

Analyzing Gait in Dogs With the *GAITFOUR* Portable Walkway System



Utilizing human technology for the welfare of animals

Victoria Light and Dr. Janet Steiss, Dept of Anatomy, Physiology and Pharmacology

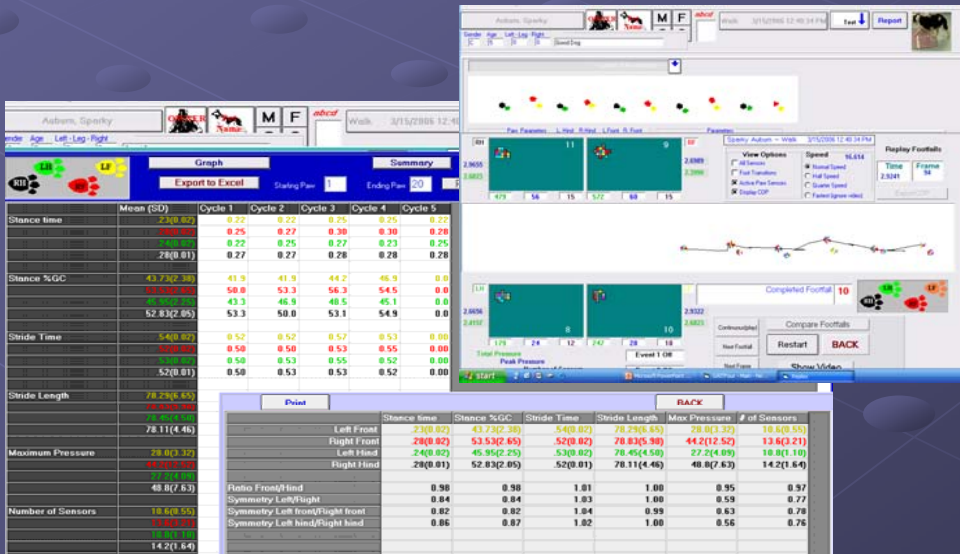


Introduction: A portable walkway system (the *GAITRite* mat) was originally created for gait analysis in the human field. Applications include:

- Detecting and reducing risk of falls in the elderly and individuals with Alzheimer's Disease
- Establishing appropriate therapy for individuals with declining gait control, such as Parkinson's Disease
- Monitoring improvement during physical therapy after injury, surgery or loss of limbs

Advantages of this *GAITFour* system for gait analysis include:

- Portability and ease of use
- Immediate Feedback
- Capturing sequential steps for measuring many variables used in physical therapy such as:
 - Stance time and Stance %GC
 - Stride Length and Stride time
 - Symmetry of Gait and Center of pressure



From the *GAITRite* technology, *GAITFour* is being adapted for application in the animal world. We are currently working with the this corporation (CIR Systems, Inc) to develop the software so that this tool can be used in clinical practice and research in veterinary medicine. The areas that are currently being explored include:

- Pre/Post surgical assessment
- Quantifying results from physical therapy
- Early lameness detection and discovering preventive measurements for Working and Athletic dogs concerning joint problems such as hip dysplasia
- Quantify results during neurological treatments