Identifying SDFT Rupture in Horses

As horses age, tendons such as the superficial digital flexor tendon (SDFT) stiffen, making them less elastic and more prone to injury. This injury is common in horses of all breeds and disciplines. In older horses, the SDFT can rupture spontaneously at the level of the carpus (knee) or cannon bone.

Betsy Vaughan, associate clinical professor of Large Animal Ultrasound, conducted a retrospective study reviewing 10 years of records in the veterinary hospital’s large animal clinic to shed more light on the characteristics and outcome of this condition to assist

Treking for Tortoises

The following story is provided by Julie Sheldon, Class of 2016, who is pursuing a career in zoological medicine. She visited the Galapagos Islands during the summer of 2014 to study giant tortoises as part of the Students Training in Advanced Research (STAR) program. Read more about the adventures of other DVM students at the school’s new blog at www.dvmtales.com.

After hiking for five exhausting hours over sharp, broken lava, we only had blood samples from two female Galapagos tortoises—until a low grunting came from deep in the trees to my left.

“Sexo...tortugas, allí!” I whispered in Tarzan-style Spanish to our local tortoise tracker and machete master. We followed the classic giant tortoise grunt coming from a vocal male, or macho, through cacti, thorns, and wasp nests, until we confronted the romantic couple about 100 yards into the brush. Finally, more tortoise blood for our research project.

As part of the school’s STAR program, I joined a research project with The Galapagos Tortoise Movement Ecology Programme, in coordination with the Galapagos National Park, the Charles Darwin Foundation, and the Saint Louis Zoo Institute for Conservation Medicine, to study the biology, reproduction, migration, and health of the giant tortoises.

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Julie Sheldon, Class of 2016, marks a tortoise with an ID number to avoid re-examination.

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Badly wounded when he was found by Marley’s Mutts Dog Rescue, Davis the dog was about to have a large portion of his lower jaw amputated when faculty member Karen Vernau saw his picture on Facebook. She responded to the post with information that the veterinary hospital may be able to save Davis’ jaw. Within just a few days, Davis was at the hospital, and his jaw was reconstructed.

With the advent of social media and its constant bombardment of people’s lives, organizations have dramatically changed how they go about their duties. Information can now be instantly disseminated worldwide to an entirely new audience. This is certainly the case with the School of Veterinary Medicine. Its Facebook and Twitter pages have increased the visibility of academic and clinical programs, with positive outcomes.

The school’s Facebook page is liked by more than 22,000 people from 45 countries, while Twitter is read by almost 10,000 loyal followers. Both are the largest followed pages of any veterinary school, and are growing at significant rates—Facebook by 63 percent and Twitter by 36 percent in the last year.

These connections are having a direct impact on patient care at the hospital. Following the surgery on Davis (who was named after the university because Marley’s Mutts was so impressed with the hospital), the rescue group brought another patient to UC Davis—a German shepherd they recently found, suspected to have been hit by a car. During treatment, the shepherd’s photo was posted to Facebook. Because the Marley’s Mutts Facebook page is liked by more than 250,000 people, word of the shepherd at UC Davis spread quickly. His owners saw the post, and immediately traveled to campus to retrieve him. Thanks to the power of social media, Bear was reunited with his family. Marley’s Mutts continually posted updates throughout Davis’ and Bear’s stays at the hospital, and was extremely complimentary of the care the dogs received. Through these posts, countless people were introduced to the top-notch care the hospital is capable of providing.

Bear was reunited with his family thanks to a post on Facebook.

Dean Michael Lairmore, who is an active Tweeter with more than 1,200 followers, recently participated in “Social Media for Faculty Educators and Researchers,” a university-wide panel of faculty members encouraging others to engage in social media as a means to add to the breadth of the UC Davis brand.

“My goal with social media is to spread the word about all the good work we do,” Lairmore said.

Lairmore urged faculty to use their expertise to tell stories in a way that demonstrates the impact of their research and position. He shared how he and members of other departments share one another’s posts so all receive a boost from social media. In total, the school’s social media pages reach tens of thousands of people every day.

Tortoises Continued from page 1

of these dinosaurs. Pirates sailing off the coast of Ecuador through the 16th and 18th centuries hunted these gentle giants to near extinction, but conservation efforts have increased the population from approximately 3,000 in the 1970s to about 20,000 today.

Every other day, our team trekked into the field and hiked for eight to nine hours, covering a distance of about 16 kilometers. We performed complete health assessments including a physical exam, blood and fecal collection, ultrasound, morphometric data collection, and weight measurement.

Problem solving in the field became a daily activity and I learned to maintain a positive attitude with a sense of humor in light of difficulties. Hopefully, one day I will return to my research office of the Galapagos jungle where copulating chelonians can make a day a success!
VMTRC Promotes Dairy Production Medicine at World Ag Expo

The school’s Veterinary Medicine Teaching and Research Center (VMTRC) participated in the 2015 World Ag Expo—the world’s largest annual agricultural exposition. Held February 10-12 at the International Agri-Center in Tulare, the event gathered an estimated 100,000 individuals from around the world.

More than 1,400 exhibitors showcased the latest innovations and trends in farm equipment, communications and technology on 2.6 million square feet of exhibit space. During the three-day show, attendees visiting the booth learned about the center’s important role in training veterinary students and residents in dairy production medicine, and in conducting research and services to solve problems related to dairy production medicine, food safety, cattle welfare and ecosystem health.

Located in Tulare County—the center of the nation’s largest dairy cattle population—the VMTRC is helping to meet the needs of the livestock industry. Through research and educating a new cadre of highly trained veterinarians, the center helps provide solutions that improve life and productivity of California’s livestock, and produce safe and wholesome dairy products for consumers across the state and the nation.

New Career Leadership and Wellness Center Launched

The center provides unique services and support for DVM students in three areas:

Career—Exploration and Preparation

Recognizing the importance of career planning, the center offers numerous professional and career development services including: career coaching; resume/CV writing; interview techniques; workshops; tools to find internship/externship opportunities; and job search assistance. The newest addition to the repertoire of services is VetMedJobs, (ucdavis-svm-csm.symplicity.com) a free online job board to assist employers to advertise opportunities and assist students to find listings for jobs, externships and internships.

Leadership—Personal and Professional Development

Leadership is a learned set of behaviors and way of thinking. The Leadership Program supports student learning through student clubs, mentoring programs, and a monthly One Hour Leadership Talks on a broad range of topics. A unique Professional Concentration in “Personal Development & Leadership” program will be offered to 10 first-year DVM or graduate students and four faculty members, on two Saturdays for five semesters. Topics include: self-awareness and self-management; ethical leadership; leadership styles; leadership for life; and groups and organizational awareness.

Mental Health and Wellness—Support and Empowerment

The center offers counseling services to help students maintain a healthy, productive and happy lifestyle. The Healer’s Art program has just been added. This innovative evening elective course for 25 DVM students and four faculty focuses on personal exploration of the time-honored values of service, healing relationships, reverence for life and compassionate care.

For more information: www.vetmed.ucdavis.edu/students/clw.
Ensuring Clean Water for Safer Food

Agricultural water can be a route of contamination for raw produce so researchers at the Western Center for Food Safety (WCFS) are hunting down potentially pathogenic and nonpathogenic bacteria—including the harmful E. coli and Salmonella strains—in reservoirs and irrigation canal networks.

The FDA-funded Western Irrigation Water Project is working to ensure safe water for agriculture through water quality surveillance and sharing of data with produce farmers and irrigation districts. It will cover sources of irrigation water from the Sierra Nevada Mountains to the Pacific Ocean, the desert southwest, and south-central Washington. For Americans sitting down to dinner, that means ready-to-eat produce like green salad and tomatoes are safer from potentially dangerous bacterial contamination that sickens millions of people each year.

Spring is a key time to sample water in reservoirs and irrigation canals because the systems are experiencing high amounts of seasonal runoff, according to water quality researcher Ronald Bond. As the weather warms, canal networks are also being prepared to receive irrigation water later in the season.

Rob Atwill, principal investigator of the WCFS and director of the Western Institute for Food Safety and Security, said the research comes with added benefits for the public.

“In addition to improving irrigation water quality and food safety, this project will improve the safety of drinking and recreational water for the public too,” Atwill said. Many California reservoirs, for example, are heavily used for recreation, such as boating and swimming, he explained.

Through this project and others, the WCFS plays a leading role in helping to address the challenges in implementing the FDA’s Food Safety Modernization Act—the most comprehensive reform of the nation’s food safety laws in more than 70 years.

Hospital’s Nutrition Service Helps Overweight Pets

An ideal weight for pets is important to maintain optimum health and longevity. With that in mind, the veterinary hospital’s Nutrition Service works with clients to accomplish successful weight loss for their pets, as obesity may contribute to the development or worsening of diabetes, heart and lung disease, heat intolerance, and bone and joint disease. In the coming months, the Nutrition Service will expand its offerings and increase collaborations with other services in the hospital, as well as with referring veterinarians and the community on health initiatives for overweight pets.

To schedule an appointment or consultation, please contact the Nutrition Service at (530) 752-7892 or nssvetmed@ucdavis.edu.
New Faculty

**Titus Brown**  
Associate Professor,  
Department of Population Health and Reproduction  

**Education**  
- PhD, California Institute of Technology, 2006  

**Recent Experience**  
- Assistant Professor, Michigan State University, 2008-2014  
- Post-doc fellow, California Institute of Technology, 2006-2008  

**Special Interests**  
- Computational biology, especially in developing and applying bioinformatics tools to the analysis of large data sets; open source software; and promoting dialogue and discourse on scientific issues in social media forums

**Kathryn Phillips**  
Assistant Professor,  
Department of Surgical and Radiological Sciences  

**Education**  
- DVM, Michigan State University, 2008  

**Recent Experience**  
- Clinical Assistant Professor, North Carolina State University, 2013-2014  
- Resident, North Carolina State University, 2010-2013  
- Internship, Ross University, 2009-2010  
- Internship, South West Equine Medical and Surgery Center, Arizona, 2008-2009  

**Special Interests**  
- Dynamic imaging with multiphase computed tomography, fluoroscopy and teaching

**Sara Thomasy**  
Associate Professor,  
Department of Surgical and Radiological Sciences  

**Education**  
- Diplomate, American College of Veterinary Ophthalmologist, 2011  
- PhD, UC Davis, 2006  
- DVM, UC Davis 2005  

**Recent Experience**  
- Assistant Professional Researcher, UC Davis, 2011-2014  
- Resident, UC Davis 2007-2010  
- Internship, North Carolina State University, 2006-2007  

**Special Interests**  
- Vision science with emphasis on anterior segment disease, specifically glaucoma and corneal healing

Research Findings Presented at House Officer Seminar Day

This past March, the veterinary hospital's house officers (residents, fellows, interns) presented research findings at the 37th Annual Gerald V. Ling House Officer Seminar Day. Examples of the 37 topics included:

- Use of infrared thermography to detect jugular venipuncture in horses  
- Pain management in guinea pigs  
- Causes of swallowing disorders  
- Duration of serum antibody response to rabies vaccination in adult horses  

UC Davis, with the largest training program of any veterinary hospital in the country, is able to offer unique research and publishing opportunities not available elsewhere to veterinarians pursuing advanced training at teaching hospitals.

New Leadership

**Xinbin Chen**, a professor in the school’s Department of Surgical and Radiological Sciences and the Department of Internal Medicine at the School of Medicine, now serves as director for the Veterinary Scientist Training Program. He also serves as co-director of the Comparative Cancer Center and co-leader of Comparative Oncology Program at UC Davis Comprehensive Cancer Center. Chen’s experience at the intersection of animal and human medicine will help develop sustainable relationships between UC Davis faculty and other institutions such as the Centers for Disease Control and the National Institutes of Health to provide opportunities for doctoral research at those organizations. He will also coordinate recruitment efforts and seek additional extramural funding in conjunction with the Office of Research and Graduate Studies.
Graduate education is a critical training ground for the next generation of veterinary scientists and high-caliber faculty. The school is committed to nurturing future veterinary innovators through its robust research program and by offering more fellowships to deserving, high-achieving graduate students through the generosity of philanthropic partners.

UC Davis has one of the largest veterinary science graduate programs in the nation and leads all veterinary schools in research funding—more than 170 graduate students and an annual research budget of $74+ million. The school trains approximately 20 percent of all veterinary college faculty members and 30 percent of comparative medicine faculty members across the country.

“Graduate students learn from our school’s renowned faculty, studying advanced techniques and networking with scientists around the world,” said Isaac Pessah, associate dean for Research and Graduate Education Programs. “Many of our students will tackle complex diseases and global issues as they eventually become leaders in basic research at the lab bench and serve at the front line of public health, fighting global pandemics, bioterrorism and food safety challenges.”

Graduate fellowships invest in future veterinary innovators—making an advanced degree achievable for those students who otherwise would not be able to pursue their passions and goals. State and federal grants, as well as teaching and research assistant positions provide some financial support, but often will not cover a student’s expenses. Gifts help meet this financial challenge and are important to sustaining and growing the school’s graduate student program.

Last year, more than $170,000 in fellowship support benefited graduate students. The school gratefully acknowledges Susan and Morton LaPittus (DVM ’61), Catherine Lau, James Moe (PhD ’78), William Spangler (PhD ’75), Marcia Syufy, Barbara and Thomas Wolfe and other philanthropic partners for their generosity.

To learn more about supporting a graduate student fellowship, please contact the Office of Development at (530) 752-7024.

“Did You Know?”

A gift of appreciated stock not only advances the work we do but may also reduce or even eliminate federal capital gains tax AND qualify for an income tax deduction. Consult your tax advisor or give us a call. School of Veterinary Medicine, Office of Development (530) 752-7024.

SDFT Rupture  Continued from page 1

horses owners and veterinarians in diagnosing and treating the injury. Vaughan’s presentation at the latest American Association of Equine Practitioners convention outlined the clinical symptoms and treatment.

Affected horses typically present with severe acute lameness and swelling. They often show visible swelling over the back of the knee and are sometimes reluctant to straighten the leg. A slight palpable notch can often be seen and/or felt at the level of the rupture, usually just above the most prominent area of swelling. Ultrasound is critical for conclusive diagnosis and shows the torn ends of the SDFT at the exact site of rupture.

Vaughan reviewed 1,317 metacarpal ultrasound exams that were performed over the ten-year period and identified 171 horses (13%) with a primary SDFT injury; however, only 13 horses and one mule, ranging in age from 15 to 30 years, sustained a complete rupture to their SDFT. Ten of these were retired or used for light riding, three were show jumpers, and one was a breeding stallion.

Successful treatment depends on a period of strict stall rest followed by gradual increases in exercise beginning with walking in hand. Initial therapy includes pain medications such as phenylbutazone in combination with hydrotherapy and support bandages.

“In general, horses seem to be at greater risk for rupturing this tendon as they age,” Vaughan said. “It’s important for veterinarians and owners to consider SDFT rupture as a possible cause of acute severe pain and lameness associated with swelling of the back of the cannon bone or carpus in older horses. Ultimately, return to pasture soundness is possible with prolonged rest and rehabilitation.”
DEAN’S CLUB HONOR ROLL

The Dean’s Club honors alumni who have generously given gifts to support the school’s mission—providing the best veterinary education and advancing the health of animals, people and the environment. The following alumni contributed to the Dean’s Club from November 2013 to December 2014.

- Elizabeth Adamson, ’88
- John Anderson, ’70
- Kirsten Baitis, ’00
- Norman Baker, ’52
- Ralph Barrett, ’73
- Richard Breitmeyer, ’80
- Dale Brooks, ’59
- Gaylord Brown, ’78
- Karen Buchinger, ’88
- James Clark, ’88
- James Correa, ’78
- Ian Coster, ’58
- Laine Cowan, ’84
- Gregg Cutler, ’74
- Eric Davis, ’77
- Ila Davis, ’89
- John ’87 & Laurie 89 Day
- Cherie Decker, ’03
- Patricia Dedrick, ’85
- Renee & Gary Dillon, ’74
- Timothy Doherty, ’81
- Nancy Elliot, ’88
- Hollis Erb, ’74
- Cynthia Facciolla, ’06
- David Fairchild, ’62
- David Feldman, ’90
- Michael Floyd, ’61 *
- Thomas Foor, ’74
- Patricia Gilbert, ’84 *
- Dana Gleason, ’03
- Beth Gordon, ’77
- Norman Green, ’59
- John Gys, ’80
- Richard Hack, ’69
- Donald Hamby, ’63
- Larry Herbert, ’62 *
- Pamela Hiltunen-Hall, ’93
- Arthur Jennison, ’76
- Jerry Kaneko, ’56 (in memorium)
- Saburo Kaneko, ’87
- Kevin Keenan, ’72
- Larry Kidwell, ’58
- Morton LaPittus, ’61
- Keith Lansing, ’56
- Kenneth & Gabrielle Levine, ’59
- Julia Lewis, ’94
- Douglas Mader, ’86
- Mark Malo, ’96
- Jonna Mazet, ’92
- Ann McGrath, ’88
- William McGuire, ’73
- Kay Mehren, ’65
- Paul Meunier, ’74
- Charles Nelson, ’55 *
- Michael O’Brien, ’76
- Sharon Osternann, ’13
- Anthony Pardo, ’84
- Niels Pedersen, ’67 *
- Lloyd Pitch, ’75
- Alison Pillsbury, ’88
- Philip Plocher, ’54
- David Reinhard, ’69
- Patrick Richardson, ’75
- Christopher Rodi, ’93
- Pamela Rohrich, ’83
- Sandy Sanford, ’88
- Debra Scheenstra, ’92
- Gregory Schmidt, ’72
- Mark Secor, ’84
- Maremaro Shibuya, ’59
- Brian Short, ’81
- Ruth Sobek, ’90
- Charles Spain, ’93
- Joseph Spinelli, ’63
- Lawrence Stickles, ’61
- William Strohauer, ’71
- John Stuelpnagel, ’83
- Richard Svihla, ’84
- Bud Tennant, ’59
- Paul Toote, ’84
- Katharine Tyson, ’03
- Richard Uchimura, ’65
- Floyd Ventress, ’61
- Jack Walther, ’63
- William Wetmore, ’55
- Mary Whitehill, ’84
- Jon Wolfson, ’82
- John Zimmerman, ’62

Rose Circle—alumni who have celebrated their 50th anniversary (indicated in bold).

* Heritage Society for Animals—members who have made planned gifts to benefit the school.

Thank you to Our Career Night Sponsors

The school recognizes the following corporate partners as major sponsors of 2014 Career Night—an annual event providing an opportunity for students to network with practitioners and health care representatives:

- Hill’s Pet Nutrition
- Merial
- Nestlé Purina PetCare Company
- Veterinary Insurance Services Company
- Zoetis

Check out VetMedJobs, the new, free online job board bringing together employers with prospective externs, interns and DVM graduates from the school. To access the recruiting system and begin posting opportunities, go to ucdavis-svm-csm.symplicity.com. Register as an “Employer” and request access for your practice or clinic.

Questions? Contact: Career, Leadership and Wellness Center, UC Davis School of Veterinary Medicine, vetmedjobs@ucdavis.edu, (530) 752-3801.
Practitioners are invited to promote work experience opportunities (externships, internships and employment) at the 2015 SVM Career Night. This will be a significant networking opportunity, with more than 150 students expected in attendance along with many corporate, practice and governmental agency representatives. The event is hosted by the Career, Leadership and Wellness Center in conjunction with the Student Chapter of the American Veterinary Medical Association (SCAVMA). For more information: www.vetmed.ucdavis.edu/students/clw/career/career_night.cfm.

Alumni Reunion Weekend
October 2-4, 2015

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