

# PHOTONIC STIMULATION & NEURO TECHNOLOGY



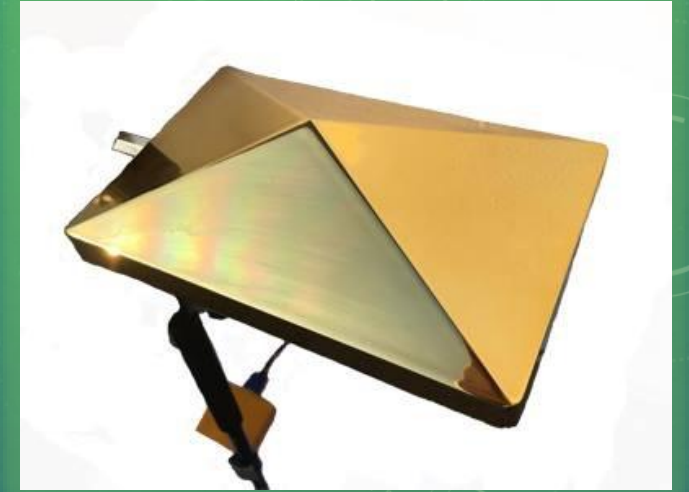
THE NEURO LIGHT  
- TOTAL BRAIN WELLNESS -

## BASIC PROPOSITION



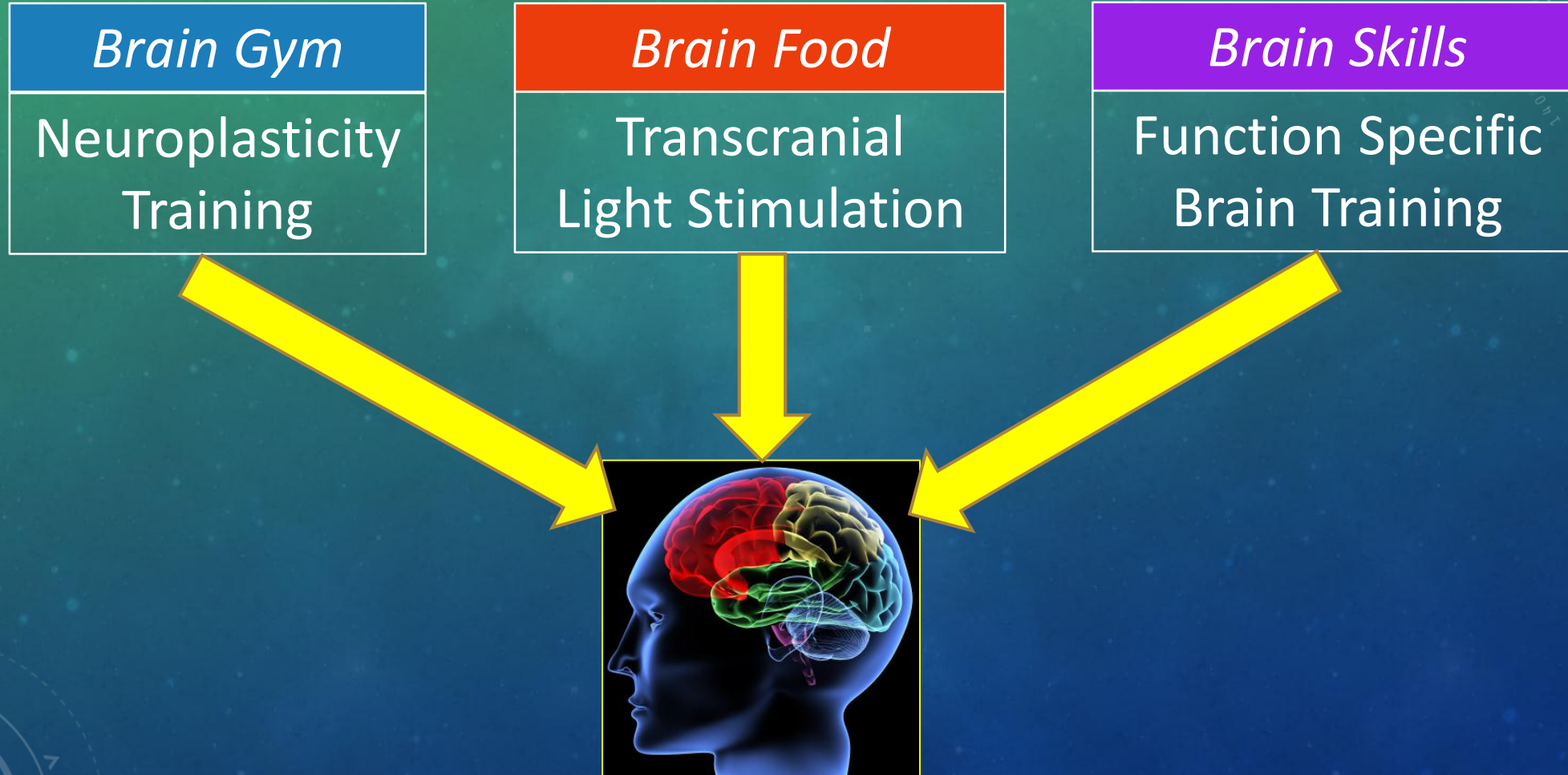
- Contrary to long held medical theory, the **Human Brain** is capable of **dynamic change** throughout our **entire lifespan**.
- This **dramatic fact** opens the doors for **new avenues** of **increasing and sustaining Brain Wellness**.

## THE NEURO LIGHT: *TOTAL BRAIN WELLNESS*



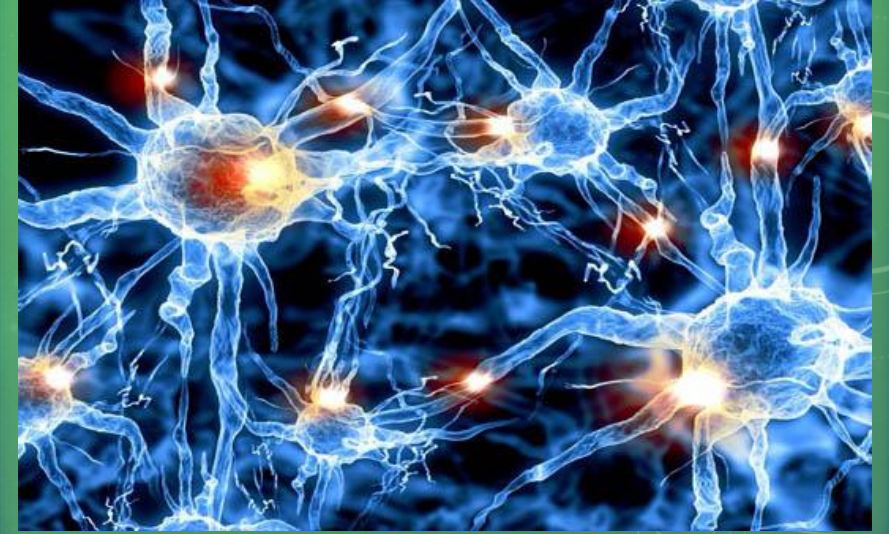
- The **Neuro Light** is a **multi-component device** capable of positive effects in **Brain Wellness related functions**.
- The device is a combination of **unique hardware and software** designs.

# THE NEURO LIGHT



# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING



- The **theory of Neuroplasticity** can be summed up as:
  - “If you **FIRE** it, you **WIRE** it”.

# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING

- The **brain responds** to **incoming stimulation** as a source of **information and guidance** in the **formation** of **novel patterns** of **adaptive behavior**.
- **Photonic (LIGHT) stimulation** is a **powerful and efficient** type of brain stimulation.



# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING



- The Neuro Light recognizes that **every individual** has their own **potential** for **Neuroplastic change**.
- The **potential** relates to **age**, **vitality** and **possible pathology**.
- The term to describe this is Neuroplastic Capacity.

# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING



- The Neuro Light has **three** (3) levels of **Neuroplasticity Training**:
  - **Foundation**
  - **Intermediate**
  - **Advanced**

An individual **progresses** through the **levels of training in stages.**



# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING

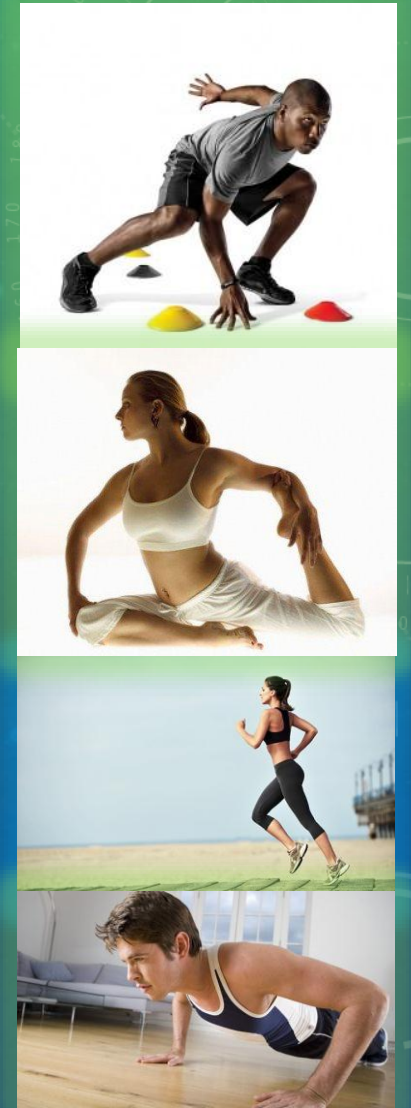


- **Each level** has **elements** designed to increase **Neuroplastic Capacity** in an **integrated dynamic**.
- The **analogy of physical exercise** is helpful.

# #1 - BRAIN GYM

## NEUROPLASTICITY TRAINING

- Physical exercise analogy as related to the **Neuroplasticity Training** in the **Neuro Light** :
- *Coordination* > **Signal Frequency**
- *Flexibility* > **Signal Pattern**
- *Endurance* > **Signal Change**
- *Strength* > **Signal Intensity**



# #1 - BRAIN GYM

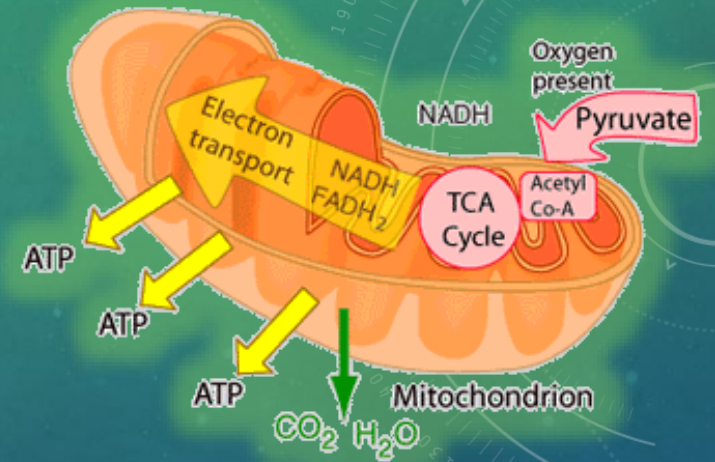
## NEUROPLASTICITY TRAINING

- The Neuro Light is capable of **generating** select **types of Photonic signals** related to *Frequency, Pattern, Change, Intensity*.
- These **Neuroplastic “exercises”** result in **increased capacity** for higher levels of **FIRE it – WIRE it** responses in the brain.

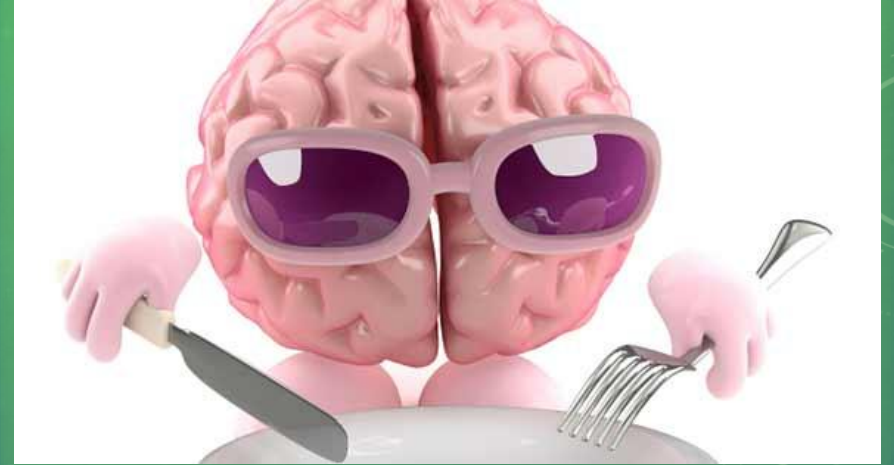


## NEUROPLASTICITY: LIMITATIONS

- There is a critical underlying assumption in the **FIRE it - WIRE it** concept:
  - The **assumption** is that there is **sufficient energy and resource** to manage the demands of **new neural patterns** and **neural growth** (neurogenesis).



## NEUROPLASTICITY: LIMITATIONS



- In fact, one of **THE main problems** is that the **Brain is HUNGRY for Energy!**
- And.....**LIGHT** is the Brain's favorite **FOOD**.

## NEUROPLASTICITY: LIMITATIONS

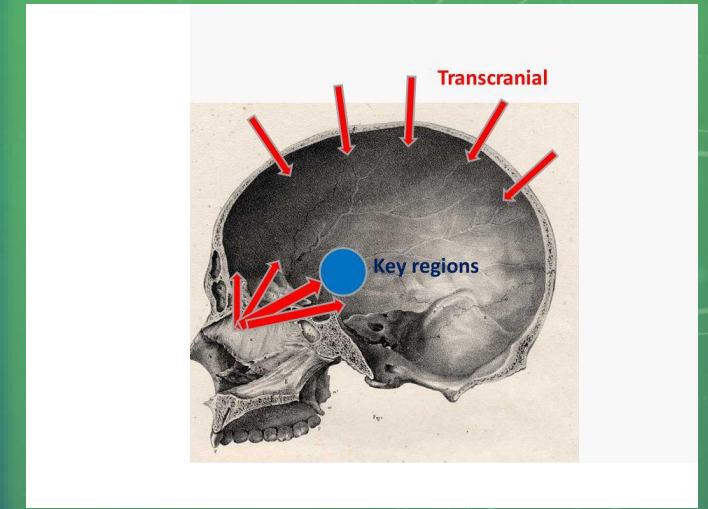


- The **Neuro Light** has a solution to this **very real limitation** in the activation of the Neuroplastic process.
- The **solution** is to couple Neuroplasticity Training with Transcranial Light Stimulation.

## #2 - BRAIN FOOD

### TRANSCRANIAL LIGHT STIMULATION

- One of the **newest** and most **promising discoveries** in **cranial neurology** is the fact that it is possible to **feed Light Energy into the brain from outside the skull.**
- Remarkably **effective, non-invasive**, very **safe** and **easy** to do.



## #2 - BRAIN FOOD

### TRANSCRANIAL LIGHT STIMULATION

- **Transcranial Light Stimulation** is performed by placing **super-luminous LEDs** on the **scalp of the head** and shining **wavelength specific light** at a **specified power** and **time** into the brain.
- **Sufficient dosage** actually **reaches the brain tissues through the skull** to create the **beneficial effects**.





## #2 - BRAIN FOOD

### TRANSCRANIAL LIGHT STIMULATION



- Numerous **validated medical/scientific studies of Transcranial Light Stimulation** have been conducted **internationally** at prestigious **universities** and **hospital research centers** such as *Harvard Medical School, Cedars-Sinai Medical Center, University of Texas, etc.*
- The **results** are **consistently positive** and **universally supported.**

## #2 - BRAIN FOOD

### TRANSCRANIAL LIGHT STIMULATION - MECHANISMS

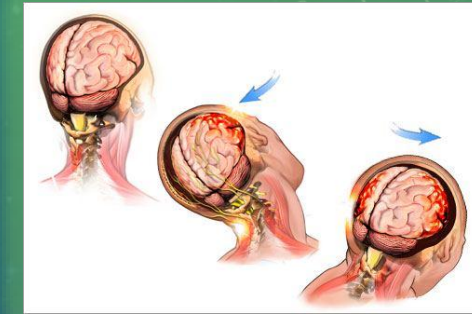
- **Six (6) beneficial mechanisms** have been identified:
  - 1) increased **mitochondrial ATP** production in the neurons;
  - 2) increased **anti-inflammatory** cascades related to oxidative stress factors;
  - 3) increased **RBC deformability** leading to improved blood flow;
  - 4) increased **cerebral blood flow** volume;
  - 5) **photo-stimulation of the blood** leading to system-wide benefits such as decreased BP and serum cholesterol;
  - 6) **stimulation of cranial acupoints** frequently used in the treatment of cranial dysfunction



## #2 - BRAIN FOOD

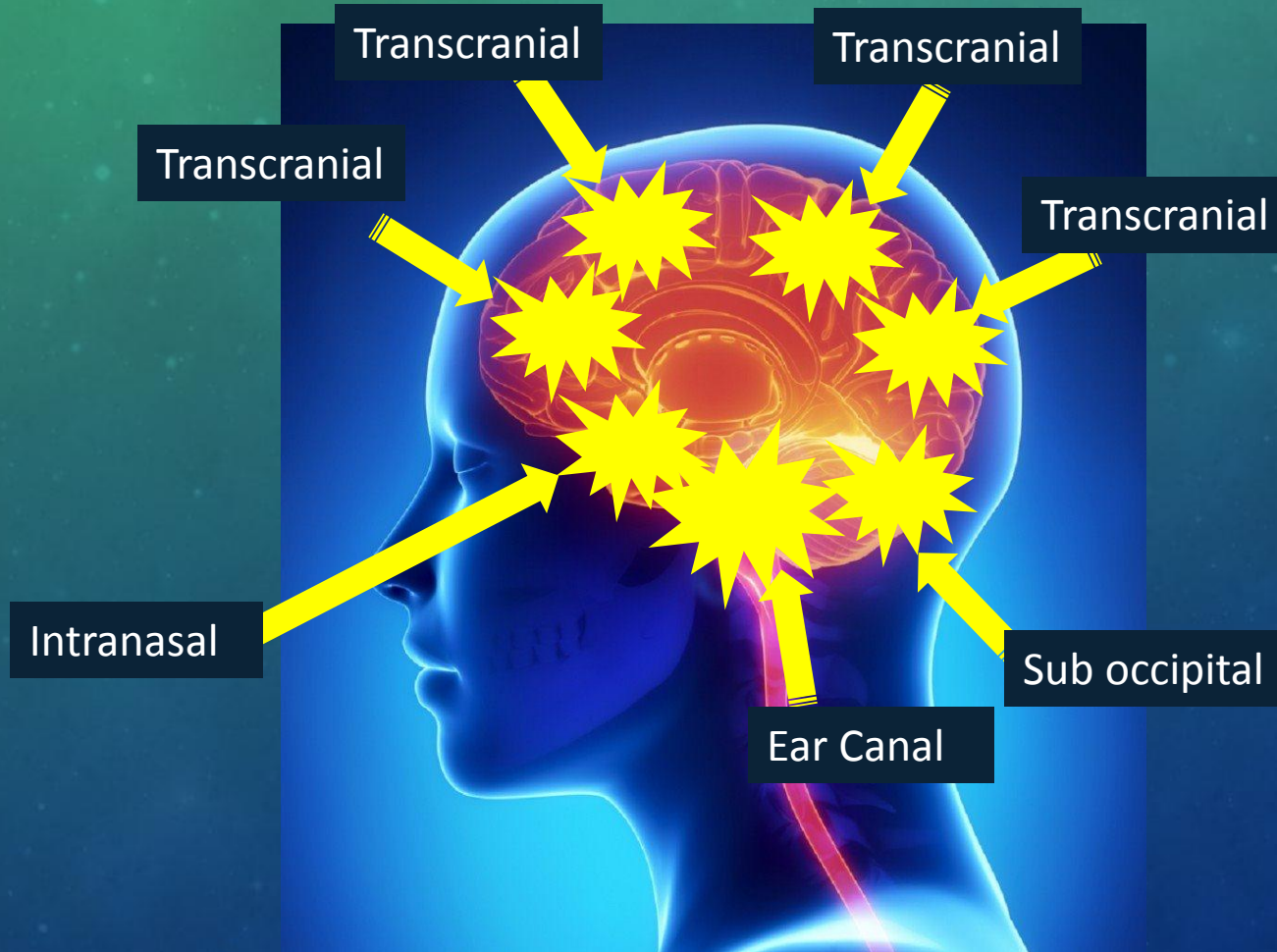
### TRANSCRANIAL LIGHT STIMULATION - APPLICATIONS

- The **applications of Transcranial Light Stimulation** are truly **impressive** and range throughout numerous **Brain Wellness** domains. To name just a few:
  - **Mood disorders** such as **anxiety** and **depression** have a high rate of amelioration.
  - Effects of **recent** and **long standing head traumas** have very good responses.
  - **Degenerative neural conditions** associated with **aging** are often significantly improved.



# #2 - BRAIN FOOD

## TRANSCRANIAL LIGHT STIMULATION - DELIVERY



## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING

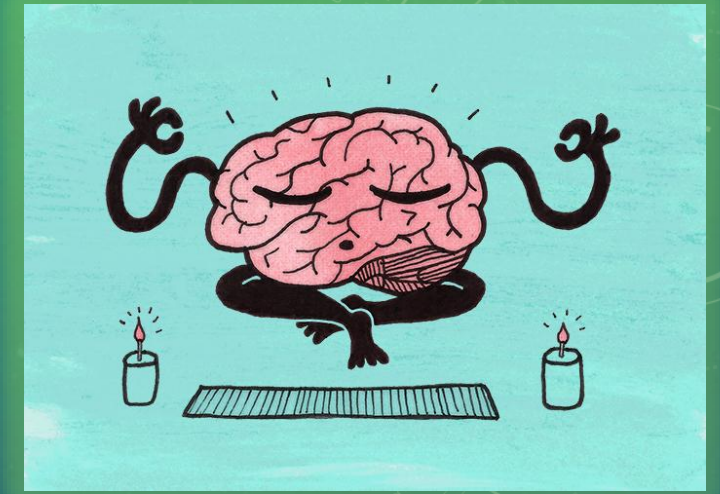


- It has been **well known** for over 50 years that the **Brain** is **sensitive** to a **Frequency Following Response**.
- The **common term** for this process is **Brain Entrainment**.

## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING

- **HOWEVER**...it is **critically important** to understand that the **Function Specific Brain Training** processes in the **NEURO LIGHT** are **MUCH MORE than Brain Entrainment.**



## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING



The **BRAIN SKILLS** section of the **NEURO LIGHT** is called **Function Specific Brain TRAINING**.

This **TRAININGS** are composed of **many elements** and **Brain Entrainment is just one of them.**

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



Let's **explore** the **incredible multifaceted composition** design of the **NEURO LIGHT Brain Training** sessions.



## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING



#### Point #1:

- Every **Brain Training session** is Function Specific.
- This means the session **targets** a **particular Brain/Mind function**.
- **NEURO LIGHT** has **80 Brain Training sessions** – each with its own unique and important Specific Function for the Brain/Mind.

## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING



#### Point #2:

- **Function Specific Brain Trainings** combine **two types** of signal sources – **LIGHT** and **SOUND**.
- The **LIGHT** and **SOUND** signals are **harmoniously integrated** for a compound synergistic effect **far beyond simple simultaneous pulsing.**

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #3-1:

- Let's have a closer look at the **SOUND** aspect of a **Brain Skills Training session**.
- **Remember** that every session is **Function Specific** which means that it will **focus on** a defined aspect of **Brain Wellness**.

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #3-2:

- The Sound aspect of a **Brain Skills Training session** has four (4) integrated elements:
  - **Multi-layer Synchronization** (frequency & pitch harmonization including in ambience)
  - **Linear Entrainment** (isochronic, binaural, monaural in pitch adjusted pulses)
  - **Mood Framing** (psycho-emotional set with Function Specific musical/nature ambient themes)
  - **Core Modulation** (unifying frequency modulation in all Mood Framing layers)

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #4-1:

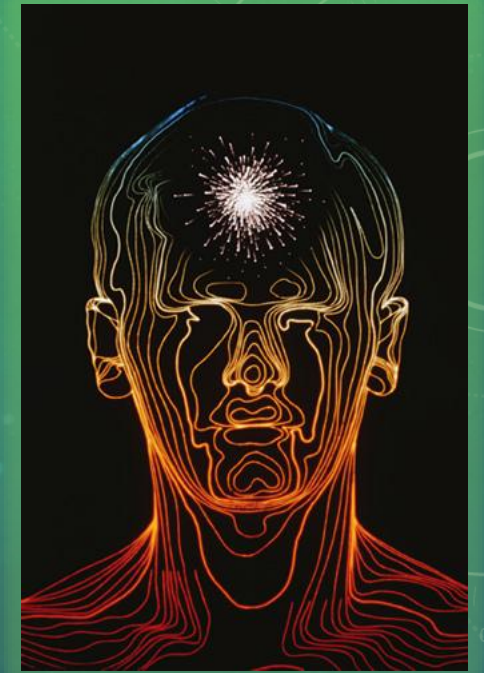
- Next, let's have a closer look at the LIGHT aspect of a **Brain Skills Training session**.
- The LIGHT and the SOUND are **harmoniously integrated** to act upon the same **Specific Brain Wellness Function**.

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING

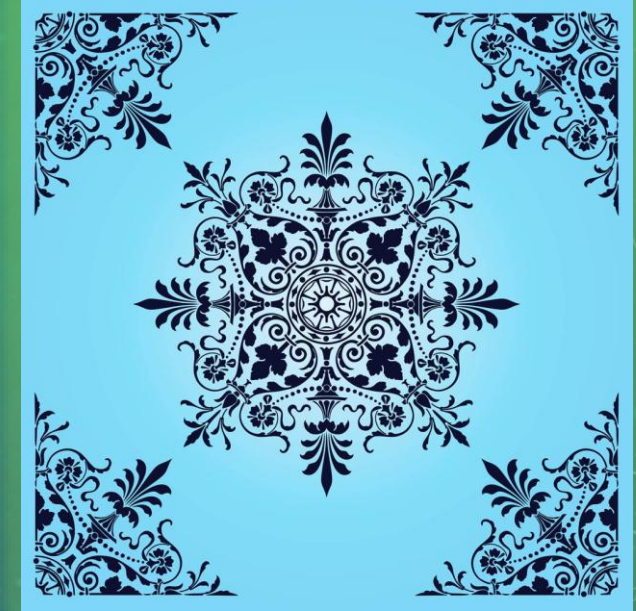
### Point #4-2:

- The Light aspect of a **Brain Skills Training session** also has four (4) integrated elements:
  - **Gateway Dynamics** (signal sets that prime the brain for new information)
  - **Pattern Recall** (the use of Form Constants to enforce information recognition)
  - **Linear Entrainment** (sets of select light pulsed frequencies)
  - **Learning Reinforcements** (regular & irregular stimulations that fortify the main set)



# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #4-3:

- The **principle** of **Pattern Recall** is worth having a **closer look**.

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



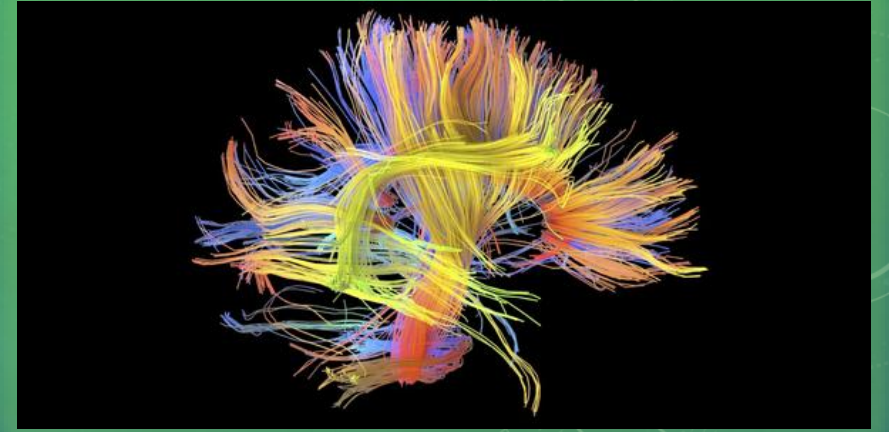
### Point #4-4:

- It is well known that **specific brain waves** are associated with **predictable states of Mind** and related **functions**.
- It is possible to **induce** important states such as **profound relaxation, alertness, memory** and **many others**.
- This is, of course, the **foundation** of **simple Linear Entrainment**.



# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING

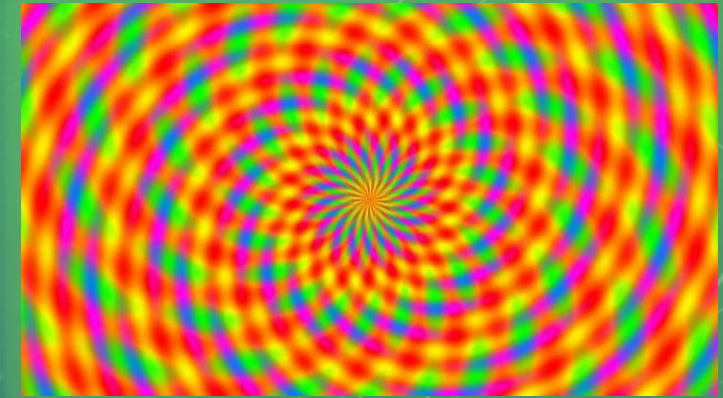


### Point #4-5:

- The **Pattern Recall** aspect of the **LIGHT** in a **Brain Training** results in the stimulation becoming **S.U.P.E.R. !!!!!**

## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING



#### Point #4-6:

- What makes the **Brain Training** in the **Neuro Light S.U.P.E.R.**?

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING

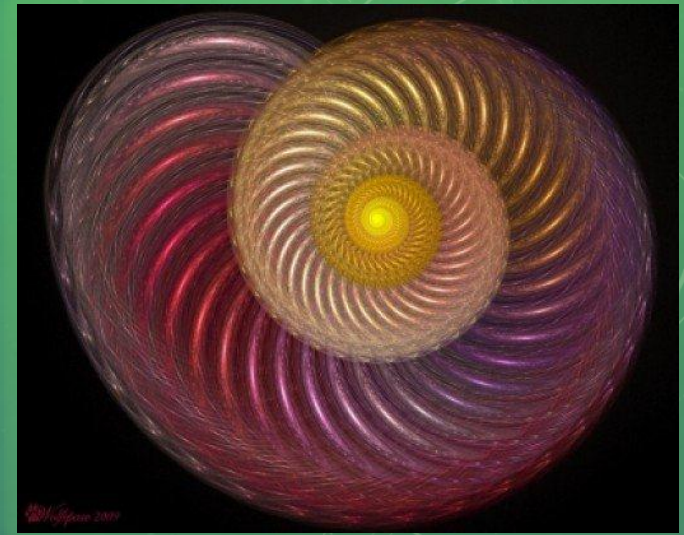


### Point #4-7:

- Obviously S.U.P.E.R. is an acronym.
  - **S = Significant**
  - **U = Universal**
  - **P = Pattern**
  - **E = Expression**
  - **R = Recognition**

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #4-8:

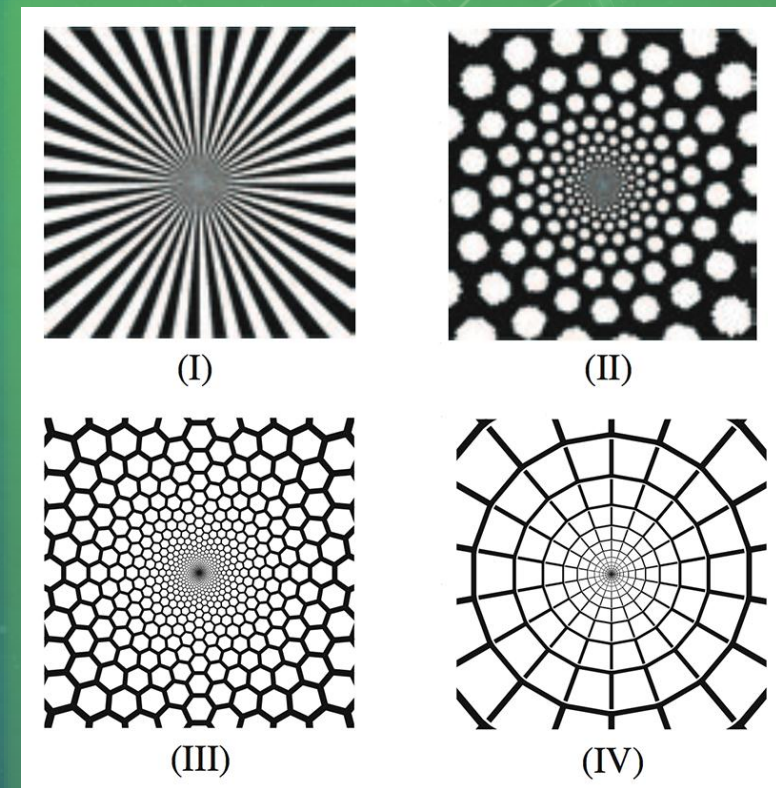
- The **Brain Training** processes in **The Neuro Light** use entirely unique **integrated signal design principles**
- **Pattern Recognition Response** is one of our **new proposed Brain Behavior dynamics** that is incorporated into every Brain Wellness Training session.

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING

### Point #4-9:

- **Neurological research** from the present and dating back almost 100 years has **consistently identified four (4) basic Patterns** at the foundation of the visual experience.
  - 1) Tunnel or funnel
  - 2) Spiral
  - 3) Honeycomb or chessboard
  - 4) Spider web



# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING

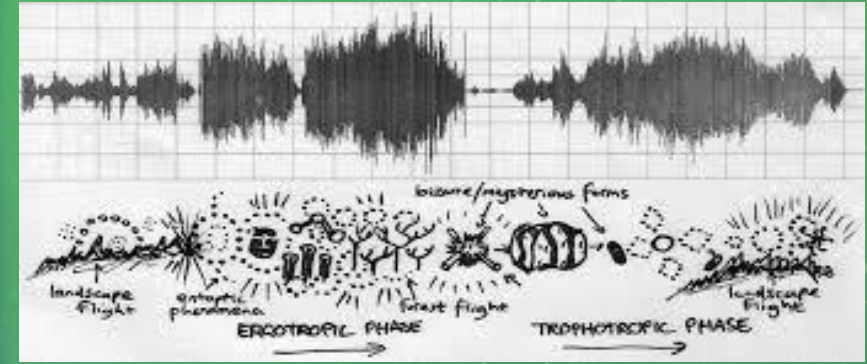


### Point #4-10:

- These **core visual Patterns** appear to be **rooted in Consciousness** itself.
- **Ancient spiritual traditions** yield evidence of their **primary function** in the experiences of **Mind**.

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #4-11:

- The **Neuro Light** has taken **Brain Training** to the “**21<sup>st</sup> century Next-Generation**” stage with the integration of:

### LIGHT

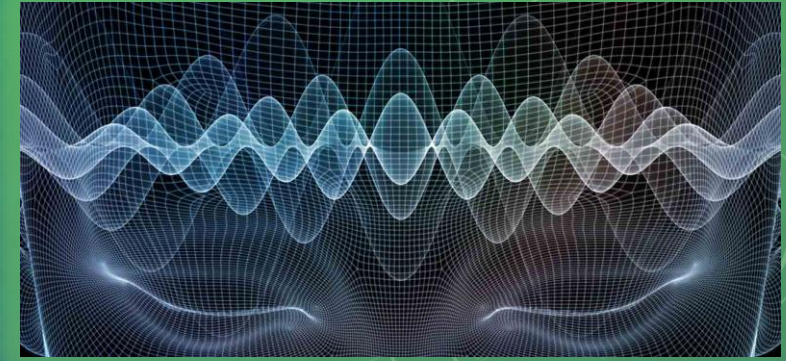
- Gateway Dynamics
- Pattern Recall
- Linear Entrainment
- Learning Reinforcement

### SOUND

- Multi-layer Synchronization
- Linear Entrainment
- Mood Framing
- Core Modulation

# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



### Point #4-12:

- **The Neuro Light** generates **80 Function Specific Brain Training** programs.
- The signals are both **Light and Sound** in nature.

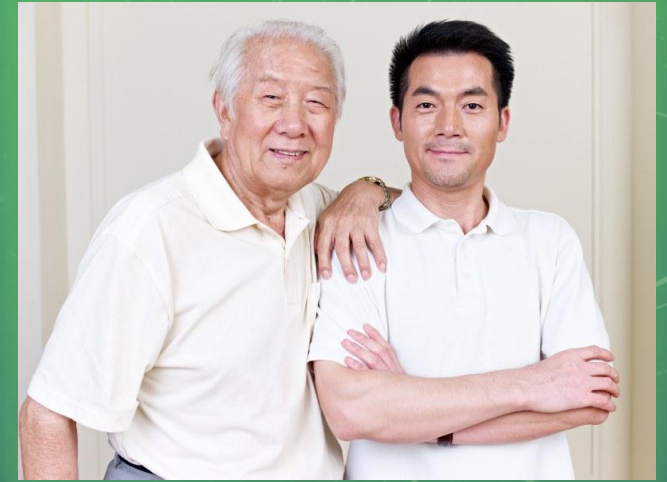


## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING

#### Point #4-13:

- For **easy** and **accurate** selection, the **80 Function Specific Brain Training** programs are subdivided to **correspond to the same levels** found in the **Brain Gym** (Neuroplasticity Trainings)
  - **Foundation**
  - **Intermediate**
  - **Advanced**



## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING

#### Point #4-14:

- For **further ease of selection**, the **Brain Training** sessions are also in general **ZONES**:
  - **Peace**
  - **Cognition**
  - **Mood**
  - **Dependency**
  - **Exploration**



# #3 - BRAIN SKILLS

## FUNCTION SPECIFIC BRAIN TRAINING



- Point #4-15:
- **Conventional Brain *Entrainment* techniques do not always match up to expectations.**
- The **reasons** are that the **brain may NOT be primed and ready** for responding and assimilating the stimulations involved and **the signaling is too simplistic** and is **boring**.

## #3 - BRAIN SKILLS

### FUNCTION SPECIFIC BRAIN TRAINING



- The **Function Specific Brain Trainings** in the **Neuro Light** have a **high level of effectiveness** because:
  - Far **beyond simple Linear Entrainment**;
  - Introduced once the person has an **increased Neuroplastic Capacity**;
  - The **brain is fully energized** by the **Transcranial Light Stimulation** process.

# THE NEURO LIGHT – FULL INTEGRATION – TOTAL BRAIN WELLNESS

