

Vet-Stem, Inc. was formed in 2002 to bring regenerative medicine technology to the veterinary profession.

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### Visit Us at AAEP Booth # 362

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## We've Moved



Vet-Stem has just moved to our new facility and we are settling in quickly. Our new facility is three times the size of our old building. Vet-Stem will now have multiple laboratories. We are excited that all of this new space will allow us to better serve our clients. In order to ensure a smooth transition for shipping samples, we ask that Veterinary Practices **PLEASE DISCARD YOUR OLD FED-EX FORMS.** All Veterinary Practices should already have updated pre-paid forms with our new address. We want to make sure samples do not get shipped to our old address.

**Vet-Stem is now located at:**

**12860 Danielson Court, Suite B  
Poway, CA 92064**

Our phone numbers have remained the same, and if you have any questions about your shipments please do not hesitate to call us.

## New Data at AAEP 2006

Vet-Stem continues to research the effects of Regenerative Cell Therapy and we are currently gathering data on over 300 horses at 15 clinics across the United States. The focus of this survey of both veterinarians and horse owners is to determine the success rate of treatment for tendon and ligament injuries in performance horses. The horses included in our survey are of varying ages and disciplines and represent a broad spectrum of injury location and severity. The expectation of the horse owner is always an important factor, as we hope that each

horse will return to their prior level of performance.

Visit us in Booth # 362 at the 52<sup>nd</sup> Annual American Association of Equine Practitioners (AAEP) Convention in San Antonio, Texas to learn more about the results.

## Preliminary Results on Canine DJD

Preliminary data on canine degenerative joint disease (DJD) treated with Vet-Stem Regenerative Cells show promising improvement in pain reduction and mobility. We are very encouraged by these results. Currently, we continue to investigate intravenous and intra-articular administration, and expand our network of Small Animal Practices to further define and utilize Regenerative Cell Therapy. If you would like to participate, please give us a call.

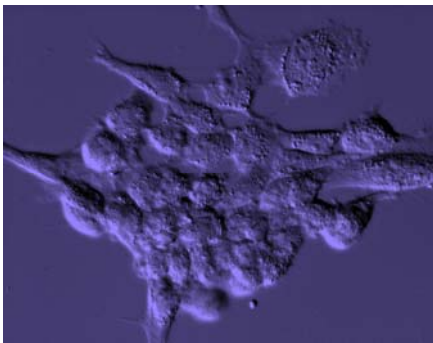
## Vet-Stem® Clinic Posters & Brochures

Posters are now available for displaying in your clinic or office, and they are a great way to generate interest and educate horse owners on Regenerative Cell Therapy. Our new brochures are included in a holder attached directly to the poster. If you would like one give us a call.



# What Do Vet-Stem Regenerative Cells Do?

Vet-Stem Regenerative Cells are derived from adipose tissue and are capable of differentiating into a variety of tissue types including tendon, ligament, bone, cartilage, smooth and cardiac muscle, and neurons. Vet-Stem Regenerative Cells are comprised of stem cells, progenitor cells and other bioactive cells in their natural, physiological proportions. This diverse cell population is critical for bioactivity and cell-to-cell communication, including:



- *Mesenchymal stem cells*
- *Growth factor producing cells*
- *Endothelial progenitor cells*
- *Immune cells*
- *Fibroblasts*
- *Pericytes*

Vet-Stem Regenerative Cells Functions:

- **Homing** – cells migrate in response to inflammatory and ischemic signaling
- **Differentiation** – cells use local signals to differentiate into required tissue(s) for healing
- **Trophic Support** – cells secrete a variety of cytokines and growth factors that promote tissue regeneration
- **Anti-inflammatory** – cells down-regulate the inflammatory cascade
- **Neo-vascularization** – cells secrete growth factors that promote new blood vessel formation and help to resolve scar tissue
- **Anti-apoptosis** – cells reduce cell death in injured tissue

# Dr. J. Corey Orava Joins Vet-Stem

Dr. Orava was born in Montreal and grew up in Toronto. He received his Doctor of Veterinary Medicine (with Honors) from the University of Guelph, Ontario Veterinary College. After graduation he completed a large animal internship at the University of Prince Edward Island. Prior to joining Vet-Stem, he practiced in California for over six years, working predominately with English sport horses, many at the Olympic level. His main interests include lameness, diagnostics and imaging.

In his new role as Eastern Equine Veterinary Services Manager, Dr. Orava will provide equine veterinarians in the Eastern United States with clinical support, consultation, training for clinic staff and horse owners, as well as speaking engagements.

# Custom Oil Painting Contest Winner!

Linda K. Sutton from Littleton, Colorado is the winner of our “Your Story” contest. She wrote:

My horse, Goer’s Elegant Bond, or “Elle” as she is affectionately called, is my 3 1/2 year old Appaloosa mare who I purchased at 8 months of age. Last year when it was time to put Elle under saddle, the trainer quickly found a problem with her front end. She was resisting the saddle and a closer inspection showed that her left shoulder was considerably underdeveloped compared to her right. I was heartbroken. My veterinarian immediately isolated the problem to Elle’s front fetlock, where X-rays revealed a subchondral bone cyst on the outside edge of the joint. I was told, “if the trainer had not stopped when he did, she probably would have been damaged beyond repair.” The next day, fat tissue was extracted from Elle’s hindquarter and sent overnight to Vet-Stem who then concentrated the stem cells and sent them back to the clinic. My veterinarian performed arthroscopic repair surgery and injected Elle’s stem cells directly into the cyst. Elle was in for a lengthy recovery. I had to keep her in a small pen with hand walking for 90 days. At 3 months we saw “new

growth” upon X-ray, but we still had 3 more months of confinement and light work each day. We just had her 6 month checkup and there was NO SIGN OF THE CYST and the surrounding bone is getting more dense. Your stem cell procedure has successfully regenerated the bone tissue. My veterinarian told me to ride her as much as possible, in straight lines! Thank you, Vet-Stem for working so quickly to provide the necessary stem cells to save my horse. Elle does not hurt anymore. She wants to trot, canter and play now. She will finally have the chance to be the horse I know she wants to be.



## Vet-Stem® Events

**American Association of Equine Practitioners (AAEP) 52<sup>nd</sup> Annual Convention, San Antonio, TX December 2 - 6, 2006**

*Exhibiting*

**North American Veterinary Conference (NAVC), Orlando, FL January 13 - 17, 2007**

*Exhibiting*

**Texas A & M University, Wetlab College Station, TX January 20, 2007**

*Exhibiting*

**Western Veterinary Conference (WVC) Las Vegas, NV February 18-21, 2007**

*Exhibiting*

**Stem Cell World Congress La Jolla, CA February 12-13, 2007**

*Dr. Robert Harman to present: Clinical Use of Adipose-Derived Stem Cells in Over 2,000 Orthopedic Cases in the Equine and Canine*

# Featured Horse: Mister Nicadual

## Top Reining Horse

### Comes Back to Win 5 Months After Vet-Stem Regenerative Cell Therapy

*Owner/Breeder:* Jerry Kimmel (owner)  
*Trainer:* Tim McQuay, Tioga, Texas  
*Veterinarian:* John McCarroll, DVM, Equine Medical Associates in Pilot Point, Texas

*Vet Stem Treatment:* November 30, 2005  
*Return to Performance:* April 2006, **5 months after treatment**  
Fourth place at the National Reining Breeders Classic in April  
Team Gold and Individual Silver at FEI World Games 2006

Mister Nicadual is a powerful six-year-old Quarter Horse stallion with a lot of heart and a winning slide stop. He was purchased late last summer and immediately thereafter made the finals at the American Quarter Horse Association World Championship show with trainer Tim McQuay. A tendon injury kept Mister Nicadual from returning to the finals. "He suffered a bow on his left front superficial digital flexor tendon in November 2005. It was stretched and torn and he was unable to work, only hand walk," McQuay explained.

Dr. John McCarroll in Pilot Point, Texas suggested Vet-Stem Regenerative Cell Therapy to promote healing of the tendon and remodel scar tissue. On November 28, 2005 a small sample of fat from Mister Nicadual's tailhead area was sent to the Vet-Stem laboratory. The regenerative cells were extracted from the fat tissue and shipped immediately back to the veterinarian for injection. Dr. McCarroll administered the treatment and recommended a rehabilitation schedule tailored specifically for the stallion's condition.

After only five months of rehabilitation and gradual return to work, Mister Nicadual was back in condition to show and won \$42,000 placing fourth at the National Reining Breeders Classic in April. He went on to place Top 10 at the 2006 NRHA Open Derby Finals and tied for second at the USEF Open in June. With NRHA's all-time money winner Tim McQuay on board, they earned a slot on Team USA for the FEI World Games in Aachen, Germany where they won the Individual Silver and had the highest USA score to help place the USA Team first for the Gold.

**"Mister Nicadual was able to compete  
in the NRHA Derby and NRBC  
because of the stem cell procedure."**  
– owner Jerry Kimmel

**"Thanks to Vet-Stem his tendon  
healed completely!"**  
- trainer Tim McQuay



Visit Us at AAEP: Booth # 362

