



## Brace Yourself: Using, Modifying, and Fabricating Splints, Soft Orthoses, and Assistive Aids

*A course offered by the Animal Rehab Division of the CPA*

**Dates:** January 21 & 22, 2017

**Location:** The Canine Fitness Centre, 4515 Manhattan Rd SE Calgary, AB.

**Instructor:** Ilaria Borghese, MS, MA, OT  
President, Thera-Paw, Inc.  
Co-Founder, Symposium on Therapeutic Advances in Animal  
Rehabilitation

**Course Details & Outline:** See attached below

***Participants are responsible for bringing the following items:***

1 x lg sharp scissors, 1 x dish towel (smooth cotton), 1 x 30cm metal/metal-edge ruler

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**Registration:                      BRACE YOURSELF**

Cost: \_\_\_ ARD member (\$850 + 5% GST), \_\_\_ non-ARD member (\$950 + 5% GST)  
Animal Rehabilitation – GST/HST # - **106865397 RT0031**

Pre-Requisites:            Minimum: Completion of 'Introduction to the Canine *Rehabilitation*  
PT, DVM, RAHT with a CCRT, CCRP, or CCRA designation

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_ (hm)            \_\_\_\_\_ (cell)

Please mail, fax, or e-mail in this registration form (Box 2001 Cochrane, Alberta, T4C 1B8). We can send you an invoice by email via the secure PayPal system so that you may pay by credit card OR pay by cheque to the Animal Rehab Division and mail (along with this registration form).

For more information, please contact [physio@fourleg.com](mailto:physio@fourleg.com), ph/fax (403) 932-4432

\*\*\*The animal rehab division reserves the right to cancel this course at any time. Course confirmation will be sent out no later than 3-weeks prior to the start date of the course. The Animal Rehab Division strongly recommends obtaining cancellation insurance for all travel.\*\*\*

## **Brace Yourself: Using, Modifying, and Fabricating Splints, Soft Orthoses, and Assistive Aids**

**Instructor:** *Ilaria Borghese, MS, MA, OT*

**Affiliation:** *President, Thera-Paw, Inc.*

*Co-Founder, Symposium on Therapeutic Advances in Animal Rehabilitation*

**Course Description:** This workshop will guide participants in identifying specific functional mobility deficits, selecting appropriate coaptation device(s) to reduce or alleviate deficit(s), and where no device is available, provide skills and resources for modifying, customizing, or fabricating a device. Participants will have practical laboratory experience developing splints, soft supports, and assistive aids using a variety of materials including but not limited to low-temperature thermoplastics, neoprene, nylon, and textiles. In addition, biomechanical and fitting principles as applied to the canine patient will be reviewed. Specific focus will be on limb conditions including but not limited to bracing applications for injury, laxity, and deviation of the paw, carpus, and tarsus. Participants will be supplied with a resource guide of currently available devices used for immobilization, support, protection, and mobility assistance, as well as resources for acquiring raw materials.

### **Learning Objectives**

- Identify a variety of pre-fabricated orthoses, splints, soft supports, and assistive aids and understand their intended uses
- Understand and appreciate the need for custom-made devices and how to design, select, measure, and order
- Learn what to consider for both pets and pet owners to determine the most suitable device, either pre-fabricated or custom-made
- Demonstrate clinical reasoning skills needed to modify devices for meeting the changing needs and requirements of the pet
- Learn to fabricate soft supports and assistive aids using a variety of raw materials including neoprenes, hook & loop, land paddings
- Demonstrate good beginning splinting skills using low-temperature thermoplastics, including splint fit, cosmesis, and padding, strapping, and traction options
- Demonstrate a solid understanding of the basic biomechanical and fitting principles involved in designing and fitting a splint or brace

### **DAY 1**

#### **Course Outline**

#### **8:30 am – 10:00 am - Lecture**

- Introduction & Review
  - splints and braces used in human medicine and traditional splinting and bracing methods used in veterinary medicine
- Challenges in splinting and bracing the canine patient
- Review of prefabricated coaptation and assistive devices

#### **10:00 am – 10:30 am - Quiz (open book)**

#### **10:30 am – 10:45 am – BREAK**

#### **10:45 am – 11:45 am - Lecture**

- Quiz review
- Customized soft, semi-rigid, and rigid braces and mobility assists
- Considerations for determining the appropriate device

#### **11:45 am – 12:30 pm - Case Studies**

- Identify specific physical limitations, and select or design the optimal device(s) to reduce deficit/improve function

#### **12:30 pm – 1:30 pm - LUNCH**

#### **1:30 pm – 2:00 pm - Lecture**

- How to custom-make your own devices to meet your patient's needs

#### **2:00 pm – 5:00 pm - Canine Lab**

- Modifying, customizing, and custom-making carpal and tarsal supports to meet your patient's needs

#### **5:00 pm – 5:30 pm - Wrap-up, Q & A**

## **DAY 2**

### **Course Outline**

#### **8:30 am – 10:00 am - Human Lab**

- Human splinting lab using thermoplastics
  - familiarize yourself with thermoplastic splinting materials and tools
  - fabricate a palmar-based wrist splint
  - assess short-term wear issues – fit, comfort, areas of pressure

#### **10:00 am – 11:00 am - Lecture**

- Introduction to custom splinting with low-temperature thermoplastics
- Review of materials
- Guidelines for splint design
- Examples of custom-made splints
- Fabricating a custom splint - principles (e.g., mechanical, anatomic) applied when splinting the canine patient
  - Conclusion and resource guide

#### **11:00 am – 11:15 am – BREAK**

#### **11:15 am – 12:30 pm - Canine Splinting Lab**

- Fabricating custom carpal splints for a variety of canine patients

#### **12:30pm – 1:30 pm – LUNCH**

#### **1:30 pm – 5:00 pm - Canine Splinting Lab; continued**

- Fabricating custom tarsal splints for a variety of canine patients
- Choice of splint fabrication (e.g., cervical)
- Time permitting – evaluate and work with devices that are most appropriate for your target patient population; review case studies submitted by participants

#### **5:00 pm – 5:30 pm - Wrap-up, Q & A**

**Personal case studies welcome – please submit case study information including patient history and digital photos or video to [Ilaria@therapaw.com](mailto:Ilaria@therapaw.com) prior to December 20.**