

VielightNEWS

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

A Theory of Why PBM Could Work for Alzheimer's

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Finally, a Much-Requested Comprehensive Workshop by Dr. Lew Lim

Vielight Returns to the IMMH Conference in August

Vielight at the American Psychological Association (APA) 2019 Conference

One Intervention, Multi-factorial Pathways

In the treatment of Alzheimer's Disease, to date, no medication has succeeded in modifying Alzheimer's Disease (AD). Some AD medications approved by the FDA before 2003 were somewhat helpful for some patients for about 6 months.

Recently, we informed our readers of the start of our major Alzheimer's Disease (AD) pivotal trial. This involves the use of the Vielight Neuro RX Gamma to treat moderate to severe AD. You may ask, “Why should this device even work when billions of dollars have been invested without achieving any notable success?” The answer to this question is several-fold. We do not know for sure until the completion of the ongoing pivotal trial, which is the purpose of it. However, there are a few arguments that warrant the investment in a big trial.

Firstly, the data from a number of small early studies, including those conducted by independent clinical study investigators, were strong. Secondly, the Vielight Gamma employs the use of photobiomodulation (PBM) in a novel way as a viable treatment option. It uses light of selected wavelengths to target certain areas of the

brain. The mechanisms of PBM to effect changes are fundamentally different from the use of medication to treat Alzheimer's Disease.

Dr. Lew Lim, CEO of Vielight Inc. and the inventor of the Neuro RX Gamma explains his theory of the pathways. Dr. Lim says, “Although research efforts were directed towards the pathologies of amyloid, tau, inflammation, along with many other possible causes, one fundamental point is often overlooked. Drug development seeks out a single protein or molecule to target for modification. However, in reality, many biomolecules, biochemical mechanisms and pathways are involved. These are further complicated by their cross-interactions.

Today, many researchers believe that developing an effective drug should stem from addressing the disease in the early stages, before the pathways get too complicated. Still, this belief makes more sense when targeting a single protein or molecule, and particularly towards preventing the progression of amyloid pathology. However, this approach comes with a big assumption that the AD pathology is not multi-factorial, but caused by a single factor, even in the early stages.”

Dr. Lim reiterates further, “This is where PBM with the Neuro RX Gamma could offer more promise than the use of single-target drug, as fundamentally, PBM is agnostic to the pathways that AD pathology takes. Instead, PBM stimulates self-correction of aberrations in the brain's network and systems to restore homeostasis. PBM may not work all the time and for every individual. However, the mechanisms and results from early studies suggest that the odds are better than what other modalities have shown.



The Neuro RX Gamma's only intervention is to deliver pulsed near infrared light (NIR) to the default mode network of the brain to influence numerous biochemical pathways. The net result is that PBM would affect the major factors identified with the disease. Much more work is needed to support the theoretical pathways, but the “proof of the pudding is in the eating”.

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Ultimately, we hope that the pivotal trial will be able to indicate that effective underlying pathways and mechanisms exist."

The complex multiple pathways are best presented by a pathway map (right) developed recently by Dr. Lim: You can download the map, its synopsis and the references via this link: <https://vielight.com/photobiomodulation-alzheimers-disease-poster/>

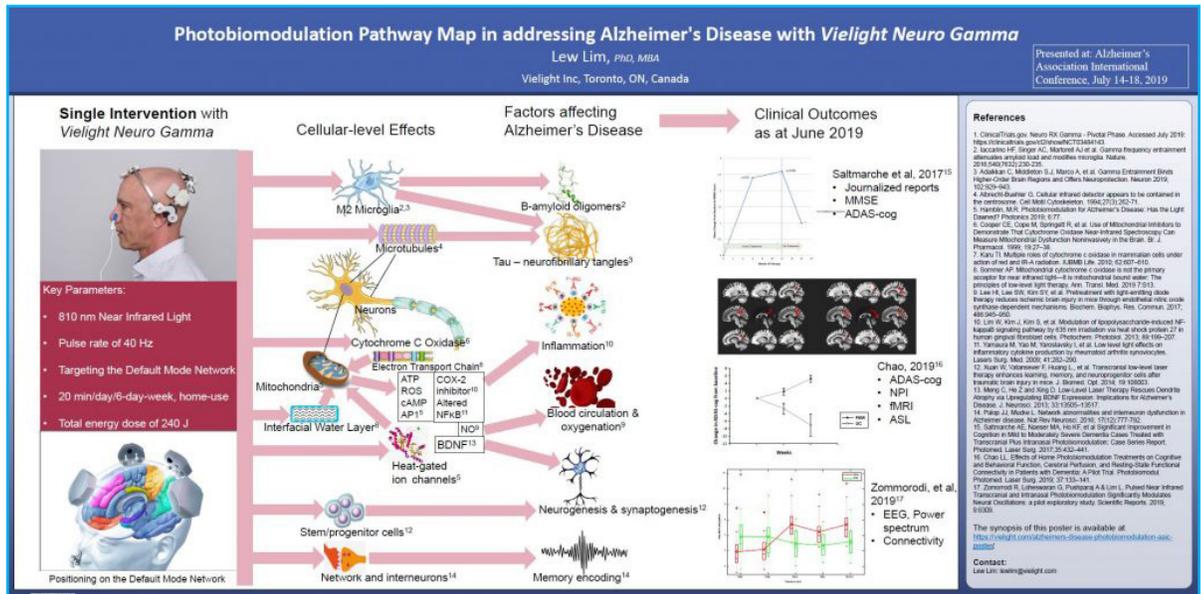
Dr. Lim added, "There have been a lot of AD research, and much more can be added to the map. However, I included only the relevant elements that are, in my opinion, the most impactful. I made this selection in order to keep this map as concise as possible.

Finally, a Much-Requested Comprehensive Workshop by Dr. Lew Lim

There is an increasing popular demand for a workshop by Dr. Lew Lim on how to apply photobiomodulation to improve brain functions. He has presented on numerous occasions, both online and at conferences, but never in a comprehensive program. For the first time, he is scheduled to spend a whole day at the ISNR 2019 Conference in Denver to share his knowledge. These sessions are scheduled for Thursday, September 19, 2019. Dr. Lim will start with an 8 a.m. plenary presentation, "Neural Oscillations Induced with Photobiomodulation Could Improve Neurofeedback Outcomes". This presentation will be followed later with a 3-hour workshop, titled "The Principles and Practice of Photobiomodulation Relevant to Neurofeedback".

Furthermore, there will also be a demonstration of new Vielight products. In addition, Penijeane Gracefire will deliver a plenary presentation, "Clinical Considerations of EEG-Guided Pulsed Near-Infrared Light as Feedback".

According to Dr. Lim, "Although a lot of



content and information will be shared at this conference, there will be very little overlapping of content over the duration of the various presentations. Much of the content will be new and will go beyond neurofeedback."

Last, but not least, Vielight will also have a booth at the conference where attendees can ask questions and experience the Vielight technology first-hand. Furthermore, practitioners will be able to obtain a generous conference-only discount for Vielight products.

We are giving the information about this conference early in view of the amount of useful content to be delivered in this conference. Readers interested in this will have time to make plans to attend.

More information about ISNR is available on the website: <https://theisnr.wixsite.com/2019-conference>.

Vielight Returns to the IMM Conference in August

Once again, Vielight will be present at the Integrative Medicine (IMM) for Mental Health Conference. Interest in the Vielight technologies continues to grow among integrative medicine practitioners. Therefore, this conference is a good opportunity for friends and followers to reconnect and learn of updates. The conference will be held at the Hilton San Diego Bayfront during 15-18 August 2019. Find us at the booth #53!

Vielight to Present at the American Psychological Association (APA) 2019 Conference

For the first time, Vielight will be present at the American Psychological Association (APA) 2019 Conference from August 8-11, 2019 in Chicago. The venue is the McCormick Place. If you are attending, we invite you to visit our Booth #415. Come by to chat, try our products and learn how our brain-focused technology can be used in the field of psychology.

Improve brain functions with **PHOTOBIMODULATION**
New methods
New evidence

VISIT VIELIGHT BOOTH 53

Experience the Vielight PBM devices, introduce yourself & meet the team behind the name

IMMH 2019 **VIELIGHT**

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