well as the all new X-Plus. The X-Plus has been designed to be versatile. It can be used on its own on most parts of the body (the eyes being an exception). It is also complementary to the Neuro Alpha and Gamma devices. The X-Plus can be placed on the head to deliver more photons to areas of the brain which are not covered by the Neuro.

In addition to these devices, we are finalizing other new products such as the Neuro Pro, a vagus nerve stimulation device and a chronic pain treatment device.

This has also been an important year in terms of trials and studies. The pivotal Alzheimer's disease trial commenced in

the summer. This is a 286-subject, double-blind, eight-site clinical trial held in both Canada and USA.

Furthermore, we have also started a controlled clinical trial for traumatic brain injury. We and our research collaborators have planned new studies covering several clinical and non-clinical indications. We will keep you posted! More exciting news came from Australia, where independent university researchers have started their Parkinson's Disease clinical trials using the Vielight Gamma.

Earlier this year, our published paper revealed for the first time that the brain produces unique electrophysiological and connectivity responses to gamma wave. The most significant lesson out of the study was the clear evidence that the brain responds significantly to intranasal-transcranial stimulation by the Vielight Neuro Gamma device. The evidence confirms that neurological modulation can be induced by the device, despite the low power and dose of the Vielight devices. Furthermore, the University of California and the University of Sydney in Australia supported these results with their imaging from fMRI.

Another research study is being initiated to explain the mechanisms of why the Vielight devices are able to elicit such responses deep within the brain.

According to the FDA guidelines, our devices are categorized as low-risk general



wellness devices. We continue to respect the boundaries within which we are able to present our devices. We believe that solid reproducible scientific evidence should prevail over speculative claims. For this reason, we maintain the discipline to practice restraint and patience in making claims regarding our devices. Meanwhile, we continue to actively seek empirical evidence to support our hypotheses embedded in the designs of our products.

For regular updates and to subscribe to our newsletter send us an email to news@vielight.com or visit www.vielight.com

I wish to thank our marvelous, dedicated and talented staff who have been quick on their feet and exercised total professionalism in their work. I also wish to thank and am grateful to our collaborators and researchers, who have continued to believe in us, as we explore new areas of knowledge. Without the practitioners and customers who believed in our technology, we would be nowhere today. There is so much more to be discovered!

I humbly thank you all for your support and send you Season's greetings!"

Imaging Shows the Effect of Neuro Alpha on Managing Movement

Using fMRI, clinical investigators at the University of Sydney showed that the Neuro Alpha can affect a healthy human brain in interesting and non-intuitive ways. The paper published in the journal, [Neuroscience](#), is an exploration of whether near infrared light can change patterns of resting (task-negative) and/or evoked (task-positive; e.g. finger-tapping) brain activity in healthy, young human subjects.

In this study, the test subjects used the active or sham Vielight Alpha, while their brains were scanned using fMRI (functional magnetic resonance imaging). The results showed that 810 nm near infrared (NIR) light had no effect on cerebral blood flow.

However, there were clear differences between the active and sham sessions in the patterns of evoked brain activity after finger-tapping actions. The evoked brain regions included those that controlled the performed movements, as well as the default mode network, which were targeted by the Neuro Alpha device.

The overall effect of the NIR light from the Neuro Alpha was either suppression or reduction in the corresponding brain activity, after movements are initiated, which is desirable to control movements.

Dr. Lim interpreted the significance of the findings of this study. "The findings show that PBM with the Vielight Alpha helps to control

movements, by helping the brain to avoid uncontrolled continuation of movements after they have been initiated. Without this, there is the risk of dyskinesia (impairment of voluntary movements) in movement disorders, such as that observed in Parkinson's."

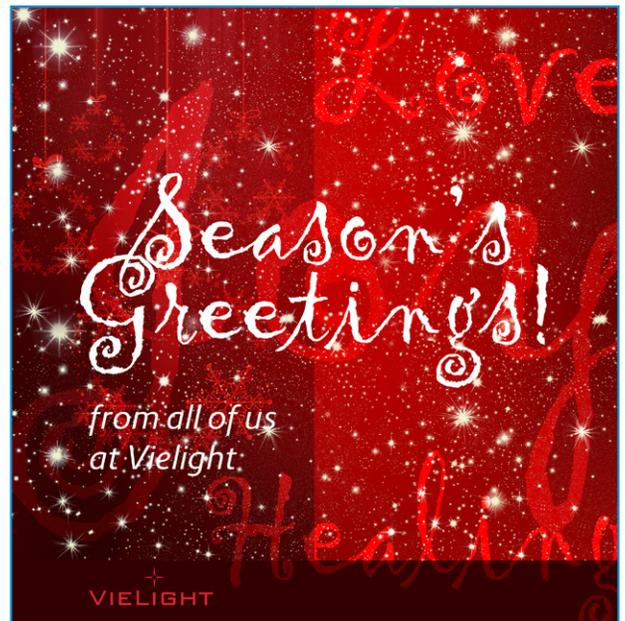
Eventful November

Vielight was involved with several conferences and presentations this November. We were there for the Biohacker Summit in Helsinki, Finland, Transtech 2019 in Palo Alto, California and MEDICA 2019 in Dusseldorf, Germany. In addition, Dr. Lim delivered a 3-hour workshop in Perth, Western Australia.

This year, we noticed a significant uptick in the awareness of the Vielight technology, as well as in the ownership of Vielight devices. We are thankful to all patrons who set aside time to meet with us to get updates and deeper understanding of our technology.

Vielight is returning to A4M Conference 2019

This year Vielight is going to be present at the world's largest aging related conference, A4M, in Las Vegas. The 2019 event is the 27th congress put together by the American Academy of Anti-Aging Medicine (A4M). Drop by our booth from 13 to



15 of December 2019 to have a chat and to try our devices. We are looking forward to seeing you at A4M 2019.

Welcoming Ciara Ross into the team

We extend a warm welcome to Ciara Ross in joining Vielight this month. Ciara has a degree in Philosophy and is a TESOL certified English language teacher. She has vast experiences as a journalist, researcher, administrator, an international coordinator in the teaching of English worldwide and is an expert in information technology. With her affable personality and love for helping people, we welcome Ciara as our customer service team member.

DECEMBER 13-15
BOOTH 9020

VISIT VIELIGHT BOOTH

Experience the Vielight PBM devices

A4M 2019

VIELIGHT

27th Congress of the American Academy of Anti-Aging Medicine, A4M Venetian/Palazzo, Las Vegas

Interested in joining our Vielight Reseller and/or Introducer programs? Send your enquiry to info@vielight.com.