

Large Animal LINKS

LARGE ANIMAL HOSPITAL NEWSMAGAZINE

UF|Veterinary Medical Center



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UNIVERSITY of
FLORIDA

Message

from the Chief of Staff, Dr. Eleanor Green



June 28, 2008 - write it down in your calendars and join us for RDVM Appreciation Day here in Gainesville. This full day of free CE allows us to say thanks for your support of the University of Florida's Veterinary Medical Center. Through your referrals, you are helping us teach the veterinarians of tomorrow, many of whom will become your associates. You are also contributing to the training of the residents, who will become the academicians and educators of tomorrow or join one of the growing number of referral hospitals to bring specialty care closer to home. Referrals allow us to provide your patients top quality diagnostics and treatments by a team of specialists in the various veterinary specialties, backed up by the latest and best diagnostic equipment. You, the referring veterinarian, are our number one client. You make us better.

Finally, it is here, up, and operating - a diagnostic imaging center. Check out GatorVetImaging.com. This center will allow practitioners to refer their cases for MRI or CT scans here at UF to complement their own diagnostic work-ups. Of course, the horse can still be referred to one of the specialty services in the hospital, as indicated by the case. A new specialty service we have just rolled out is the lameness and diagnostic imaging service headed up by Dr. Matt Brokken. You can read more about Dr. Brokken and his service on Page 5 of this newsletter. Our hospital made this very large investment in MRI and CT with the patient, the referring veterinarian, and the advancement of new knowledge in mind. The use of MRI has mushroomed in equine practice. We are now able to confirm diagnoses merely postulated previously. Soon the term caudal heel pain will give way to a wide variety of specific diagnoses and the ever evasive nervous system will be better explored. More to come.....

Dr. Huisheng Xie is one of the best known veterinarians in acupuncture in the United States and I believe is the first faculty member hired full-time to provide acupuncture services in an academic hospital. Acupuncture at UF has finally reached a critical mass to be its own service, with two veterinarians and two interns. Dr. Carolina Ortiz-Umpierre recently joined us at UF and has already shown the leadership skills to become Chief of the new Acupuncture Service.

We have thoroughly enjoyed showcasing the art of local equine artists in our hospital. I have admired the work of all of the artists we have had so far, including the work of horses themselves. Sharon Crute's paintings are on display "as we speak." It is notable that our Large Animal Clinical Sciences Conference Room and my home were not listed among the prestigious locations that exhibit her work.

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Arts & Sciences

THE LARGE ANIMAL HOSPITAL'S NEW EQUINE ART GALLERY

While the UFVMC has always been known for its scientific skills we are starting to show our artistic side as well. The initial idea was to showcase local equine artists and have a changing exhibit that would provide something new and different to discover whenever you visit the UFVMC, but like anything we do - we are doing it on a grand scale. Our first exhibits included local artists such as Sue Johnson and Patsy Lindamood. Another featured artist was Cheryl Ward - however in her case the horses did the painting - Cheryl only facilitated. All of these exhibits were a huge hit, so we've expanded.

Our current artist is a local favorite Sharon Crute whose boldly colored, high energy work is always popular. The gallery is not only in our front entrance hall, but the hall down to the equine auditorium and the hallway outside of the outpatient receiving area. All the artwork displayed is for sale, prints at varying prices and sizes are available.

Our current artist has been involved in the horse racing industry for over thirty years and has the distinctive ability to create dynamic equine paintings expressing powerful movement and speed. Her experience at the racetrack stretches the gamut from hotwalker to racing official.

Because of Crute's extensive involvement in all aspects of racing, she feels that her artwork is straight "from the trenches". She endeavors to "express the subtle with an undercurrent of volatility" resulting from intimate knowledge of the emotional anguish and exhilaration shared by all those who love horse racing. Numerous galleries, arts councils and racing centers on both coasts exhibit her artwork. Included in her resume is a long list of private and public collectors including those abroad in Italy, England and Japan.

Some of Crute's recent exhibitions include a group show at the Florida Thoroughbred Breeders' and Owners' Association in Ocala, Florida and at Equidae Gallery in Saratoga Springs, New York; a two-artist exhibit at Gallery Central in Hot Springs, Arkansas; and a solo exhibit at Fayette Gallery in Lexington, Kentucky. Her artwork has also been exhibited at the Museum of Florida Art in Deland, Florida and The Elliott Museum in Stuart, Florida.

Commissions abound as Crute's work is featured on the posters, book covers and program covers for: Michigan Stallion Directory, Florida Farm Managers' Directory (twice), H.I.T.S. (Horseshows in the Sun), Horseshows in the Park and Live Oak International Driving Competition to name a few. Logo design and illustration include two children's books, one is currently in progress. Her artwork is often requested as illustration material for various publications.

If you would like to view our current exhibit the UFVMC is open from 7:30-5:30 Monday through Friday for visitors to the gallery. If you know an artist who would be interested in displaying their work at UF please contact Kate Vinzant @ 352-392-2229. For more information on Sharon Crute and her work please visit www.sharoncrute.com.



Sharon Crute in front of "Harrowing" a piece that is an open edition which can be reproduced in a variety of sizes and is currently on display at the UFVMC Gallery.

Congratulations

2008 Faculty Awards, Recognitions and Accomplishments

Dr. Eleanor M. Green, DVM - President, American Association of Equine Practitioners (AAEP)

Dr. Eleanor Green, Chair & Chief of Staff of Large Animal Clinical Sciences, has been named the first female President of the American Association of Equine Practitioners (AAEP). Her Presidency began January 2008 and will run through December 2008. Dr. Green was featured on the January 2008 cover of Horse Capital Digest, in the Florida Horse, The Quarter Horse Journal, and the Quarter Horse Racing Journal. Dr. Green is responsible for organizing the 2008 AAEP Focus Meeting which will be held in Austin, Texas in July 2008. The focus is "The First Year of Life". Green was inducted into office during the AAEP's annual convention, held Dec. 1-5 in Orlando. Board-certified by both the American College of Veterinary Internal Medicine and the American Board of Veterinary Practitioners, Green is a past president of the ABVP and also of the American Association of Veterinary Clinicians. She has been an active member of AAEP since joining the organization in 1973, the year she graduated from veterinary school at Auburn. Green most recently served as AAEP's president-elect and also has served as a district director and as chair of the internship and student relations committee and the AAEP foundation's student scholarship task force, and has participated on several other committees.

Dr. Al Merritt, DVM - Honored by the Florida Association of Equine Practitioners (FAEP)

Alfred Merritt, D.V.M., the former Appleton Professor of Equine Studies and retired director of the Island Whirl Equine Colic Research Laboratory at the University of Florida College of Veterinary Medicine, has received the Florida Association of Equine Practitioners' lifetime achievement award. FAEP members honored Merritt, a UF faculty member from 1978 until his retirement in 2003, in September during the group's annual meeting in the Bahamas. Award presenter Carol Clark, D.V.M., completed her residency in large animal medicine at UF. "There is probably not a person at this meeting whose life has not been touched by Dr. Merritt," she said. Merritt's primary research interests were the function and malfunction of the equine gastrointestinal system. The Island Whirl laboratory is a resource for faculty, staff and student research in the area of equine colic. Merritt served as editor or co-editor of four books and has written 20 book chapters. Two of his books, "Equine Medicine and Surgery" and "Veterinary Gastroenterology," are widely used in veterinary courses throughout the world. While at UF, Merritt was recognized with several teaching awards, including the Norden Distinguished Teacher Award, which is bestowed by college faculty. Veterinary students chose Merritt three times as Large Animal Clinician of the Year. "I felt extremely honored to receive this recognition from this first-class organization, especially since numerous former students and residents were involved in the decision to name me," Merritt said. "What could be more gratifying than knowing that your life's work has had some lasting positive impact?"

Dr. Michael B. Porter, PhD, DVM, DACVIM - Distinguished Award Winner from the University of Florida

The Outstanding Young Alumnus Award was given to Dr. Michael Porter, a clinical assistant professor at the UF veterinary college. Porter received his D.V.M. and Ph.D. degrees from the UF veterinary college in 1998 and 2001, respectively. He also completed a residency in large animal medicine at UF in 2004. As director of the college's Mobile Equine Diagnostic Service, Porter takes state-of-the-art imaging technology on the road providing imaging to a wider area of horse owners and veterinarians.

New Lameness and Imaging Service

Dr. Matt Brokken

by Sarah Carey

A new clinical service at the University of Florida Veterinary Medical Center offers horse owners full-time expertise in the area of equine lameness and imaging. “We provide referral MRI procedures to veterinarians and their clients,” said Dr. Matt Brokken, a board-certified surgeon who graduated from the UF veterinary college in 2003 and subsequently completed a residency in equine surgery and sports medicine at Washington State University.

He returned to UF in early 2008 to head up the equine lameness and imaging service at the Alec P. and Louise H. Courtelis Equine Hospital. “My goal is to be a constant presence and to serve the referral community better by being available as a resource whenever these kinds of cases come in,” Brokken said.

The new service will provide information about the use and advantages of equine MRI as well as providing evaluations of images from other magnetic resonance imaging units upon request.

“Horses that come to our facility now have access to imaging technology comparable to what is available for human patients,” said Dr. Eleanor Green, chairwoman of UF’s department of large animal clinical sciences and chief of staff of the large animal hospital. “Our own patients will benefit significantly from our enhanced diagnostic capabilities, but in addition, veterinarians throughout Florida and beyond can refer their patients and clients to us to have images taken and interpreted to complement their own diagnostic procedures.”

Brokken has extensive experience with the use of equine MRI, as well as with the diagnosis and treatment of equine orthopedic injuries. MRI produces highly detailed images, which are obtained in multiple planes of bone and soft tissue, and can examine any portion of the horse’s body which will fit into the aperture designed for people. In adult horses, this includes the foot, fetlock, suspensory ligament, carpus, hock and head. In foals, the entire body can be imaged.



Dr. Matt Brokken in the client consultation room at the UFVMC LArge Animal Hospital using a 4 screen viewing station to show clients and students the MRI images.



Dr. Brokken performing a lameness exam at the UFVMC

The MRI imaging technique can help determine the specific causes of lameness, which is critical to determining appropriate treatment recommendations. Brokken offers more than just clinical expertise; he also has conducted research into a new surgical therapy for proximal suspensory ligament injuries and has used MRI to monitor healing of the ligament after treatment.

He works closely with UFVMC radiologists and said he is excited about the imaging technology UF has to offer, which in addition to MRI, includes CT, nuclear scintigraphy, digital radiography and ultrasonography. “I believe our expertise with the MRI is second to none, and while we already have the only high-field strength magnet in Florida, an upgrade is already on the way and is expected to arrive within the year.” Brokken said. “That will increase our capability even more.”

The upgraded magnet will speed up exam time and will provide higher-resolution images, Brokken said. The MRI upgrade is expected to be implemented by next March and a new CT table for horses is coming soon as well. “This advanced diagnostic imaging technology is enhanced by the expertise that surrounds it,” Brokken said. “Our comprehensive approach is supported by a team of veterinary specialists, including board-certified surgeons, internists, radiologists, anesthesiologists and many others. Here at UF, we have everything that anyone would want to diagnose and treat a horse, and we can do it all in one place.”

That aspect of academic veterinary medicine is a large part of what attracted Brokken to the job. “Being at this university allows me to practice at the highest level, and I’m very excited for the opportunity to return to my alma mater,” Brokken said.

Receiving days for the equine lameness and imaging service are Tuesdays and Thursdays and surgeries and MRI examinations are generally performed on Mondays, Wednesdays and Fridays. Horse owners, trainers, referring veterinarians and others seeking more information or who wish to make an appointment with the equine lameness and imaging service should call 352-392-2229.

Please visit our new Diagnostic Imaging website www.GatorVetImaging.com

New Acupuncture Faculty & Expanded Services

Acupuncture has been used in China for over 2,000 years to treat a variety of diseases. Acupuncture is the insertion of thin, sterile needles into specific points on the body to create a therapeutic effect. Physiological changes in response to acupuncture point stimulation is the basis of clinical treatment. Some of these changes include release of endogenous opioids and other neurotransmitters, release of hormones, immune system stimulation, and blood pressure regulation. There are 361 acupuncture points located throughout the body that have various functions used to treat different diseases.

Acupuncture is safe, effective, and is used to treat a variety of diseases including but not limited to pain and lameness, neurological disorders (laryngeal hemiplegia, seizures, disc disease, wobbler's disease), dermatological disorders, behavioral disorders (anxiety, fear and aggression), reproductive disorders (infertility or impotence), gastrointestinal disorders (colic, vomiting, diarrhea, inflammatory bowel disease), anhydrosis (non-sweat), respiratory disorders (Heaves/RAO), and improvement of quality of life in geriatric and/or cancer patients. In many instances, acupuncture is used together with conventional therapy to improve the overall effects of treatment.

There are usually minimal to no side effects if acupuncture is performed by a professional. There are rare and minor side-effects such as local short-term discomfort and occasional bruising in the area where the needle is inserted. However, there are certain contraindications of needle insertion based on the location of the acupuncture point or health status of the patient. Contraindications for certain applications of acupuncture include inserting a needle directly into a tumor or open wound, using certain acupuncture points around the lumbar and lower abdominal regions during pregnancy, and using electro-acupuncture on seizure or pacemaker patients.

The Acupuncture Service at the University of Florida has two clinicians, Dr. Huisheng Xie and Dr. Carolina Ortiz. Dr. Xie graduated from Sichuan College of Animal Science and Veterinary Medicine (China) in 1983 and received a PhD from the University of Florida in 1998. He has been a clinician at the University of Florida for 9 years. Dr. Ortiz graduated from St. George's University College of Veterinary Medicine (Grenada) in 2005. She completed an internship at the University of Florida in 2006 and is the current chief of the acupuncture service. They treat both large and small animals at the Veterinary Medical Center as outpatients and also do farm calls and house calls. For more information the acupuncture service can be reached at (352) 392-2235 X 4076.

Their service treats cases six days a week according to the following schedule:

Mondays: Horses and small animals seen in the hospital as outpatients

Tuesdays: 1) Small animals seen in the hospital as outpatients

2) Ambulatory farm call service in Gainesville and surrounding areas

Wednesdays: Ambulatory farm call service in Gainesville and surrounding areas

Thursdays: Small animals seen in the hospital as outpatients

Fridays: Ambulatory farm call service in Gainesville and surrounding areas

Saturdays: Small animals seen in the hospital as outpatients



2008 New Clinicians



Dr. Sarah Matyjaszek, the third year Large Animal Surgery resident, will be completing her residency this July. We are happy to announce that she will be staying on at the UFVMC as faculty with a one year appointment as a surgical clinician, and will be assisting with coverage of the hospital's newly expanded Emergency Service. Her professional areas of interest include upper airway disease and colic.



Dr. Laura Javicas, the third year Large Animal Medicine resident, is also completing her residency this July and will be staying on with the UFVMC with a one year faculty appointment as a medicine clinician. She will be filling in for Dr. Robert

MacKay during his sabbatical. We are happy to have Dr. Javicas back with us for another year. Her professional areas of interest include equine neonatology, critical care, and endotoxemia.

2008 Residents



Jeremiah Easley, DVM
Large Animal Surgery

Jeremiah is from Shelbyville, KY. He received a Bachelor of Science degree from College of Charleston in Charleston, SC in 2002. He worked as a laboratory technician at the Grice Marine Laboratory in Charleston, SC before entering veterinary school in 2003.

In 2007, he received his DVM degree from the Virginia-Maryland Regional College of Veterinary Medicine.

He then completed a one year internship program at the Equine Medical Center of Ocala where he focused on numerous aspects of equine veterinary medicine ranging from surgery and neonatal care, to Thoroughbred sales and reproduction. His interests are varied, and he enjoys all aspects of equine surgery.



Mouhamadou Diaw, DVM
Large Animal Reproduction

Mouhamadou received his DVM from the University of Dakar, School of Veterinary Medicine in Senegal in 1987. He spent 10 years in private practice in Senegal and is also licensed to practice in France (Nantes 1998).

In 2006 he worked for Hagyard Equine Medical Institute in Lexington aiding in equine reproduction procedures in Field Care and at the McGee Fertility Center (embryo transfer, problem mares, and stallions).

Most recently he was employed by SCP Guiot Vanbrabant, Grandpre France a clinic specializing in equine reproduction managing late pregnant mares, embryo transfer, artificial insemination with fresh, cooled and frozen semen, following and treating problem mares, and managing the recipient herd.



Johanna Elfenbein
Large Animal Medicine

Johanna Elfenbein grew up in Florida. She graduated from Harvard College in 2003 with a degree in Biochemical Sciences and a Citation of Fluency in Italian. She returned to Gainesville for her DVM and is a UF Alumni. During veterinary school, Johanna performed research in the Island Whirl Equine Colic Research Laboratory and was a technician in the Hofmann Equine Neonatal Intensive Care Unit.

She completed her internship in Large Animal Medicine and Surgery at the University of Georgia College of Veterinary Medicine.

Johanna's research interests include equine pain management, equine gastroenterology, and systemic inflammation. Johanna's clinical interests include large animal critical care in both the adult and neonate.

Interleukin-1 Receptor Antagonist Protein (IRAP®) Therapy for Equine Osteoarthritis

Amanda M. House, DVM, DACVIM and Alison Morton, DVM, MSpVM, DACVS

A novel therapy called IRAP®, Interleukin-1 Receptor Antagonist Protein, is now available and showing promising results for the treatment of osteoarthritis in horses. Equine athletes are susceptible to musculoskeletal injuries and osteoarthritis (OA), also known as degenerative joint disease (DJD). Osteoarthritis has a major economic impact on the horse industry and dictates the level of performance for many horses and their riders. Conventional therapies for osteoarthritis include rest; nonsteroidal anti-inflammatory drugs (NSAIDs), such as bute, Banamine®, and Equioxx®; intraarticular (joint) injections with hyaluronic acid and/or corticosteroids; intramuscular Adequan®; intravenous Legend®; oral supplementation with products such as glucosamine and chondroitin sulfate, and extracorporeal shockwave therapy. IRAP® was originally developed in Europe and has been used extensively in Germany. It is being marketed in the United States by Arthrex VetSystems, and is recommended for the treatment of synovitis (inflammation of the joint lining) and mild to moderate OA.

Osteoarthritis is one of the most common causes of lameness in the horse. It is the result of multiple factors which can include conformation, age, type of performance, conditioning, trauma, development diseases, and multiple physiologic factors. The clinical signs of OA include lameness, poor performance, stiffness, and joint swelling and inflammation. These signs are a result of synovitis and progressive cartilage damage within the joint. Trauma (physical or chemical) to the joint surface results in the formation and release of inflammatory proteins, such as interleukin-1 (IL-1) and other cytokines, which result in cartilage degeneration. Cytokines, including IL-1, are chemical signals produced by cells in the immune system and tissues of joints, that may speed up joint injury and potentiate inflammation. Articular cartilage normally has a smooth



Dr. Alison Morton injecting IRAP into a joint at the Veterinary Medical Center.

surface and is a critical component of joint stability and fluid motion. It is also resilient and acts to absorb a great amount of force exerted through locomotion. Damage to the cartilage initiates a cycle of inflammation and pain, increased inflammatory protein production, and thus further cartilage degeneration. This process can become a vicious cycle if not treated and arrested in a timely fashion. Over time, bony changes will occur, which account for abnormalities commonly seen on radiographs (“x-rays”) of joints with OA.

Continued on page 10...

IRAP® was developed to counteract the inflammatory protein interleukin-1 that is produced in the joint during synovitis and to slow the progression of OA. It prevents IL-1 from binding to IL-1 receptors on tissues within the joint, and therefore blocks the action of and stops the damage caused by IL-1 in the joint. The IRAP procedure requires drawing about 50 ml of your horse's blood. The blood is collected and incubated for 24 hours in a special syringe which stimulates production of the antagonist protein. After incubation, the blood is placed in a centrifuge and the plasma (containing IRAP) is separated from the blood cells. The plasma is stored in multiple aliquots and placed in a special freezer at -80 degrees Celsius for use at any time. The IRAP-rich plasma is then thawed and steriley injected into the affected joint. The joint is usually treated every 7-10 days for 3 or more treatments with 1-8 ml, depending on the size and location of the joint. Rest is typically recommended for at least 5-7 days following the injection, per your veterinarian.

Preliminary studies show that IRAP® is improving lameness and may decrease joint swelling. Horses likely to benefit most from IRAP® are those with synovitis or mild to moderate OA or other conditions that may result in a secondary inflammation within a joint. IRAP® can not reverse any permanent damage that often exists in joints with OA, but may serve to prevent further inflammation and reduce progression of disease. It is likely that other therapeutics may also be needed in conjunction with IRAP® therapy to treat horses with OA. Some horses with severe osteoarthritis that were refractory to other therapies are reported to have improved with the addition of IRAP® therapy, however, IRAP® is generally not recommended for horses with severe cartilage loss. Talk to your veterinarian, as they are the best resource to determine if IRAP® is right for your horse.



If this procedure is not available in your area contact your local veterinarian for a referral to the UFVMC. We will work along with your referring veterinarian to give your horse the best possible treatment.



Horses of all disciplines can benefit from IRAP®



UF Willed Body Program

A way for your horse to leave a lasting legacy

“He made a difference in someone’s life while he was alive, and now he will make a difference in many other horses’ lives by what he is teaching us future veterinarians.”

Katherine Doerr, a veterinary student at the University of Florida College of Veterinary Medicine (CVM), is speaking about the horse whose body she studied in her Large Animal Anatomy course.



Recently, the CVM expanded its Willed Body Program, which allows individuals facing the euthanasia of their terminally ill horse, pony or cow to donate the animal’s body to the vet school for use in teaching. Through this generous act, donors help students become veterinarians.

In Large Animal Anatomy, first-year students build a foundation of knowledge about the structure and function of the body. Later courses – about disease processes, surgery, radiology, pain management, and more – all build on this foundation. And it’s in Large Animal Anatomy that, for many hours each day for over 2 months, students work with the donated cadavers.

Students deeply appreciate the contribution body donation makes to their education. “Knowing the loving history behind the donated cadavers made learning from them so much more meaningful,” says Doerr.

At the end of the course, each group of students honors the donated animal and the person who donated the animal’s body by sending a personalized card expressing their gratitude.

Some donors have reported that, in their time of grief, it was comforting to know that their animal was helping to advance veterinary medicine. The CVM also offers pet loss counseling through the Companions Program.

For several years, donation to the Willed Body Program has been offered to some clients at the CVM’s Veterinary Medical Center (VMC) who were facing the unavoidable euthanasia of their equines. Recently, a grant allowed the CVM to expand the Willed Body Program. Now, people throughout Florida (including those who are not VMC clients) can donate their animals’ bodies.

The Willed Body Program resonates with the CVM’s reputation for being at the forefront of veterinary medicine and education. While several other veterinary schools have similar programs, the CVM is developing the concept by focusing on large animals and enlisting the help of referring veterinarians. Last year, the program was featured at the Association of American Veterinary Medical Colleges Educational Symposium in Washington, D.C.

If you would like to learn more about this program, please call the Willed Body Program Hotline at (352) 392-2246 ext 3149 or email program director Dr. R.D. Johnson at Johnson@mbi.ufl.edu.

In order to be donated to the Willed Body Program, animals must weigh less than 700 pounds and arrangements must be made in advance.

RDVM Appreciation Day Topics

June 28, 2008

Equine Pain Management

Dr. Chris Sanchez

Ultrasound Examination of the Foal Abdomen

Dr. Laura Javicas

The Coughing Horse - Field Diagnosis & Treatment

Dr. Michael Porter

Amniotic Membrane and the Horse Cornea

Dr. Dennis Brooks

MRSA in the Horse

Dr. Amanda House

Update on Hormone Therapy in the Mare

Dr. Margo Macpherson

Update on Equine Metabolic Syndrome

Dr. Dana Zimmel

Use of MRI in the Horse

Dr. Matt Brokken

Applications of Computed Tomography in the Equine Patient

Dr. Matt Winter

Care of the Post-operative Colic Patient

Dr. David Freeman

Advanced Treatment Modalities for Lameness

Dr. Alison Morton

Options for Treating Local Skin Tumors

Dr. Jason Errico

Top 3 Equine Diseases Treated with Acupuncture

Dr. Carolina Ortiz-Umpierre

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