



## Science and Research - LifeWave, Inc.

### Featured Research

We collaborate with major universities and renowned medical facilities to research and test the effectiveness of our products. Through controlled studies, published scientific papers and general research reports, we can validate the many health benefits they provide. Most importantly, these efforts help us achieve our mission of helping people feel better, look younger, and lead more joyful lives.

#### Phototherapy Induced Metabolism Change Produced by the LifeWave X39 Non-transdermal Patch

*International Journal of Research Studies in Medical and Health Sciences* Volume 6, Issue 5, 2021

Purpose: To determine X-39 patch impact in stimulation of Copper peptide biosynthesis and bio-available amino acid levels, neurotransmitters production, memory, sleep quality, vitality, muscle relaxation and blood pressure.

Summary: The results of the double blind randomized controlled trial of 50 subjects using the LifeWave non-transdermal X-39 phototherapy patch produced an increase in 8 amino acids at significant levels. The study showed there was an improvement in short term memory at significant levels over 7 days, in quality of sleep at significant levels within 24 hours and a self-reported increase in vitality at near significant levels in 7 days. The findings suggest this patch is not only stimulating the biosynthesis of copper-peptide production, but also increases neurotransmitters production and improves metabolism.

- — Melinda H. Connor, DD, PhD, AMP, FAM
- — Caitlin A. Connor, MAcOM, DAOM
- — Naran Gombusuren, PhD
- — Jens Eickhoff, PhD
- — Nathan Anderson, MACOM, LAc
- — Marsha Perry, RN, MA
- — Leonard Peugh, MAcOM

#### Double-Blind Testing of the Lifewave X39 Patch to Determine GHK-Cu Production Levels

*Internal Medicine Research - Open Journal* (Volume 6(1): 1-3)

Purpose: To determine if the LifeWave X39 non-transdermal photobiomodulation active patch would show improved production of GHK-Cu over controls in a double blind randomized controlled trial.

This highly anticipated study was designed to test the impact of wearing X39® patches on the levels of GHK-Cu levels in the blood over the period of one week. The results of the trial demonstrate that X39 elevates GHK and GHK-Cu peptides by about 40% within seven days, as compared to placebo which experiences no changes.

- — Caitlin A. Connor, MAcOM, DAOM
- — Melinda H. Connor, DD, PhD, AMP, FAM
- — David Yue, PhD, Chiu-An Chang, DO
- — DO, LAc, Jens Eickhoff, PhD
- — Susan Wagner, DAOM, LAc, BCIM
- — Amy Chang, PhD

#### Changes in Tripeptides Produced By the LifeWave X39 Patch

*International Journal of Healing and Caring* (Vol 20, Issue 2, May 2020)

Purpose: To determine if the LifeWave X39 non-transdermal patch can produce changes in tripeptides GHK and GHK-Cu production.

- — Caitlin A. Connor, MAcOM, DAOM
- — Melinda H. Connor, DD, PhD, AMP, FAM
- — David Yue, PhD, Chiu-An Chang, DO
- — DO, LAc, Jens Eickhoff, PhD
- — Susan Wagner, DAOM, LAc, BCIM
- — Amy Chang, PhD



### LifeWave X39 Pilot Demonstrates Light Triggered Changes

International Journal of Healing and Caring (Vol 20, Issue 2, May 2020)

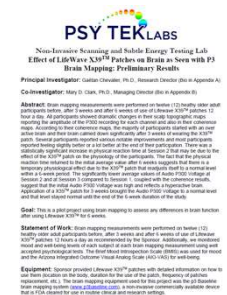
Purpose - To determine if metabolic and physiological changes were produced by participants wearing the LifeWave non-transdermal X39 phototherapy patch.

- — Melinda H. Connor, DD, PhD, AMP, FAM
- — Caitlin A. Connor, MAcOM, DAOM
- — Naran Gombosuren, PhD
- — Jens Eickhoff, PhD
- — Leonard Pugh, MAcOM



### Fast Facts on X39 Studies

Dr. Melinda Connor, et al. have performed three clinical studies for LifeWave on X39. These studies are not being posted to our website at this time as they are currently being reviewed for publication in peer-reviewed journals. Once the studies are published, we will post them here.



### Study by Gaetan Chevalier, Ph.D., Research Director for Psy-Tek Labs (January 2020)

Dr. Gaetan Chevalier completed this study of LifeWave X39® patches in December 2019. He concluded that the X39® patch is dramatically effective in improving brain function. This study includes stunning before-and-after brain-mapping visuals.



### Experimental Study of Lifewave X-39™ Patches (November, 2018)

The Centre for Biofield Sciences

- — Dr. Thornton Streeter
- — Dr. Rachana Shetty
- — Shesh Iyer
- — Harshitha
- — Mohan Kumar



### Osteoarthritis Double-Blind Placebo Controlled IceWave Pain Relief Study (June 2013)

PharmaScan

- — Dr. Pierre Volckmann

[Read more about Dr. Volckmann](#)

### Published Studies

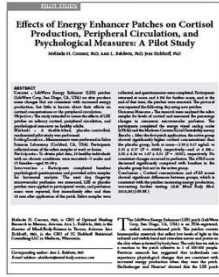


A double-blind placebo-controlled heart rate variability investigation to evaluate the quantitative effects of the organic nanoscale aeon patch on the autonomic nervous system.

TANG International Journal of Genuine Traditional Medicine (Vol 5, Issue 1, Feb 2015)

- — Homer Nazeran PhD, CPEng (Biomed.)

*Department of Electrical and Computer Engineering and Biomedical Engineering Graduate Programs University of Texas at El Paso, USA*



**Effects of energy enhancer patches on cortisol production, peripheral circulation, and psychological measures: a pilot study.**

*Advances in Mind-body Medicine · January 2015*

- — Melinda H. Connor, D.D., Ph.D., AMP, FAM. (Akamai University, Hilo, Hawaii)
- — Ann Baldwin (The University of Arizona)



**Effect of IceWave®; organic nanoscale patches on reduction of musculoskeletal pain**

*TANG International Journal of Genuine Traditional Medicine (Vol 3, Issue 1, Feb 2013)*

- — Emily Piven<sup>1</sup>,\*, Rupesh Dharia<sup>2</sup>, Karen Jones<sup>3</sup>, Chuck Davis<sup>4</sup>, Homer Nazeran<sup>5</sup>

*<sup>1</sup>Health Matters of Florida, Oakland, Florida 34760 USA; <sup>2</sup>Palm Beach Internal Medicine, Palm Beach, Florida 33410 USA; <sup>3</sup>Flagler Medical Associates, West Palm Beach, Florida 33401 USA; <sup>4</sup>CSD Biostatistics Inc., San Diego, California 92130 USA; <sup>5</sup>Electrical and Computer Engineering, University of Texas at El Paso, El Paso Texas 79968, USA*



**Mild stimulation of stomach 36 acupuncture point by organic nanoscale SP6 patch improves cellular physiologic functional status of different organs**

*TANG International Journal of Genuine Traditional Medicine (Vol 2, Issue 1, Feb 2012)*

- — Homer Nazeran PhD, CPEng (Biomed.)
- — Sherry Blake-Greenberg ND, MA, HMD
- — Emily Haltiwanger OTD, MHE, OTR



**Human Clinical Study of the Efficacy of LifeWave Energy Patch in Improving Flexibility, Strength and Endurance in Healthy Humans**

*International Journal of Healing and Caring (Vol 12, No. 1, Jan 2012)*

- — Lisa Tully, PhD



**Special Issue on LifeWave Studies (6 Studies total)**

*Holistic Health Care And Research Journal (Vol I, No. 001, Oct-Dec 2011)*



**"Infrared Thermal Imaging Quantifies the Efficacy of IceWave® Patches in Musculoskeletal Pain Relief in Horses."**

*Journal of American Holistic Veterinary Medical Association* (Vol 30, No. 1, 2011)

- — Lauren DeRock DVM
- — Dean Clark DC
- — Homer Nazeran PhD, CPEng (Biomed.)



**"Nanoscale Wearable Devices Reduce Qualitative and Quantitative Measures of Neuromuscular Pain."**

*International Journal of Medical Implants & Devices* (Vol 5, No. 2, 2011).

- — Homer Nazeran PhD, CPEng (Biomed.)
- — Emily Haltiwanger OTD, MHE, OTR



**"Nanoscale GLUTATHIONE Patches Improve Organ Function."**

*International Federation for Medical & Biological Engineering Proceedings Series* (2010).

- — Sherry Blake-Greenberg ND, MA, HMD
- — Homer Nazeran PhD, CPEng (Biomed.)



**"Nanoscale CARNOSINE Patches Improve Organ Function."**

*International Federation for Medical & Biological Engineering Proceedings Series* (2010).

- — Sherry Blake-Greenberg ND, MA, HMD
- — Homer Nazeran PhD, CPEng (Biomed.)



**"Heart Rate Variability Enhancement Through Nanotechnology: A Double Blind Randomized-Control Pilot Study."**

*Journal of Neuropathy* (Vol. 12, No. 01, 2008)

- — Thomas H. Budzynski, PhD
- — Helen K. Budzynski, PhD
- — Karl Maret, MD
- — Hsin-Yi (Jean) Tang, PhD



**"A New Way to Increase Glutathione Levels in the Body."**

*Hippocrates: Healing our World* 28.1 (2008)

- — Dr. Steven Haltiwanger, MD, CCN



**“Heart Rate Variability Signal Parameters Quantify Skin Cooling Effect of Energy Patches During Rest And Exercise in Young Health Individuals.”**

*Biomedical Engineering Recent Developments* (2007)

- — Dr. Homer Nazeran PhD, CPEng (Biomed.)



**“Responsiveness of Horses to Biofrequency Modulation after Acupuncture Palpation.”**

*Journal of American Holistic Veterinary Medical Association* (2005)

- — Dr. J. Lauren DeRock, DVM

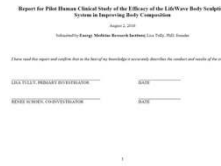


**“Effect of Novel Nanoscale Energy Patches on Spectral and Nonlinear Dynamic Features of Heart Rate Variability Signals in Healthy Individuals during Rest and Exercise.”**

*IEEE Engineering in Medicine and Biology Society Conference Proceedings* (Sept 2005)

- — Dr. Homer Nazeran, PhD
- — S. Chatlapalli
- — R. Krishnam.

**LifeWave Research**



**Report for Pilot Human Clinical Study of the Efficacy of the LifeWave Body Sculpting System in Improving Body Composition** (August 2016)

*Energy Medicine Research Institute*



**Clinical Evaluation of the Efficacy of a Skin Care Regimen to Improve Skin Conditions** (July 2015)

*BioScreen Testing Services, Inc.*



**The LifeWave ALAVIDA Non-transdermal Anti-aging Patch Improves Cellular Functional Status in Different Organs** (July 2015)

*Health Integration Therapy*

- — Sherry Blake-Greenberg MA, HMD
- — Homer Nazeran PhD, CPEng. (Biomed.)



### **Amino Acid, Neurotransmitter, GDV and Physiological Testing of the LifeWave Y-age Aeon Patches** (Nov 2013)

*Optimal Healing Research*

- — Melinda H. Conner, PhD, FAM
- — Jens Eickhoff, PhD



### **Hormonal, Amino Acid, Neurotransmitter, GDV and Physiological Testing of the LifeWave Silent Nights Patches** (Nov 2013)

*Optimal Healing Research*

- — Melinda H. Conner, PhD, FAM
- — Jens Eickhoff, PhD



### **AcuLife Patches Produce Pain Relief in Horses** (Aug 2013)

- — Lauren DeRock DVM
- — Dean Clark DC
- — Chuck Davis PhD
- — Homer Nazeran PhD, CPEng (Biomed.)



### **Effect of Silica on Membrane Transport of Phospho-Choline** (July 2013)

*Quantum Biology Research Lab*

- — Dr. Glen Rein, CEO



### **Open-label Pain Study Comparing the Effects of the IceWave® Pain Patches to the Regular Treatment of Various Pain Medications** (May 2013)

*Integrated Care Communities and Morena valley Senior Care Center*

- — Homer Nazeran, PhD, CPEng (Biomed.)
- — Carl Rowe, PharmD
- — Dean Clark, DC



### **A Placebo-Controlled Randomized Study on the Effects of IceWave® Patches on the Reduction of Pain** (Dec 2012)

*Integrative Medicine & Acupuncture, PC*

- — Dr. Helen Budzynski
- — Dr. Hsin-Yi (Jean) Tang
- — Karen Kan, MD
- — Quila Rider, RN, PhD



**Single-Site, Open-label Study Testing Horses for Traces of Performance Enhancing Drugs (PEDs) post AcuLife Application** (June 2012)

- — Kirk Shumpert, DVM



**Effects of LifeWave Y-AGE® Anti-Aging Patches on Varied Skin Types** (Jan 2012)

*Balance Therapy Clinic*

- — Dr. Bella Zaicev



**Treatment of Insomnia with Energetic Acupuncture Point Activation. A Double-Blind Placebo Randomized Trial.** (Apr 2012)

*Shealy Wellness Center*

- — Dr. C. Norman Shealy, M.D., PhD



**“Testing lifeWave Anti-Aging Carnosine Patches for Restoring Mental Decline”** (Jan 2012)

- — Hsin-Yi Tang, PhD, ARNP
- — Helen Budzynski, PhD
- — Thomas Budzynski, PhD



**Characterizing the Effect of the Energy Emitted by LifeWave Patches on Human DNA** (Mar 2012)

*Quantum Biology Research*

- — Glen Rein, PhD



**Report for Pilot Human Clinical Study of the Efficacy of the LifeWave Carnosine Patch in Improving Flexibility, Strength, and Endurance in Healthy Humans** (Aug 2011)

*Energy Medicine Research Institute*

- — Lisa Tully, PhD, Founder



**Report for Pilot Clinical Study of LifeWave Y-age Carnosine Patch in Lowering Blood Lactate Levels** (Aug 2011)

*Energy Medicine Research Institute*

- — Lisa Tully, PhD, Founder



**The Effects of LifeWave Silent Nights® Patches on Sleep** (Jan 2011)

*Shealy Wellness Center*

- — Dr. C. Norman Shealy, M.D., PhD
- — Robert Mueller



**Investigative Study of Biochemical Effects of LifeWave Patches using Bio-Explorer Technology** (May 2011)

- — Dr. Danilo Toneguzzi; Psychiatrist, Psychotherapist, Scientific Director of Istituto Gestalt Pordenone.
- — Dr. Susanna Carlovich; Clinical Pedagogist, Counsellor, Floritherapist, Head teaching of Istituto Gestalt Pordenone.
- — Dr. Gaia Gini; Sociologist with specialization in Human Resources and Social Research.



**Report for Human Clinical Pilot Study of the Efficacy of LifeWave Energy Patch in Improving Flexibility, Strength and Endurance** (Dec 2010)

*Energy Medicine Research Institute*

- — Lisa Tully, PhD, Founder



**Gas Discharge Visualization Testing of Lifewave Glutathione Patches** (Mar 2011)

*National Foundation for Energy Healing.*

- — Melinda H. Connor, D.D., PhD, AMP
- — Karl Maret, M.D., M.Eng.



**Clinical Evaluation of an Anti-Acne Test System of Glutathione Patches and LifeWave Homeopathic Spray** (Apr 2010)

*Essex Testing Clinic, Inc.*

- — Toni Miller, PhD, DABT, BCFE





**A Double-Blind Placebo Controlled Clinical Efficacy Evaluation of a Patch to Soothe Knee Pain** (Mar 2010)

*Essex Testing Clinic, Inc.*

- — Toni Miller, PhD, DABT, BCFE



**X-15 [Y-Age Aeon] Patch Improves Cellular Physiologic Functional Status of Liver, Kidneys, Pancreas, Intestines, Hypothalamus, Adrenal and Thyroid Glands** (2010)

- — Sherry Blake-Greenberg MA, HMD
- — Homer Nazeran PhD, CPEng (Biomed.)



**Report for Human Clinical Pilot Study LifeWave Glutathione Patch. Energy Medicine Research Institute** (January 2010)

- — Energy Medicine Research Institute, Lisa Tully, PhD, Founder
- — AquaViva, Andrew Lange, ND, Founder
- — Quicksilver Scientific, Chris Shade, PhD, Founder



**LifeWave Scientific Study by Means of an NM4 Gauge** (2010)

- — Prof. Bruno Brandimarte | Biomeasurement Lecturer in the Masters of Posturology program, La Sapienza University, Rome.
- — Dr. Alessandro Micarelli | Surgeon – Researcher in project on the study of Neuronitis using TC-PET methodology
- — Prof. Marco Alessandrini | Auxiliary Technology Lecturer in Language Pathology Tor Vergata University
- — Luca La Bella | University Expert and Lecturer in “Physical Means in Physiotherapy”
- — Mr. Giovanni Pietropaoli | Electronic Engineer – Biomedical Field – Rome 3 University



**Implications of Heart Rate Rhythm Analysis for the Study of LifeWave [Y-Age Aeon] Patches** (2010)

- — Thomas H. Budzynski, PhD
- — Helen K. Budzynski, PhD, RN
- — Hsin-Yi (Jean) Tang, PhD, ARNP



**Acuscope and Skin Conductance along Meridians: Before and After LifeWave Energy Patches** (Dec 2009)

- — Thomas Budzynski, PhD
- — Helen Budzynski, PhD
- — Hsin-Yi Tang, PhD



### Effects of LifeWave Patches on Acupuncture Meridians & Biophoton Emission in Human Subjects (pilot study) (Dec 2009)

*Dove Health Alliance and California Institute for Human Science*

- — Toshiaki Harada, PhD
- — Koji Tsuchiya, PhD
- — Gaetan Chevalier, PhD
- — Karl Maret M.D. (Dove Health Alliance)



### LifeWave Research Study World Peace Centre, MIT College, Pune (Dec 2009)

*The Centre for Biofield Sciences | Integrated Health*



### SP6 Patch Improves Organ Function (May 2009)

- — Sherry Blake-Greenberg ND, MA, HMD
- — Homer Nazeran PhD, CPEng (Biomed.)



### LifeWave Patches Research (IceWave and Glutathione) (2009)

*The Centre for Biofield Sciences | Integrated Health*



### The Effect Of A Non-Transdermal Surface Patch On Mitochondrial Function

- — Frank Shallenberger, MD
- — Homer Nazeran, PhD



### Summary of IceWave Clinical Research Study – Infrared Imaging

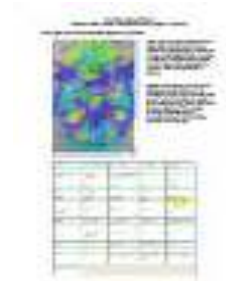
- — Dr. Dean Clark, DC
- — Dr. Steven Haltiwanger, MD CCN
- — Salvatore Palomares



**LifeWave Energy Patches Infrared Study** (Dec 2005)

*Comprehensive Pain Management of Portland, LLC*

- — Dr. Dean Clark, D.C. CCSP, CACBII



**LifeWave Energy Patches Measured with Auramed Biopulsar Reflexograph** (Dec 2005)



**Investigative Study of Long Term Effects of LifeWave Patches Using Electro Meridian Analysis System (EMAS)**

- — Dr. E. Reenah McGill, D.O.M., M.A., L. Ac.



**BioCoherence and Lifewave Energy Enhancement Patches Utilizing Bionetic-Feedback Assessment**

- — Lee G. Woolley, CBT, BPA
- — Dr. Steven Haltiwanger, MD CCN



**Report of Results: MVA6158, Patch Permeability**

- — Dr. Richard S. Brown
- — MVA Scientific Consultants



**LifeWave Strength Test – *Morehouse College\****

- — Joseph A. Goodson MS, ATC
- — David Schmidt



**A double blind placebo controlled study of the LifeWave technology as it relates to the improvement of strength endurance in high performance college athletics – *Troy State University\****

- — David Schmidt
- — Richard Shaughnessy

\*Research studies were conducted by individuals and were not authorized by the University and do not represent an association or relationship between LifeWave and University.

**Summaries of Completed Studies**



**Energy Enhancer** completed research summaries.



**Y-Age System** completed research summaries.



**IceWave** completed research summaries.



**Y-Age Aeon** completed research summaries.



**Silent Nights** completed research summaries.



**Y-Age Carnosine** completed research summaries.



**SP6 Patch** completed research summaries.



**Y-Age Glutathione** completed research summaries.



**AcuLife** completed research summaries.



**LifeWave Skin Care Patch Instructions**

*By Steve Haltiwanger, M.D., C.C.N.*

**Scientific Papers**

**Letters**



**Mechanisms of Low Level Light Therapy**

*By Michael R. Hamblin*

**World Anti-Doping Agency**



**LifeWave Patches are Medical Devices that are Disposable Thermal Patches**

*By Steve Haltiwanger, M.D., C.C.N.*



**United States Anti-Doping Agency**



**Different Types of Nanotechnology Devices**

*By Steve Haltiwanger, M.D., C.C.N.*



**Dr. Dean Clark, DC**



## Richard Shaughnessy Letter



## Pain Reduction

## Acupressure Abstracts



## Sleep

## Anti-Aging



## Weight Loss

## Antioxidants



## Acupressure Articles & Studies



## TEFILLIN: An Ancient Acupuncture Point Prescription for Mental Clarity

*By Steven Schram (2002), Journal of Chinese Medicine, no.70, October*

## Energy Improvement



### **Acupressure Patients Find Relief for Low Back Pain**

Study finds acupressure more effective than physical therapy

*By Editorial Staff (2006), Acupuncture Today, Vol. 07, Issue 06, June*



### **Auricular Acupressure for Weight Reduction in Obese Asian Young Adults: A Randomized Controlled Trial**

*By Ching Hsiu Hsieh, BSN (2007), Medical Acupuncture, Vol. 19, no. 4*



### **Treatment of low back pain by acupressure and physical therapy: randomized controlled trial**

*By Lisa Li-Chen Hsieh, Chung-Hung Kuo, Liang Huei Lee, Amy Ming-Fang Yen, Kuo-Liong Chien and Tony Hsiu-Hsi Chen*

*BMJ 2006;332:696-700; originally published online 17 Feb 2006*



### **The Treatment of Obesity By Acupuncture**

*By Dr. Mehmet Tugrul Cabýoglu, Neyhan Ergene, Uner Tan (2006), Intern. J. Neuroscience, 116:165-175*



### **Acupressure treatment of morning sickness in pregnancy: A randomized, double-blind, placebo-controlled study**

*By Norheim, Arne Johan, Pedersen, Erik Jesman, Fønnebø, Vinjar and Berge, Lillian (2001), Scandinavian Journal of Primary Health Care*



### **Acupuncture in Human Performance**

*By Pelham, T.W., L.E. Holt, and R. Stalker (2001), Journal of Strength and Conditioning Research*



## **Prehospital Analgesia with Acupressure in Victims of Minor Trauma: A Prospective, Randomized, Double-Blinded Trial**

*By Alexander Kober, MD, Thomas Scheck, MD, Manfred Greher, MD, Frank Lieba, BS, Roman Fleischhackl, BS, Sabine Fleischhackl, BS, Frederick Randunsky, BS, and Klaus Hoerauf, MD*



## **Anatomic characterization of acupuncture system and ultra-weak photon emission**

*By Roeland Van Wijk, Kwang-Sup Soh, Eduard P. A. Van Wijk*

## **The Human Energy Field - Scientific proof**



## **Imaging of Ultraweak Spontaneous Photon Emission from Human Body Displaying Diurnal Rhythm**

*By Masaki Kobayashi, Daisuke Kikuchi, Hitoshi Okamura*

## **Photobiomodulation (PBM)**



## **Photobiomodulation or low-level laser therapy**

*Published in final edited form as: J Biophotonics. 2016 December ; 9(11-12): 1122–1124. doi:10.1002/jbio.201670113.*