

# **Understanding and Utilising LED Phototherapy in Veterinary & Animal Therapy Practice**

1-day CPD (2 CPD Points)

## **Course Syllabus / Learning Outcomes**

### **PART 1 – OVERVIEW OF LIGHT THERAPIES AND EFFECTS OF LIGHT ON HEALTH**

#### **Introduction**

- **Brief history of light therapy**
- **Various light therapies for health**

#### **Electromagnetic spectrum and how light heals**

#### **Proven effects of Photobiomodulation and how it works**

At the end of Part 1, it is expected that students will be able to:

- differentiate between all forms of 'light therapy' and how they have been applied historically and currently to enhance human/animal health
- identify the particular section (by colour/nanometers) of the electromagnetic spectrum which is specifically related to the modality of photobiomodulation
- describe all the scientifically proven biostimulatory effects of photobiomodulation when an 'appropriate dose' of phototherapy is applied to tissue

### **PART 2 – SCIENTIFIC TERMINOLOGY AND PRACTICAL CONSIDERATIONS FOR EFFECTIVE PHOTOTHERAPY**

#### **Various terms and Parameters used in Phototherapy/Photobiomodulation**

#### **Considerations for optimal / effective dose including:**

- **Practical application recommendations**

At the end of Part 2, it is expected that students will be able to:

- recognise most or all of the terms used in the field of photobiomodulation, especially with using laser devices
- explain the difference between achieving an optimal or effective dose of phototherapy and how different application methods can affect the efficacy of a device

### PART 3 – OVERVIEW OF PHOTOTHERAPY DEVICES – THE FUTURE FOR PHOTOTHERAPY

#### Laser vs LED devices

- Terminologies used to describe phototherapy devices
- Overcoming current barriers for mainstream phototherapy use
- The future of phototherapy for widespread acceptance and home use

At the end of Part 3, it is expected that students will be able to:

- recognise multiple names used in scientific papers and articles to describe devices used
- explain how the availability and complexity of devices has limited widespread acceptance and how improvements in LED technology will enable the modality to be utilised across a huge spectrum of health practitioners in both animal and human therapeutic applications
- 

### PART 4 – GETTING FAMILIAR WITH YOUR PHOTIZO DEVICE

#### A closer look at Photizo

- Features and benefits
- Treatments for animals

Reactions, medication, precautions and general user advice

Practical session on one or two dogs

At the end of Part 4, it is expected that students will be able to:

- demonstrate how Photizo differs from professional laser devices and be able to explain how this will benefit their practice and clients
- summarise conditions shown from studies which are shown to be treatable with photobiomodulation
- discuss reactions experienced from other users' animals and how an animal's response be observed during application to help improve outcomes
- give examples of medication/substances which may interact with photobiomodulation efficacy, and know when it should not be applied
- demonstrate some of various application techniques discussed throughout the course

#### Assessment for theory knowledge and practical skill

No exams or time controlled practical assessments are used.

Presentation handouts are provided for students to complete their own reference notes throughout. Complete information packs on the Photizo device will be handed for reference.

Due to the simplicity of photizo application, the informal practical and discussion session during the final part of the course will allow students to demonstrate application and observation techniques learned throughout the day.