

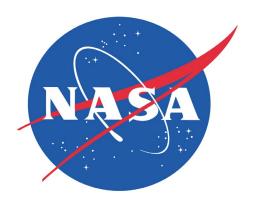






# The application of specific wavelengths of light to tissue to obtain therapeutic benefits

- Category: Low Level Light Therapy
- Includes LED & Cold LASER (under 1W power)
- Treats Acne, Wrinkles & Pain & more
- Great for pets too







#### The Future of Light Therapy

"The day may not be far off when most homes will have a light source (most likely a LED device) to be used for aches, pains, cuts, bruises, joints, and which can also be applied to the hair and even transcranially to the brain".

Note: this is the closing comment from a collaborative study conducted by researchers at Boston's Mass General Hospital, the Harvard School of Medicine and the Harvard-MIT Division of Health & Sciences

(Annals of Biomedical Engineering, Feb 2012. The Nuts & Bolts of Low Level Laser (Light) Therapy)

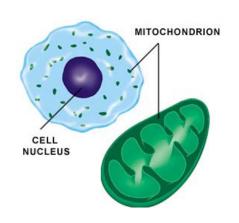


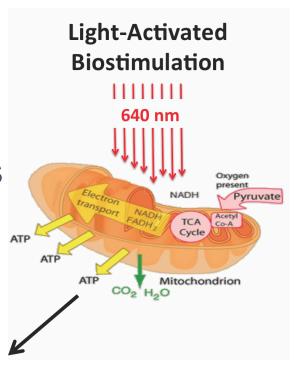


#### **How Light Therapy Works**

# Think of it as a battery charger for compromised cells . . .

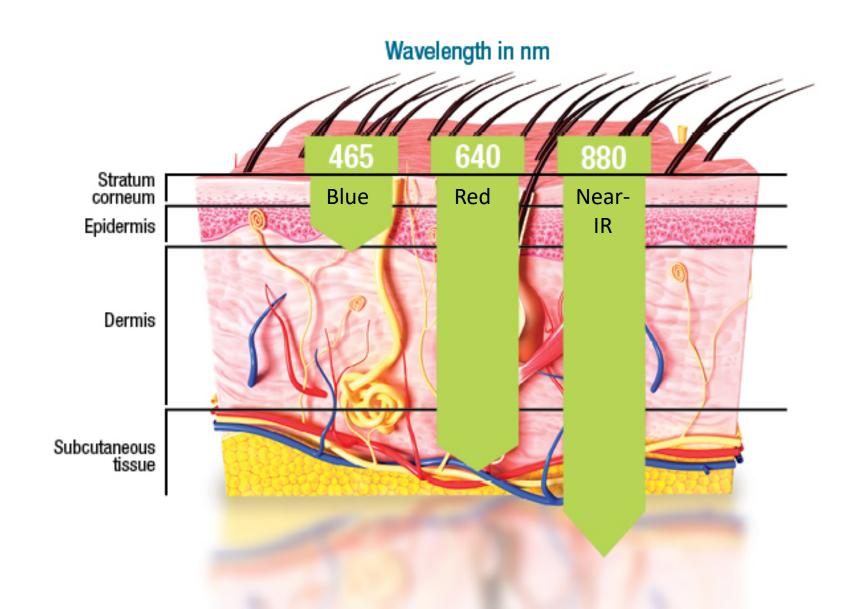
- Light source emits photons
- Photons are absorbed in the mitochondria and cell membranes
- Causing an elevation of ATP synthesis
- Increased ATP causes a cascade of metabolic events resulting in biochemical & cellular changes...







### **Depth of Penetration**





## Cells Affected by LED Therapy

- •<u>Fibroblast Cells</u>: (red, a little IR). Produces collagen and elastin fibers in connective tissue.
- •<u>Keratinocytes</u>: (both red and IR equally). Provides structural strength to the skin, hair and nails. Responsible for skin clarity, tone and texture.
- Mast Cells: (red, near IR). Essential for inflammatory reactions.
- •<u>Neutrophil Cells</u>: (leukocytes): (little red, mostly IR). Are the first line of defense in the inflammatory process. Adequate numbers are important to protect the body from infection.
- Macrophage Cells: (leukocytes): (red and IR). Play a vital role in activating specific immune responses.
- •P. acnes bacteria: (blue) causes bacteria to destroy itself.



#### Acne

Blue Light Dominant (465 nm)



Singlet oxygen is produced



P. acnes self-destruction
A phototoxic reaction
caused by singlet oxygen
(a bacteriacide)



# Wrinkles **Red Light Dominant** (640 nm) Absorbed by fibroblasts **Up-regulation of ATP** process Collagenesis Elastin production



#### **Pain**

Near-Infrared Dominant (880 nm)



**Creates Angiogenesis** 



**Decrease Inflammation** 



**Pain Reduction** 



#### **Wound Healing**

Red + IR wavelengths

(640 + 880nm)



Absorbed by epithelial cells



Up-regulation of ATP process – cell migration - angiogenesis





Wound closure



#### Celluma LED Light Panels

#### Perfect Combination of Sophistication & Simplicity

Large Flexible Panel

**Control Pad** 



Power Cord



#### The Celluma Series



**Celluma ELITE** 



**Celluma SPORT** 



**Celluma FACE** 



**Celluma PRO** 



**Celluma LITE** 



**Celluma Clear** 



**Celluma SKIN** 



**Celluma HOME** 



**Celluma POD** 



#### **The Celluma Series**



Cellumo



cellumo



celluma



Cellumo



### **Celluma Versatility**













Before Celluma



#### After Celluma

2 times per week 8 weeks later No other modalities used







#### Before Celluma

#### After Celluma

2 times per week 8 weeks later No other modalities used



#### **Before & After**



Before Celluma



#### After Celluma

2 times per week 5 weeks later No other modalities used









2 times per week for 8 weeks later
No other modalities used (images courtesy Laura Kitzman)



#### **Before & After**



"Loving my Celluma and have been experimenting with different protocols. Protocol for this young acne client was 30 minute blue LED 1 x weekly with simple cleanse and extractions for 6 tx. Then 1 x month for 2 tx (NO enzyme or chemical peels) plus home care of salicylic wash, toner, 5% BPO gel, oil-free SPF a.m. and periodic clay mask. Client also cut sugar and dairy intake. We started Feb. 22nd but, due to my husband's illness, had only 1 appointment mid-May until our appointment last week (July 31st approx.) at which time the "after" photo was taken. These are excellent results given we did no full facials."

Images courtesy of Pamela Cantor's Correct Skin Therapy



#### **Before & After**



Before Celluma

#### After Celluma

2 times per week 2 weeks later No other modalities used





Before Celluma



After Celluma

2 times per week 2 weeks later, no other modalities used





#### The Power of colluma LED Therapy!

Client is in her late 20's & struggling with adult acne. Here's How We're Fighting Back!

- ~ 30 minute Celluma Treatment, 2x / week using blue LED (It's so relaxing under the light, she can't wait to get in for her "nap time" now!)
  - ~ Gentle exfoliating facial 1x / month using an enzyme or a combo of lactic & salicylic acids.
  - ~ I recommended a **gentle cleanser** that she was able to pick up at the drug store. ~ She is using **Circadia by Dr. Pugliese's Daytime Control & Nighttime Control** which work to control
  - She is using Circadia by Dr. Pugliese's Daytime Control & Nighttime Control which work to control sebum production, reduce inflammation, and eliminate the p. acne bacteria.

#### Immediately Before 1st Treatment...



#### Immediately After 9th Treatment...WOW!



Beach Bums Skincare & Waxing Salon ~ Stephanie Meyer, Owner / Esthetician 1542 Guava Avenue, Suite C, Melbourne, FL 32935 321-890-6010 ~ www.BeachBumsSkincare.com









Protocol: 3 times per week for 4 weeks
Photo taken 12 weeks <u>after</u> final Celluma treatment







After Celluma

Protocol: 3 times per week for 4 weeks
Photo was taken 12 weeks <u>after</u> final Celluma treatment







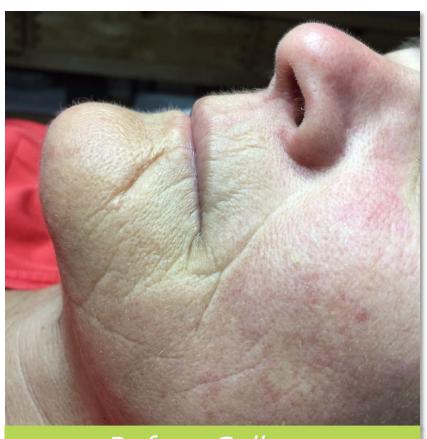
#### Before Celluma

#### After Celluma

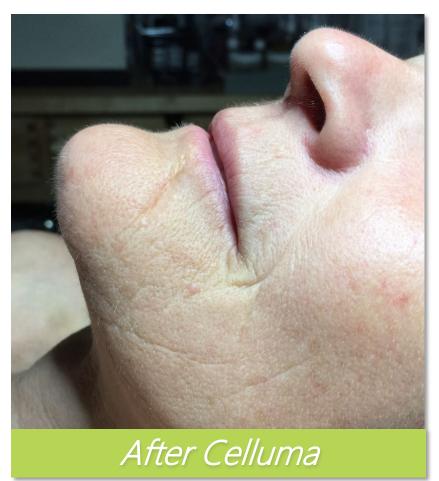
Protocol: 3 times per week for 4 weeks







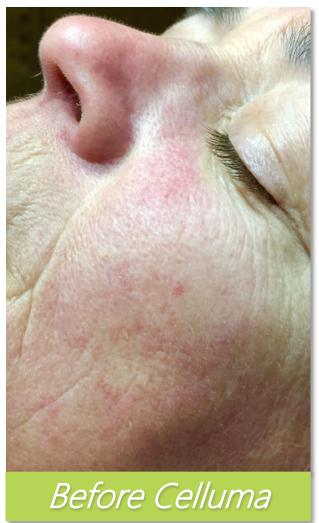
Before Celluma



1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
No other modality used (Images courtesy Lori Hall L.E.)









1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
No other modality used (Images courtesy Lori Hall L.E.)









1 x 30 minute Celluma treatment, 2 times a week for 4 weeks
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#### Firming Skin and Smoothing Wrinkles



4 week treatment - 8 weeks post treatment Image courtesy Lori Hall L.E.







Look at the improvement in texture & wrinkle depth!



#### **Before & After**



Before Celluma



#### After Celluma

2 times a week for 4.5 weeks, 9 treatments total









Bruise after one 30 minute Celluma treatment
No other modality used





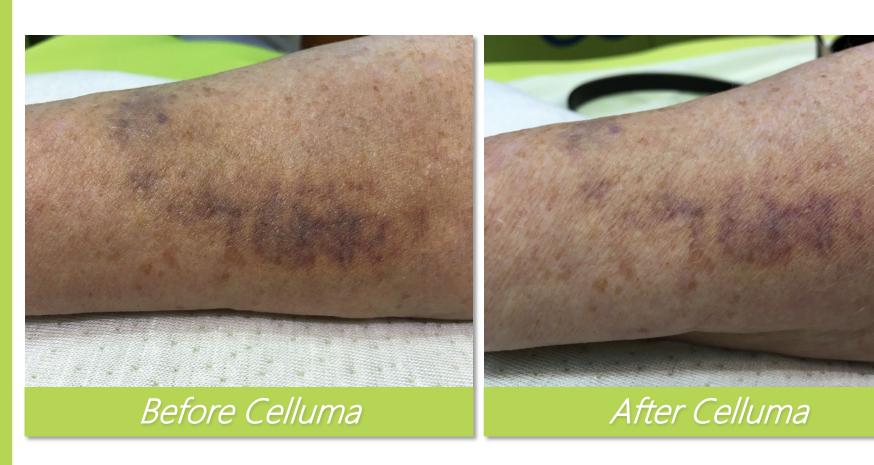




Bruise after one 30 minute Celluma treatment No other modality used







Arm bruise 20 hours after 1 Celluma treatment
No other modality used



#### **Before & After - Microneedling**



After microneedling & before Celluma



Celluma



#### **Before & After - Microneedling**



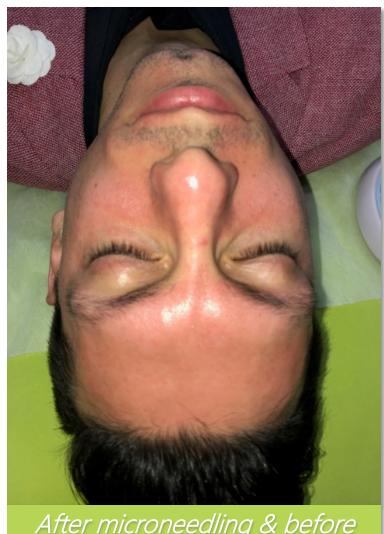
After microneedling & before Celluma



Celluma



#### **Before & After - Microneedling**



After microneedling & <u>before</u> Celluma





#### Celluma + Cosmetic Acupuncture





#### **Dermal Wound Healing\***





After 3 Celluma treatments over 9 days. No other modality used \*Celluma is not FDA-cleared for wound healing



#### **Dermal Wound Healing For Pets**

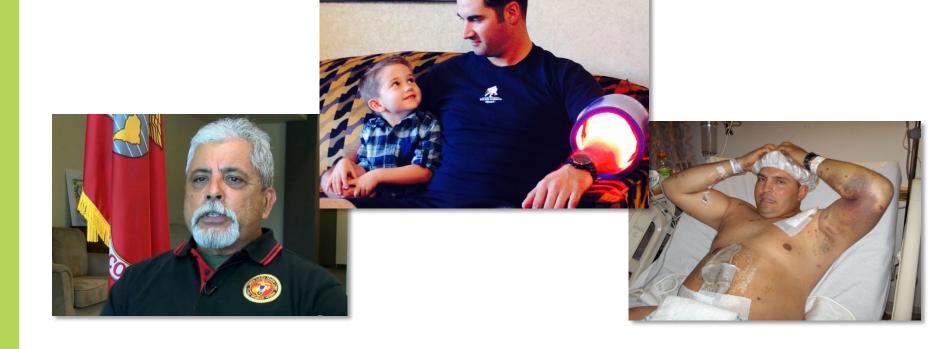






### Celluma in Collaboration with The Semper Fi Fund

We work with The Semper Fi Fund to make Celluma available to Wounded Warriors for pain relief





#### **Celluma Awards**











