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. Courtells Equine Hospital.

“He provided 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.

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“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.

“When horses 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

See “Lameness” continued on page 7
Determine that the thing can and shall be done, and then we shall find the way.”

This is one of my favorite inspirational quotes from Abraham Lincoln, and seems especially appropriate to describe how the college arrived at the exciting stage we are now experiencing as we finalize design plans for our new Small Animal Hospital.

Since this past fall, we have been meeting regularly with our architects to finetune details for each floor of our $58 million, 90,000 square-foot facility. Several town hall meetings have been presented to faculty, staff and students since then, and plans are about 60 percent complete. From floor and ceiling diagrams to wall drawings with detail including electric outlets, switches, computer ports and scheduling boards, the fine points are coming together.

A sustainable, green building design will be used along with a learning-centered approach that includes having rounds rooms associated with every hospital service. These rooms will concentrate the entire student rotation learning experience in one location.

The design team envisions creating an open, three-story atrium with lots of light, which will serve as the reception and waiting room area. We are planning a groundbreaking ceremony in the fall of 2008.

Our architects from the FWAJDB/Zeidler group are doing their part to bring us to the next stage — construction. But getting to this point has been a long and determined haul involving our clinical faculty, key staff and administrators as well as of course the many donors and friends responsible for helping to make this new facility a reality.

We all need something to look forward to, particularly in these difficult state budgetary and overall economic times. The new hospital is a bright spot, and I’m heartened and impressed by the enthusiasm with which this project is being embraced, not just because of the hospital’s many innovations and high-tech equipment, but because it symbolizes progress for the UF College of Veterinary Medicine.

Although we have the funds to move forward with our construction plans, there continue to be funding needs for programs within the hospital as well as naming opportunities for rooms and dedicated spaces. Please contact us if you are inspired to make a contribution to assist us in these efforts.

We’ve “found the way” and we continue to aspire to greatness as well as new levels of clinical and research excellence. We are confidently envisioning the future and how we can improve in what we offer to companion animals throughout the state of Florida and beyond.
Beachgoers who stay high and dry may stay healthier

By Sarah Carey

Attention snowbirds and spring breakers: Beachgoers who stay high and dry may have healthier fun in the sun than those frolicking on wet sand or in the water, according to a University of Florida veterinary researcher.

“Our objective was to understand whether beach sand could pose a health risk to beachgoers,” said Tonya D. Bonilla, a doctoral student in the UF College of Veterinary Medicine’s department of infectious diseases and pathology who studied three South Florida beaches over a two-year period to see whether human health risks appear to increase based on the level of sand exposure.

“What we found was that there was no increased health risk due to exposure to sand on the upper beach,” Bonilla said. “However, the longer the period of time people spent in the water and in the wet sand, the higher the probability that they would experience some gastrointestinal illness.”

Bonilla’s research was conducted at Fort Lauderdale Beach, Hollywood Beach and Hobie Beach. There were 882 respondents who participated in the pilot epidemiological study and 609 who participated in the control group.

Beachgoers were made aware of the study and, if willing to participate, were given a survey form to complete four days after their beach visit. The questionnaire focused on type and duration of beach activity and inquired whether participants became ill during the four days after the beach visit. The control group consisted of people randomly chosen from the general population who had not visited a beach in at least nine days.

Jay M. Fleisher, Ph.D., an associate professor in the College of Osteopathic Medicine at Nova Southeastern University, analyzed the epidemiological data collected in the study.

“Our findings suggest that there is an increased risk of acquiring gastroenteritis the longer a bather either sits in the wet sand or stays in the water,” Fleisher said. “The probability that an individual will become sick increases over expected non-exposure rates for a 10-minute stay to approximately seven out of 100 people exposed for a 70-minute stay,” Fleisher added. “Both show a clear dose-response relationship in risk with increasing time of exposure. These estimates of increased risk might seem small, but when one considers how many people use this beach in the course of a year, we can end up with a substantial public health problem.”

While fecal indicator levels in the near-shore waters of South Florida’s recreational beaches are routinely monitored, sand samples from the surf zone — the wet sand — and the upper beach are not. Beach sand may become contaminated by gull droppings and other sources of fecal-derived organisms that then diffuse into wet sand and water, said Bonilla, whose research was published in the Marine Pollution Bulletin. Her work, part of her master’s thesis work at Nova Southeastern University, was funded by a grant from the Environmental Protection Agency.

Helena Solo-Gabriele, Ph.D., a professor of environmental engineering at the University of Miami and a collaborator in the National Science Foundation’s Oceans and Human Health Center, is working on understanding how fecal indicator levels correlate with pathogen levels in her own research. Her work primarily focuses on environmental measurements, specifically of microbial indicators in water.

In addition to evaluating the potential human health effects of microbes from beach sands, Bonilla’s paper provides new information concerning the reservoirs and sources of fecal indicator bacteria, Solo-Gabriele said.

“This study emphasizes that beach sands serve as the most significant reservoir of fecal indicator bacteria, and shows that the situation is not isolated to one specific beach, but can be widespread across regions,” she said. “Bonilla and her collaborators provide a mechanistic explanation for the potential spread of fecal indicator bacteria through gull droppings and subsequent distribution through natural diffusion in the environment, as well as by people walking on the beach. The suggestion of an association between fecal indicator levels in sand and illness rates among humans is very significant and points to the need to conduct more comprehensive studies of beach sand.”
Imported “giant clams” found to have foreign disease

By Sarah Carey

Vividly colorful giant clams, officially known as tridacnids, decorate many an upscale aquarium. But now experts say they boast an exterior beauty that masks an ugly truth: their potential for carrying foreign diseases.

In findings that may impact the reef clam industry as well as international trade, a University of Florida veterinary pathologist recently discovered Perkinsus olseni, an internationally reportable foreign pathogen, in aquacultured clams imported from Vietnam.

While not believed to be a threat to human health or other reef aquarium species, the pathogen’s presence concerns scientists as well as aquaculture industry representatives and points out the largely unregulated environment in which the importation of aquacultured reef clams from Asia takes place.

“I had 30 clams in my lab as part of a student research project,” said Barbara Sheppard, D.V.M., Ph.D., a clinical associate professor of pathology at the UF College of Veterinary Medicine. “Then they started looking sickly, and within four months, all of them were dead.”

As a pathologist, Sheppard was intrigued. She began investigating the cause of death: freezing tissues, putting them into formalin and conducting histopathology and DNA tests in her laboratory. Her findings, which appear online in Diseases of Aquatic Organisms, showed the presence of Perkinsus olseni along with a new species of Perkinsus that has yet to be characterized.

“This is an important finding,” said Ralph Elston, Ph.D., president of AquaTechnics, a Carlsbad, Wash.-based company that provides veterinary, laboratory and environmental assessment services to the shellfish industry. “It indicates the potential risk of the spread of animal disease when health monitoring is not in place to control such risks.”

Elston added that further research is needed to evaluate the distribution of previously unknown species of Perkinsus in Florida.

Giant clams are the largest bivalves in the world. Their range stretches across the Indo-Pacific region from the eastern coast of Africa in the west to the South Pacific in the east, according to the United Nations Environment Program’s World Conservation Monitoring Center. These clams represent an increasingly large proportion of the live invertebrates imported to become aquarium specimens. As a result of overexploitation, all species of giant clams are included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora, an international agreement between governments that aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

Based on CITES data from 1993-2001, Vietnam has dominated the export of live giant clams since 1998. The United States and Europe are the main importers, and captive bred, or aquacultured, clams represent only about a third of the nearly 1 million tridacnids traded worldwide.

Sheppard is now collaborating with the Virginia Institute of Marine Sciences, the Maryland Department of Agriculture and Anita Wright, Ph.D., a Perkinsus researcher and associate professor at UF, to further characterize the new exotic species of Perkinsus Sheppard discovered in her clam colony.

“This is not a zoonotic disease, transmissible to people,” Sheppard said. “No one is going to get sick from this, as far as we know. The problem here is economic and international trade. We know that Perkinsus is a pathogen of aquatic shellfish, and the reason it is so important is that it makes animals very vulnerable to dying when the weather gets hot or when they get stressed in some other way.”

She added that a major pathogen known as Perkinsus marinus is already associated with the depletion of major oyster stocks on the Atlantic coast.

“It’s indigenous; you can’t avoid it, and we know that particular pathogen is already economically devastating to our shellfish industries,” Sheppard said. “They don’t want this Pacific version of Perkinsus (olseni) to be transported here.”

Although the infected clams were found in Florida, tridacnids are exported all over the country and distributed throughout the hobby industry. Sheppard’s findings suggest that almost certainly clams infected with Perkinsus olseni and the new Perkinsus species have made their way into consumer aquariums throughout the United States, she said.

“This is a great example of why you should never release an aquarium animal anywhere, under any circumstances,” said Ruth Francis-Floyd, D.V.M., director of UF’s Aquatic Animal Health program.
Brazilian Olympic dressage horse treated successfully at UF

By Sarah Carey

After surviving an odyssey of difficult surgeries and complicated medical problems, a Brazilian Olympic dressage horse named Livello has lived to train another day and is recuperating back in his home country, thanks to University of Florida veterinarians.

UF equine surgeon David Freeman, who played a key role in Livello’s amazing story and eventual turnaround, discharged the horse on April 11 to one of his Brazilian veterinarians, who flew home with him.

“This horse is all quality,” Freeman said. “Everyone who dealt with him here did a wonderful job, and this is a horse that came all the way from Brazil because we had the technology to treat him.”

Freeman said Livello’s case illustrated the importance of powerful imaging equipment, particularly UF’s MRI unit, in guiding effective medical treatment.

“Radiology, specifically Drs. Matt Winter and Shannon Holmes, did a wonderful job with interpreting the images,” Freeman said, adding that clinicians and technicians from the radiology, surgery, ophthalmology and anesthesia services were all extremely helpful.

“Livello actually came here because the owners were aware we had CT and thought that could be used to help him, but it turned out that the MRI was a better imaging tool for his problem,” Freeman said.

Brazilian veterinarian Fernanda Bicudo Cesar said the horse’s owner, Dr. Jorge de la Rocha, and his family were “very thankful for everyone involved.”

Cesar spent two weeks at UF with Livello when his primary veterinarian, Patricia Brossi, had to return home after spending two months in Gainesville.

“The owners haven’t seen him for three months, but now they can sleep well and finally feel that things are going to be OK,” Cesar said.

Brossi said called Livello “a fighter.”

“Livello is the horse we dreamed of back in our childhood, when we first realized we loved horses, those huge creatures, their smell, the noise from their hooves, the feeling of being on top of them,” Brossi said.

Livello’s story began in Brazil last October with a bad tooth. A tooth extraction procedure damaged the horse’s tear duct and intraorbital nerve, veterinarians said.

“Tears were coming down his face, and he had nerve damage that was causing him to rub his face and sneeze,” Freeman said, adding that a subsequent procedure involving a veterinary surgeon from Tennessee and a world-renowned equine dentist who were flown to Brazil to help, did not resolve the problem.

“The surgeries went well, but never cleared up the infection Livello had developed in his sinuses,” Freeman said.

Because of his infection, Livello subsequently developed facial swelling and a malodorous nasal discharge.

Desperate to help him, his owners and their veterinarians, who had heard of Freeman and UF’s imaging capability through veterinary meetings in Brazil, decided the horse needed to be seen and treated at UF. In February, de la Rocha, who also has ridden Livello as part of the Brazilian Olympic dressage team, flew the horse and Brossi to Florida’s Alec P. and Louise H. Courtelis Equine Hospital.

“We had some idea based on Livello’s history and clinical signs that there was probably some necrotic bone that needed to be removed,” Freeman said. “But we didn’t know the exact location or extent of it, and that is where both the CT and our new MRI unit came in.”

An initial surgery resulted in the removal of a lot of dead bone and tissue, but Livello’s sinus drainage continued as did the malodorous nasal discharge.

“So we did another MRI on him about three weeks later and then another surgery after that,” Freeman said. “The MRI images helped us find the sites where we needed to go, and the site was not an easy area to gain access to. We were somewhat reserved by then in terms of our level of satisfaction because we knew there might still be more bone left.”

By the time Livello left, he had undergone three surgeries at UF, with the last one being the most difficult. Within two weeks of his last procedure, however, Livello began showing signs of improvement.

“His attitude definitely improved,” Freeman said. When Livello’s nasal discharge vanished, Freeman and his colleagues knew they had turned a corner.

“This was a tough case,” he said. “Every now and then we get cases that test us and test our general ability to handle very serious veterinary challenges and this was one of them.”

Freeman added that he gave a lot of credit to Livello’s owner, de la Rocha, for his unwavering commitment to the horse.

“He was not going to be deterred by the cost of treatment but he was realistic and committed and most of all, he did not want this horse to suffer,” Freeman said. “He wanted the very best for him, and he did all the right things. That didn’t replace any of our caregiving for the horse, but it made it a lot easier.”

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Dr. David Freeman stands with Livello on April 11 prior to the horse’s release from UF’s Alec P. and Louise H. Courtelis Equine Hospital after successful treatment to treat complications from an extracted tooth.

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Bovine veterinarian aims to enhance awareness of animal welfare

Jan Shearer, D.V.M., the University of Florida College of Veterinary Medicine’s dairy extension veterinarian, was recently featured in a cover story in Bovine Veterinarian magazine.

The story, titled “The Kindest Act,” appeared in the January issue of the publication and focused on the issue of euthanasia and personal beliefs.

The article stressed that the act of performing euthanasia, while uncomfortable to many people, is a critical part of veterinary medicine.

“The hardest part of euthanasia is getting over the emotional aspect and coming to grips with doing it,” Shearer said. “This is about these cows we find on farms that often are down or dying and the dairyman doesn’t have the emotional strength to put them down because it’s his animal. We as vets need to step up to the plate and do it for them.”

Surgery resident honored for presentation

University of Florida College of Veterinary Medicine small animal surgery resident Stanley Kim, B.V.Sc., received top honors for the most outstanding resident presentation at this year’s annual Veterinary Orthopedic Society meeting, held recently in Big Sky, Montana.

Kim’s presentation dealt with the effect of tibial plateau leveling osteotomy and tibial tuberosity advancement -- two surgical techniques used to correct tears of the cruciate ligament in dogs -- on femorotibial contact mechanics.

Kim attended and presented his work as a recipient of one of the Veterinary Orthopedic Society’s Mark Bloomberg Awards, which provide financial support for deserving residents to attend the meeting and present their research. The awards are based on a review of their scientific abstracts.

UF aquatic animal vet honored by federal wildlife group

Michael Walsh, D.V.M., a University of Florida College of Veterinary Medicine veterinarian has received the U.S. Fish and Wildlife Services Regional Director’s Conservation Award for his years of service in the area of manatee rescue and rehabilitation.

Walsh is associate director of UF’s Aquatic Animal Health Program. He served as head veterinarian for Sea World of Florida for many years prior to being hired by UF in 2007.

“This award acknowledges Mike’s commitment and many years of participation in the Manatee, Rescue, Rehabilitation and Release program, as well as his significant contribution to manatee medicine and conservation,” said Nicole Adimey, a biologist with the U.S. Fish and Wildlife Service.

In Memoriam

Former UF small animal surgeon and longtime faculty member Robert B. Parker died April 7 in Coolbaugh Township, Pa., in a car accident.

Parker was a charter member of the faculty in the Department of Surgical Sciences when UF’s College of Veterinary Medicine opened its doors in 1977. A Diplomate in the American College of Veterinary Surgeons, Dr. Parker became an Associate Professor and served as Chief of the Small Animal Surgery Service from 1982-1991. From 1991-1992, Parker spent a year on sabbatical in Australia where he served as a visiting scholar at Sydney University.

“For two decades, Rob Parker was synonymous with small animal orthopedics at UF, where he taught hundreds of aspiring veterinary students and more than two dozen small animal surgery residents the art and science of small animal orthopedics,” said Dan Lewis, DVM, professor of small animal surgery at UF and orthopedic specialist.

“Rob had special interests in fracture repair, arthrodeses and bone grafting. He was also one of the early pioneers in performing total hip replacements in dogs.”

Parker left UF and moved to New York City in 1997 where he spent 10 years as Chairman of the Surgery Department at the Animal Medical Center. In January, Parker embarked on a new phase of his career when he accepted the position of Chief of Surgery at the Animal Emergency Clinic of Wyoming Valley in Pittston, Pa. He had lived in Buck Hill Falls, Pa., for nearly a decade and had been an active member of the community and an avid golfer.

Parker is survived by his mother, Emily Parker of Menifee, Calif.; his wife, Ramona (Fletcher) Parker of Buck Hill Falls, Pa.; his daughter, Elizabeth (Parker) Griseck and her husband Chris of Alachua.

Donations honoring Parker’s legacy can be made to the University of Florida’s Small Animal Surgery Resident Scholarly Fund. Checks should be written to the UF Foundation in care of Dr. Dan Lewis, Small Animal Clinical Sciences, PO. Box 100126, Gainesville, FL 32610-0126.
Reception to benefit “Olive’s Way” oncology program raises $320,000

A benefit hosted March 11 in Boca Raton by grateful clients of the University of Florida Veterinary Medical Center’s oncology service raised $320,000 to support cancer research and care for both small and large animals affected by the disease.

Lisa and Harry Posin, whose 4-year-old Maltese, Olive, was successfully treated at UF in 2007 for kidney cancer, organized the event. Recently the Posins, who live in Boca Raton, created a program known as “Olive’s Way” dedicated to raising funds for UF’s veterinary cancer programs. All “Olive’s Way” contributions go directly to the college, earmarked to the oncology service.

“Funds we raise will be used both to support the UF oncology service’s ongoing efforts and to expand the research that this world-class team performs,” Harry Posin said. “We fully believe that due to the severity of Olive’s illness and the complex nature of the surgery, had it not been for the skilled oncology team at UF, we would likely have lost Olive on the operating table.”

Olive underwent a complicated surgical procedure that involved the removal of one kidney and a portion of her adrenal gland. She subsequently has undergone eight chemotherapy treatments and has regained her strength and normal body functions.

“The level of postoperative support to Olive, and to us, was beyond compare to any that we have seen, whether animal or human,” Posin added. “The sincerity to which the entire oncology team cares for the patient is remarkable as well as their ongoing support and consultation with our local oncologist.”

Anyone wishing to contribute to the “Olive’s Way” Fund established in the UF College of Veterinary Medicine for cancer research, may do so by contacting the college’s development office at (352) 392-2213, ext. 5200 or by e-mailing Zoë Seale, senior director of development and alumni affairs, at sealez@vetmed.ufl.edu.

Lameness, continued from page 1

people. In adult horses, this includes the foot, fetlock, suspensory ligament, carpus, hock and head. In foals, the entire body can be imaged.

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 UF veterinary 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 examination 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.
July 19-22
The annual meeting of the American Veterinary Medical Association will be held in New Orleans. For more information, go to www.AVMA.org.

September 25-27
The annual Florida Association of Equine Practitioners conference will be held in Puerto Rico. For more information, go to www.FAEP.net.

October 3-5
The annual meeting of the Florida Veterinary Medical Association will be held in Orlando. For more information, go to www.FVMA.com.

October 19
The Team VetMed and Horse Farm Hundred bicycle ride will be held in Gainesville. For more information, contact Jo Ann Winn at winnj@vetmed.ufl.edu.

October 25
UF Homecoming weekend. For more information about college activities, contact Jo Ann Winn at winnj@vetmed.ufl.edu.

Christine Janks, owner of Carson Springs Farm Wildlife Foundation, prepares to feed her 10-week-old giraffe, Gracie, a milk bottle at the University of Florida’s Veterinary Medical Center March 13. UF veterinarians sent Gracie home the following day after having successfully treated her for a gastrointestinal illness using fluid therapy and antibiotics.

Gracie eyes a milk bottle that her owner was preparing to give her on March 13.