

Proven | Non-Invasive | Drug-Free | Petcare Solutions



ERCHONIA®

Laser Petcare™



From Theory to Therapy

Better outcomes for patients often rely on new or improved therapies

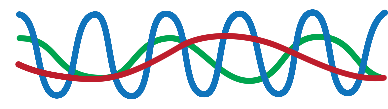
Since our inception in 1996, Erchonia® Corporation has embraced the philosophy of tirelessly exploring the possibilities of low level laser therapy (LLLT®). From theory to therapy, our products are strongly supported by thorough and statistically significant clinical data. This dedication has rightfully earned Erchonia® seven FDA market clearances along with a plethora of publications in peer-reviewed journals.

Erchonia's research and development is driven to provide alternative non-invasive, drug free solutions for doctors, scientists, nurses and other healthcare professionals who are dedicated toward improving the lives of others. Erchonia proudly adheres to the highest ethical standards in the work that is conducted in the laboratory, as well as within our in vivo clinical trials. Erchonia® understands that better outcomes for patients often rely on new or improved therapies. Non-invasive laser therapy for the reduction of chronic pain was the first treatment by Erchonia® Corporation proven by (2) double-blind clinical trials more than 10 years ago— revolutionizing the practice of laser medicine and paving the way for laser therapy.

Is More Power Better?

Power is key

A common misconception within the laser community is that if low power is effective then more must be better, but that is simply not true. Low level laser therapy (3LT®) works differently than the majority of high powered lasers on the market, it operates under the principles of a science known as photochemistry. In photochemistry, it is the unique characteristics of the photon (wavelength primarily) that are most important. The purpose of low level laser therapy (3LT®) is to excite electrons in the photoabsorbing receptors and excitation of electrons occurs via the absorption of a photon of a specific energy value. If too much energy is supplied, the electrons may not enter an excited state simply because the protein they are housed in may become altered due to the high amount of energy being applied to the cell. Proteins function properly only under optimal conditions (i.e. temperature and pH). We have recognized through numerous studies, that the wavelength is more important than the energy output, as too much energy can actually exacerbate the condition. Therefore, we have designed a unique, patent-protected delivery of photonic energy. By administering photons in a line generated beam we can maximize the photons being delivered to a targeted region of tissue ensuring proper electron excitation without producing a thermal event thus inhibiting our results.



Sunlight (many different colors)



LED: one color (monochromatic and waves not in phase (non-coherent))



LASER: One color (monochromatic) and waves in phase (coherent)



Quality of Life

Goals towards a better life for your animal.

It is not uncommon for a pet or trusted animal companion to become a part of the family or transition into a trusted work partner, and as owners we attempt to provide as much as we can to ensure the quality of their health and preserve vitality and energy. The medical disorders that plague us are not that dissimilar to those that affect our animal companions. Unfortunately, cost can sometimes be the biggest hurdle when attempting to provide the best possible care for your pets. Muscle sprains, arthritis, tendon and ligament damage, fractures and general inflammation can severely impact the quality of life of your animal with only a narrow selection of therapeutic options available to provide relief.

Erchonia lasers have been proven to be successful in treating many equine, canine, feline and avian medical conditions such as:

- ▷ Chronic non-healing wounds
- ▷ Chronic joint pain
- ▷ Muscle strains and tears
- ▷ Degenerative conditions such as navicular syndrome
- ▷ Post surgical pain
- ▷ Tendon and ligament injuries
- ▷ Bone fractures
- ▷ Hip dysplasia
- ▷ Feather picking

Fortunately, a trusted technology— one that has earned Food and Drug Administration clearances to treat chronic neck and shoulder pain, acne, laser assisted liposuction, post surgical pain reduction during breast augmentation and non-invasive body contouring is now available for the treatment of a wide assortment of medical conditions that may be affecting many of the animals you provide healthcare for.



The Science

The science of low level laser therapy (3LT®)

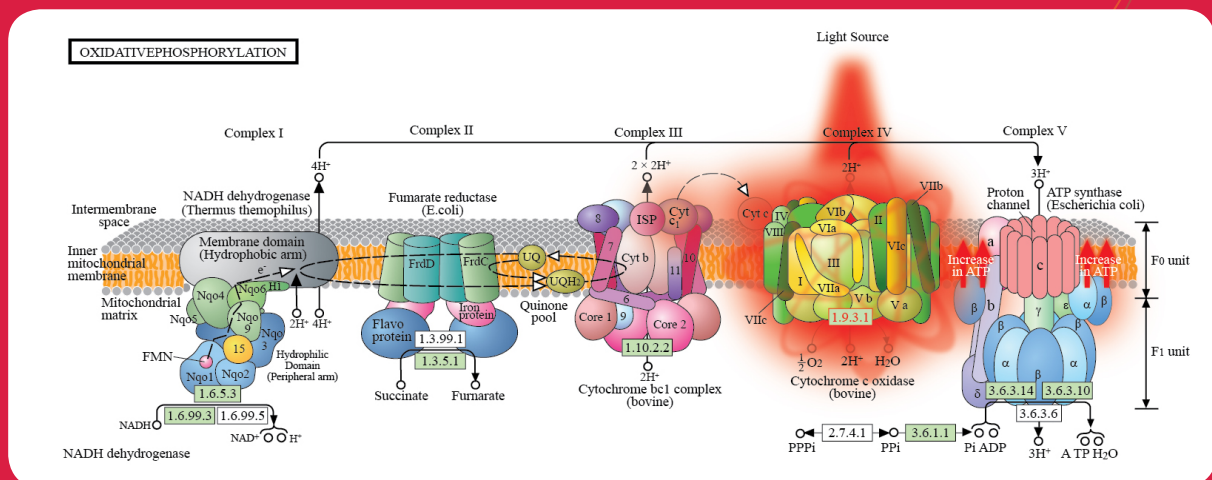
The underlining mechanism of action is defined as bioorganic photochemistry, a discipline that explores the interaction between photons and biochemical pathways within cells. Like many other scientific theories, bioorganic photochemistry is defined by laws, and the first law of photochemistry states that a photoabsorbing structure must be present to yield a clinical outcome. Cytochrome c oxidase, a terminal enzyme found along the respiratory chain, has been reported to function as a photoabsorbing complex within eukaryotic cells.

This enzyme is responsible for facilitating the transport of electrons across the inner mitochondrial membrane to reduce oxygen and form a proton-electrochemical gradient. Cytochrome c oxidase serves an important role in the metabolic process known as oxidative phosphorylation, which is the production of the high energy molecule adenosine triphosphate (ATP). Stimulation of cytochrome c oxidase with a well-defined monochromatic low level laser instrument modulates cellular metabolism and secondary biological cascades which can affect cell function and behavior responsible for the positive clinical outcomes that transpires subsequent to 3LT®.

Low-level laser therapy (3LT®) is an exciting new technology but it is important to understand that certain parameters must be satisfied in order for it to function as an effective therapy. Erchonia® Corporation has performed numerous histological and clinical studies and has combined all the essential components of laser therapy to ensure that your animal receives the best results restoring quality of life.

Photochemistry

Photochemistry is a sub-discipline of chemistry. It is the study of chemical reactions that proceed with the absorption of light by atoms or molecules.



The Technology

Portable and reliable 3LT® technology



VLS Laser System

Handheld technology in a precise reliable package.



BASE STATION™

Wireless handheld technology with 3 transportable laser probes.

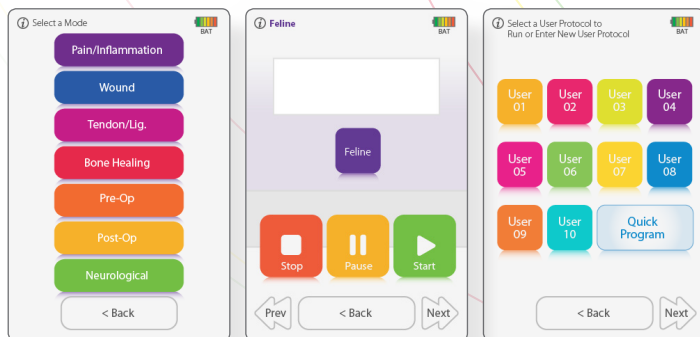
Proven through two double-blind studies, Erchonia's low level laser made history when it became the first to receive FDA 510(k) market clearance for the treatment of chronic pain.

The **VLS** laser is the most advanced complete handheld laser on the market, with a sleek design, revolutionary technology and the capability of treating with up to 4 frequencies at one time.

The **BASE STATION™** is a desk top unit with three (3) probes and smart docking along with the ability to program one or all of the lasers from one control station. The Erchonia® BASE STATION™ has not only been designed with ergonomics and space savings in mind but also portability.

US PAT 6,013,096; US PAT 6,746,473
For additional US and International patents and patent pending information go to www.erschonia.com

The applications of laser therapy are diverse, but as broad as the applications are, the outcome is consistently narrow, generating beneficial and clinically meaningful outcomes that can drastically improve the quality of your animal's life.



Benefits

The clinically proven benefits of low level laser therapy (3LT®)

The clinically identified benefits of low level laser therapy are extensive and have proven to provide relief when all other modalities have failed. Altering the bioenergetics of a group of injured or damaged cells can provide cell stabilization and promote the production of important proteins, growth factors, and enhance biochemical mechanisms necessary for tissue repair. 3LT® has been proven to promote bone repair, wound healing, reduction of inflammation, and tendon/ligament repair. Although each application can seem drastically different, the need for energy and stimulation of basic molecules is the same. Low level laser therapy has been shown to stimulate osteoblast, fibroblast, stem cells, skin tissue, nervous tissue, immune cells and a wide assortment of other tissue structures and cells. Targeting these cells can promote the release of important molecules that support increased blood flow, collagen synthesis, cell recruitment, mineralization, skin cell replication, nerve tissue regeneration, reduction of scar tissue and heat tissue repair. Again, each advantage originates from the laser's capability of influencing the energy production of cells, which is necessary to drive reactions to produce the outcomes mentioned above.

In addition the promotion of specific pathways important for the production of proteins and cell growth and proliferation, low level laser therapy has been identified as an effective means to suppress harmful pathways that can lead to inflammation and even cell death. Most non-steroidal anti-inflammatory drugs (NSAIDS) attempt to suppress the mechanism responsible for producing a key immunologic molecule that promotes an inflammatory response and can further damage tissue and impede the rate of healing. Although NSAIDS have been used for many years and their effectiveness is well documented, a hefty list of side effects has been associated with NSAIDS, which can lead to serious digestive disorders. However, the same mechanism these medications and drugs attempt to suppress, low level laser therapy has been proven to suppress the same mechanism but on a local level and more importantly bypassing the digestive system. 3LT® over an injured or tender area can allow for a direct and safe way to reduce the inflammation experienced by your animal companion thereby reducing pain. Although it may sound easier to simply provide a NSAID for pain relief, the only capability they have is just that, reduce pain and inflammation. Symptomatic presentation of pain is only the superficial issue and the result of mild or serious tissue injury and 3LT® is the tool that can not only suppress inflammation and pain but also stimulate the aforementioned cells to address the underlying problem and promote a healing environment. Suppression of pain is important, but just as important is the healing of the injured tissue, and low level laser therapy has been proven to effectively promote both.



History of Erchonia

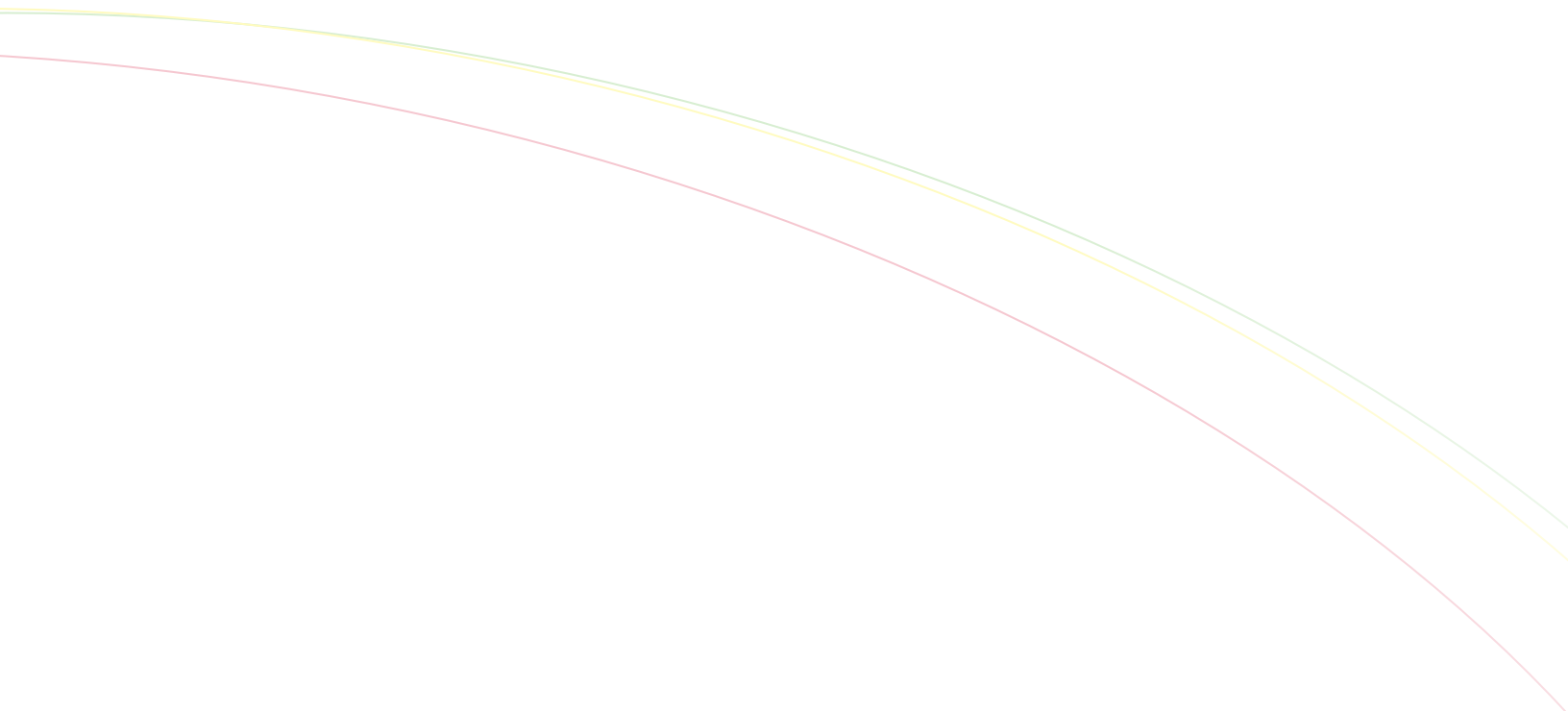
Erchonia® Corporation was founded in 1996 as a small family business, and even though we've grown into an international enterprise, we still operate under the founding principles that guided us to our present success. Our commitment to the legitimate advancement of low level laser therapy (3LT®) through scientific and clinical research has transformed Erchonia into a world leader in the field of 3LT® technology. The integrity, diligence, quality and commitment of our company are evident in the rigorous process we follow in order to take a research hypothesis from concept to a viable, agency-approved product and treatment method.

As the manufacturer, we manage to maintain our quality production standards by operating as an 85% self-reliant company. This means we are involved in almost every facet of our products' creation, performance research, development, fabrication of components and assembly of finished goods all in-house. As marketers, we hold on to the highest customer service standards possible, providing multi-media training and meeting all of our client's requests with creativity and purpose.



Therapy Diversity

A doctor in Florida has been working on dolphins for musculoskeletal disorders at a local marine park and is seeing amazing results while using Erchonia® lasers.



ERCHONIA®

Laser Petcare™

Erchonia® Corporation 2021 Commerce Drive McKinney, TX 75069
214-544-2227 214-544-2228 Fax 888-242-0571 Toll Free
www.erschonia.com or www.laserpetcare.com

