Regenerative Medicine at UF Large Animal Hospital

No matter what discipline, lameness may alter the careers of horses and their riders. Without veterinary intervention, lameness can cause decreased performance, pain and early retirement for your horse.

Stem cell and platelet-rich plasma (PRP) are forms of regenerative medicine that originate from the horse's own body to positively affect the healing process. These therapies, along with other advanced modalities that augment healing, are available at UF and are provided by our board-certified specialists.

For more information, visit the UF Large Animal Hospital website or call us at 352-392-2229 to speak to one of our veterinary specialists.

Stem Cell Therapy

Stem cell therapy restores function by providing cells that can provide healing with normal tissue versus scar tissue. Stem cells are found in higher concentrations in bone marrow and fat. To obtain therapeutic amounts of stem cells, bone marrow or fat is collected and sent to specialized laboratories for processing. When ready, the stem cells are injected into the affected areas. Stem cell therapy has shown positive healing results in tendon, ligament and joint injuries in horses.

Upcoming Events

UF CVM Open House
Saturday, April 14, 2012

Join students, staff and faculty at the annual UF College of Veterinary Medicine Open House. Educational demonstrations, tours of the UF Veterinary Hospitals, and more will be a part of this family-friendly and educational event.

Healthy Horses Conference
Saturday, April 28, 2012

The 2012 Healthy Horses Conference at the UF College of Veterinary Medicine will be a full day of equine education. This year’s topics are compiled from previous requests and include an update on paralysis caused by equine herpesvirus (EHV), rehabilitating lameness injuries, new deworming recommendations, and a Q & A session on preventative health care, just to name a few. Register online now!
**PRP Therapy**

PRP stands for platelet-rich plasma. Created from the horse’s own blood, high concentrations of platelets are suspended in their conditioned plasma. PRP may be used to augment tendon, ligament and joint healing in combination with stem cell or autologous conditioned serum (ACS) therapies.

**Other forms of healing at UF**

**Autologous Conditioned Serum (ACS)**

ACS is also known as "IRAP." IRAP is an acronym for interleukin-1 receptor antagonist protein, which is a protein created from plasma using the horse's own blood. IRAP therapy reduces inflammation and is especially helpful in reducing acute inflammation in the joint and preventing continued degeneration and progression of osteoarthritis.

**Extracorporeal shockwave therapy (ESWT)**

ESWT is used to stimulate healing in ligaments, tendons and bony structures by improving blood flow, increasing healing factors and decreasing inflammation in treated areas. A high-energy acoustic pressure wave is emitted via a transducer which travels through tissues to a specific location, which increases the speed and quality of tendon, ligament, and wound healing, and decreases inflammation and pain.

**Acupuncture**

Acupuncture is the insertion of fine sterile needles into specific points that create a physiologic response. Some of the responses include release of beta-endorphins, dynorphins, serotonin, GABA and cortisol which aid in pain relief. Many recent studies have provided scientific evidence that acupuncture can be used to treat equine lameness. Depending on the condition, sometimes a single acupuncture treatment can alleviate pain due to an acute injury. Chronic conditions typically require three to five treatments for maximum benefit.

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**Florida Small Farms and Alternative Enterprises Conference**

**July 27-29, 2012**

The Florida Small Farms and Alternative Enterprises Conference of 2012 will focus on educating entrepreneurs to strengthen local food systems. The weekend-long event will include farm tours, a trade show, workshops and a networking social. Be sure to register online by July 9, 2012 for the early bird special.

**News**

**Explore Research with UF**

The Florida Museum of Natural History has teamed up with UF students and researchers in an exhibit called Explore Research, which showcases UF’s most exciting discoveries. UF Large Animal Hospital surgeon, Dr. Patrick Colahan, is featured in this project involving performance testing in horses. Watch the video, or visit the museum for more information and more videos!

**UF Patient now Breyer Horse**

An American Drum Horse stallion named Mariah’s Boon was a patient at the UF Large Animal Hospital between 2008 and 2009, when he received two surgeries and numerous checkups for an abdominal abscess caused by a small wire that had penetrated his stomach. Now at only six years of age, he’s been selected as the 2012 Celebration Breyer Horse. Watch the video or read the story.

**Ocala horse rescued with UF help**

The Alachua County Sheriff’s Office Deputy Danny Buckley, the UF College of Veterinary Medicine’s Disaster Response Team and the Paynes Prairie State Park Rangers rescued an Ocala horse from a peat bog last month. Florida’s marshy environment, in addition to its natural disasters, have created a demand for a large animal emergency rescue team. Read the article from The Gainesville Sun.
UF Equine Lameness & Imaging

Under the direction of Dr. Alison Morton, DACVS, the UF Equine Lameness & Imaging service offers regenerative therapies, along with advanced imaging modalities for the localization, diagnosis and treatment of lameness in horses.

- High-field (1.5 T) MRI
- Spiral computed tomography (CT scan)
- Digital and computed radiography
- Digital ultrasonography
- Nuclear scintigraphy (bone scan)
- Lameness Locator™
- High-speed treadmill analysis and endoscopy
- Video endoscopy
- Arthroscopy/Tenoscopy
- Acupuncture
- Therapeutic farriery
- Prepurchase examinations
- Performance evaluations